

Spirax-Sarco Engineering plc

**Efficient
Safer
Sustainable**



Annual Report 2020

Efficient, Safer, Sustainable

In a year we will never forget, our people, products and solutions helped critical industries and our communities around the globe in the fight against COVID-19.

Living our Company purpose

Our purpose is to create sustainable value for all our stakeholders as we engineer a more efficient, safer and sustainable world.

In challenging circumstances, our teams have continued to live our purpose and Values, demonstrating resilience, innovation and entrepreneurship.



Efficient

Spirax Sarco is helping food producers to implement more efficient processes, supporting quality improvements which create consistency in the appearance, taste and texture of food products around the world.

Find out more on pages 14 to 15



Safer

Watson-Marlow technology is being used in the development and production of vaccines as well as virus tests helping to fight the pandemic and create a safer world for future generations.

Find out more on pages 16 to 17



Sustainable

Electric Thermal Solutions is working with an electric vehicle manufacturer to develop innovative CO₂-free production processes, supporting the transition towards a more sustainable future.

Find out more on pages 18 to 19

Who we are

Spirax-Sarco Engineering plc is a multi-national industrial engineering Group with expertise in the control and management of steam, electric thermal solutions, peristaltic pumping and associated fluid path technologies.

Our technologies play a critical role across multiple industries as diverse as Food & Beverage, Pharmaceutical & Biotechnology, Power Generation and Healthcare.

With customers in 130 countries, we provide the engineered solutions that sit behind the production of many items used in daily life.

Our purpose, supported by our Values, unites us, guides our decisions and inspires us everywhere that we operate.



Further reading
To find out more about our Values
See pages 20-21

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A year of unprecedented challenges

The impact of COVID-19 presented significant challenges for our people throughout 2020. We moved swiftly at the start of the pandemic to protect and support our colleagues, helping them to adapt quickly to the new realities of socially distanced and remote working, while empowering them to go out into our local communities to provide practical and much-needed support. While juggling family and work life amidst a pandemic, our people together with our wider supply chain are helping our businesses to keep supporting the critical industries we serve, at a time when it matters most.

Efficient, Safer, Sustainable

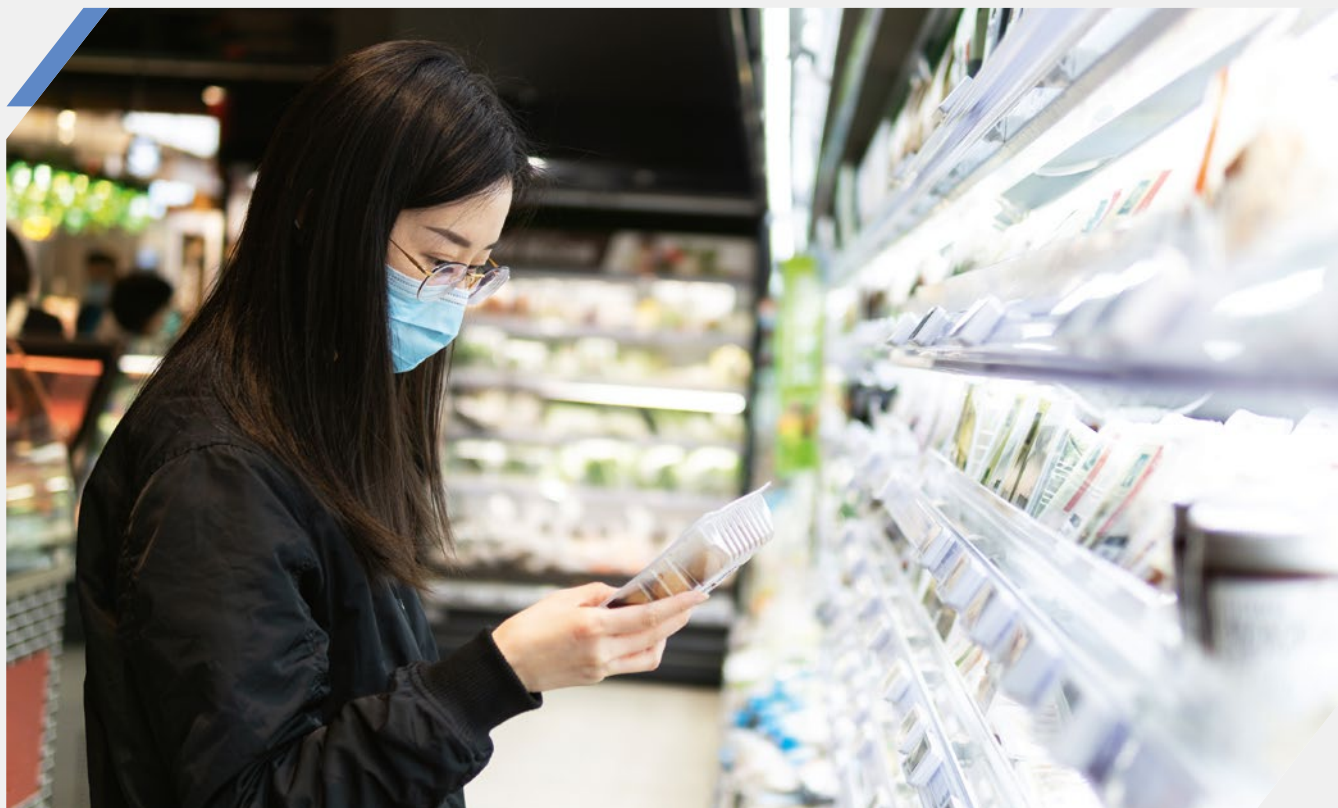
To keep fulfilling our purpose, we applied our business model, increased our capacity where required and stepped-up our support and engagement with our suppliers to maintain continuity of service and solutions for our customers in all sectors, including those directly involved in fighting COVID-19.



Supporting the frontline effort

Whether it's steam systems keeping hospitals warm and surgical equipment sterilised, or pumping, dosing and filling applications for COVID-19 vaccine development and production, the work we do to support critical processes in the Pharmaceutical & Biotechnology and Healthcare sectors has never been more important or more urgent.





Providing nurture through nourishment

We work with a diverse range of customers in beverage manufacturing, food production and processing, where steam is used for blanching, cooking and baking as well as packaging, cleaning and sterilising. Electric heating elements are used in commercial food equipment and pumps are used to meter ingredients, deliver food to process lines and handle process waste.

Our teams supported Food & Beverage manufacturers, both large and small, all over the world to help our customers respond to the increased demand, keeping families nourished as the restrictions took hold.



2020 was a challenging year. We worked together and took care of each other and those around us. We rose to the challenges, emerged stronger, more resilient and most important of all, ready for 2021.

Financial summary

for the year ended 31st December 2020

- Revenue down 4%, organically down 3%; industrial production (IP) down between 4% and 5%
- Adjusted operating margin of 22.7%, 10 bps below 2019; up 120 bps on a statutory basis
- Strong organic sales and profit growth in Watson-Marlow, adjusted operating margin 33.4%
- Steam Specialties organic sales decline broadly in line with IP; margin down 80 bps organically
- Electric Thermal Solutions organic sales decline 12%; margin up 10 bps organically
- Temporary cost containment initiatives reduced overheads by £22 million
- Net debt[^] at year end £229 million; leverage reduced to 0.7x EBITDA*
- Total dividend up by 7% to 118.0p

2020 key figures

Adjusted*	2020	2019	Reported	Organic*
Revenue	£1,193.4m	£1,242.4m	-4%	-3%
Adjusted operating profit*	£270.4m	£282.7m	-4%	-1%
Adjusted operating profit margin*	22.7%	22.8%	-10 bps	+40 bps
Adjusted profit before taxation*	£261.5m	£274.5m	-5%	
Adjusted basic earnings per share*	256.6p	265.7p	-3%	
Cash conversion	102%	84%		

Statutory	2020	2019	Reported	
Revenue	£1,193.4m	£1,242.4m	-4%	
Operating profit	£249.0m	£245.0m	+2%	
Operating profit margin	20.9%	19.7%	+120 bps	
Profit before taxation	£240.1m	£236.8m	+1%	
Basic earnings per share	235.5p	226.2p	+4%	
Dividend per share	118.0p	110.0p	+7%	

* Results quoted in this announcement are "adjusted" metrics, except where otherwise stated. Organic measures are at constant currency and exclude contributions from acquisitions and disposals. See Note 2 to the Financial Statements for an explanation of alternative performance measures.

[^] Net debt includes total borrowings, cash and bank overdrafts but excludes IFRS 16 lease liabilities, as set out in Note 8 to the Financial Statements.

Segmental reporting

Our segmental reporting is consistent with how we present management information to the Board. A detailed segmental breakdown is provided in Note 3 of the Consolidated Financial Statements on pages 178 to 180. A performance review by operating segment is set out on pages 38 to 51.

2020	2020 Revenue	Change		2020 Adjusted operating profit*	Change	
		Reported	Organic		Reported	Organic
EMEA ^{††}	£310.0m	-8%	-7%	£54.1m	-19%	-18%
Asia Pacific	£234.6m	-6%	-5%	£72.4m	0%	+2%
Americas	£149.5m	-12%	-3%	£27.8m	-28%	-12%
Steam Specialties	£694.1m	-8%	-6%	£154.3m	-13%	-9%
Electric Thermal Solutions	£178.0m	-4%	-12%	£24.6m	0%	-11%
Watson-Marlow	£321.3m	+7%	+9%	£107.3m	+12%	+15%
Corporate expenses				(£15.8m)		
Total	£1,193.4m	-4%	-3%	£270.4m	-4%	-1%

^{††} Europe, Middle East and Africa.

* All profit measures exclude certain items, which totalled a charge of £21.4 million (2019: charge of £37.7 million), as set out in Note 2.

Revenue £m

£1,193.4m

KPI

Organic
change %

2020	1,193.4	-3
2019	1,242.4	+6
2018	1,153.3	+7
2017	998.7	+6
2016	757.4	+4

Adjusted operating profit* £m

£270.4m

KPI

Margin %

2020	270.4	22.7
2019	282.7	22.8
2018	264.9	23.0
2017	235.5	23.6
2016	180.6	23.8

Basic adjusted earnings per share* p

256.6p

KPI

2020	256.6
2019	265.7
2018	250.0
2017	220.5
2016	171.5

H&S over three-day lost time injury rate per 1,000 employees

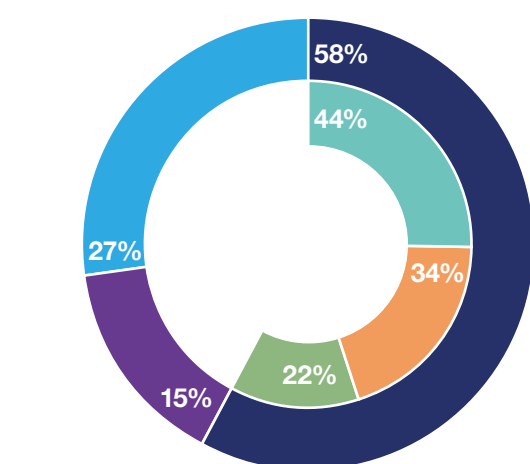
KPI

2.9

2020	2.9
2019	3.6
2018	4.9
2017	4.6
2016	6.0

* All profit measures exclude certain items, which totalled a charge of £21.4 million (2019: charge of £37.7 million), as set out in Note 2.

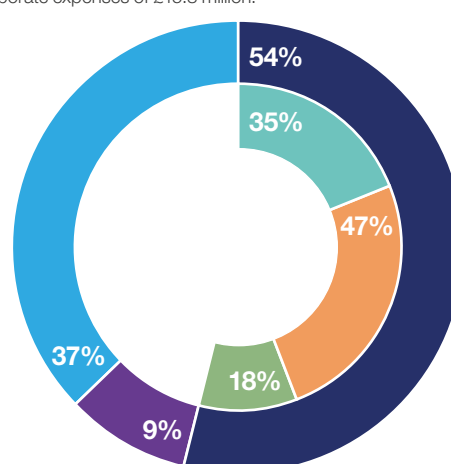
Revenue by segment %



- Steam Specialties
- EMEA
- Asia Pacific
- Americas
- Electric Thermal Solutions
- Watson-Marlow

Adjusted operating profit by segment* %

Before corporate expenses of £15.8 million.

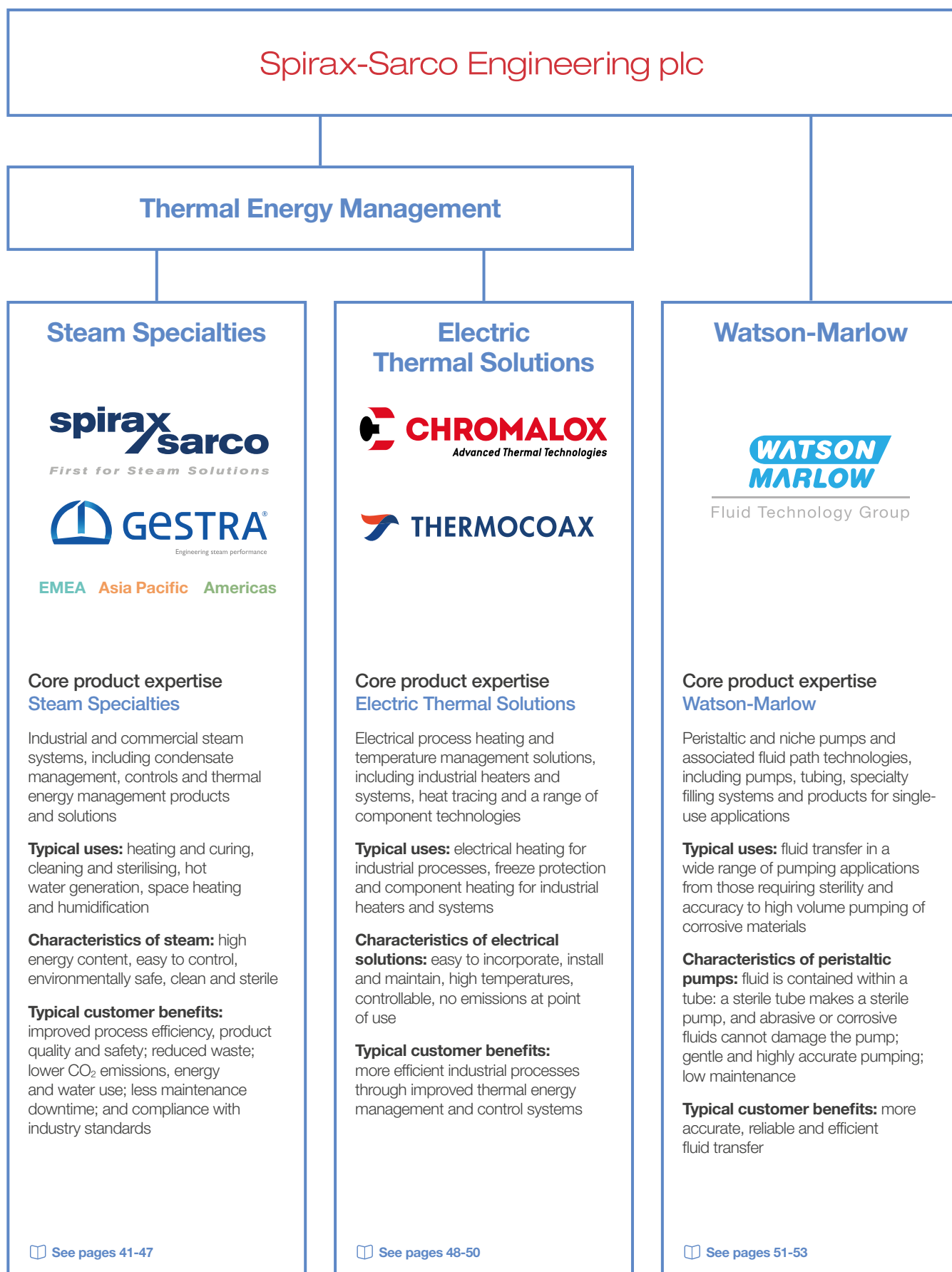


- Steam Specialties
- EMEA
- Asia Pacific
- Americas
- Electric Thermal Solutions
- Watson-Marlow

* All profit measures exclude certain items, which totalled a charge of £21.4 million (2019: charge of £37.7), as set out in Note 2. The Group's three operating segments, as defined by IFRS 8, are Steam Specialties, Electric Thermal Solutions and Watson-Marlow.

Our Group at a glance

A world-leading industrial engineering Group



Global operations*

A diverse and expanding Group with a presence in all key industries and markets

We operate in both mature and emerging economies and in almost all industrial sectors. We have a global coverage and serve customers in 130 countries worldwide. We have 132 operating units in 47 countries and a resident direct sales presence in 21 countries. A further 62 countries are serviced indirectly by distributors or non-resident direct sales.




* Global operations as of February 2021.

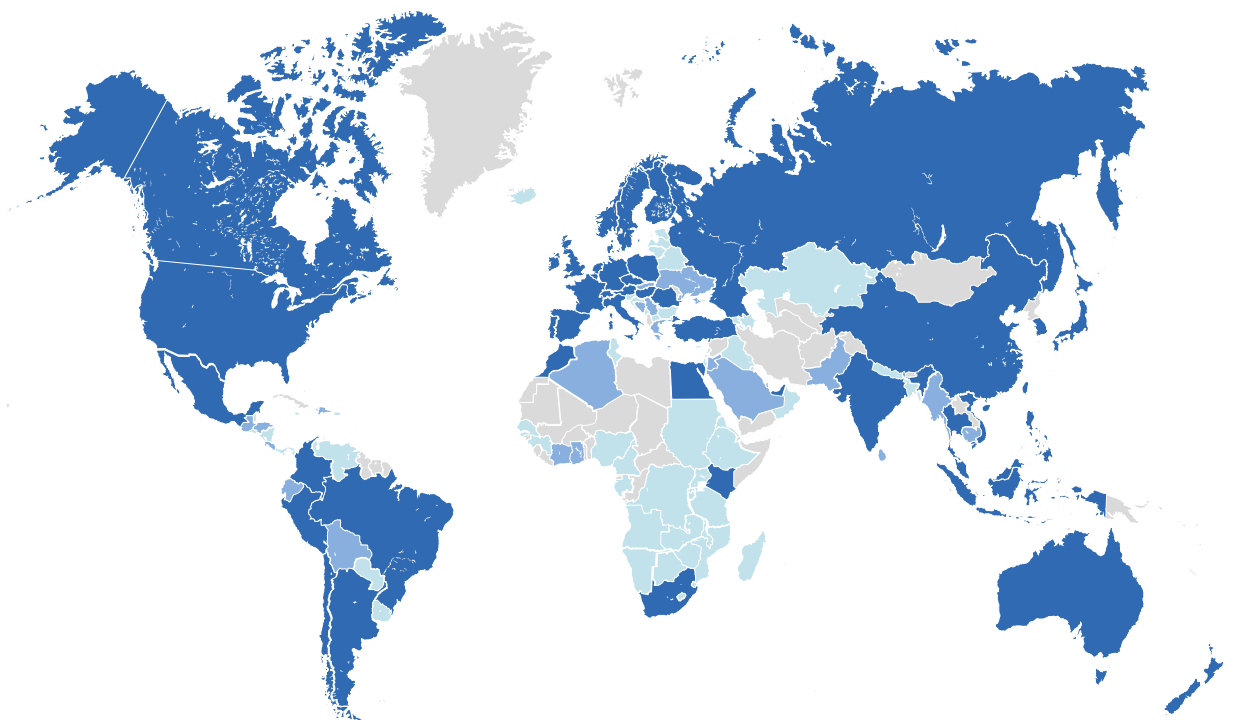
Further reading

Read more about our performance across the Group and our geographical expansion in 2020.

 See pages 38-51

Map key

-  Operating units
-  Sales offices
-  Indirect presence



Our diverse business

People

7,900

Core product lines

1,600+

Operating units**

132

Countries with a resident direct sales presence

68

Sales and service engineers

1,900+

Direct buying customers‡

110,000

** Operating units are business units that invoice locally.

‡ Actively purchasing in the last 24 months.

The industries we serve

A diversified and growing sector focus

We apply our products, solutions and expertise across a diverse range of industrial sectors, helping our customers to increase their efficiency, safety and sustainability.

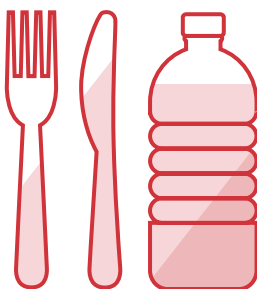


Pharmaceutical & Biotechnology

21%

of Group revenue

Our peristaltic pumps, valves and single-use components enable precise flow control and fluid isolation; clean steam reduces the risk of product and process contamination; electrical heating is used in a wide range of process heating applications.

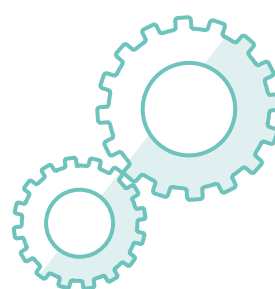


Food & Beverage

20%

of Group revenue

Steam is used for blanching, cooking, baking, brewing, distilling, packaging, cleaning and sterilising. Electric heating elements are used in commercial food equipment. Pumps are used to meter and transfer ingredients, deliver food to process lines, and handle process waste.

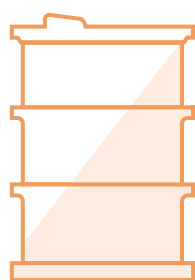


OEM Machinery

12%

of Group revenue

Original Equipment Manufacturers (OEMs) are companies that build and supply machines for use in industry. Our activities with OEMs vary from simple product supply to advising on machine performance improvements and process plant design.

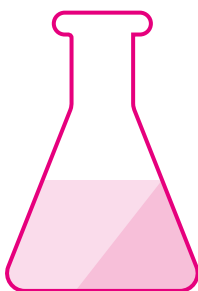


Oil & Gas

6%

of Group revenue

Electrical heating products reduce fluid viscosity, deliver freeze protection and help separate natural gas, crude oil and water during extraction. Our steam products enable optimum steam system performance and reduce energy use during oil and gas production.



Chemicals

5%

of Group revenue

Steam and electricity are widely used as an energy source in chemical production and product processing, while our pumps are used to safely and accurately transfer and dose critical chemical components.



Power Generation

5%

of Group revenue

Electrical heating technologies are widely used to optimise power generation. Steam turbines transfer chemical energy in fuel into electrical energy and steam is used to distribute and reuse waste heat formed during the power generation process.

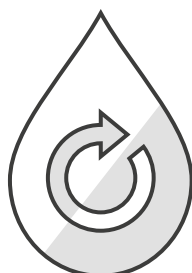


Healthcare

4%

of Group revenue

Steam is used in hospitals and clinics for space heating, hot water production, humidification and sterilisation. Pumps and associated equipment are used in the manufacture of products for the Healthcare industry.



Water & Wastewater

3%

of Group revenue

Peristaltic pumps are used to dose chemicals during water treatment processes and to transfer viscous and abrasive slurries. Electrical heating solutions provide freeze protection, temperature maintenance and space heating in water treatment plants.

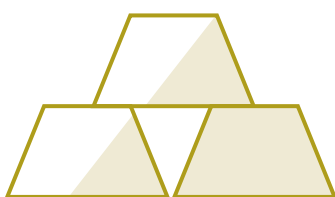


Buildings

3%

of Group revenue

Steam is used to provide space heating, humidification and hot water in public and private buildings, while our electrical products are used for hot water and heat generation, snow melting, gutter and roof de-icing and frost-heave prevention.

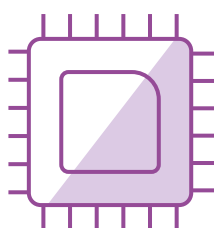


Mining & Precious Metal Processing

2%

of Group revenue

Peristaltic pumps reduce water, energy and chemical use and increase productivity while moving and processing abrasive ores and slurries. Electrical heating is used for temperature maintenance and space heating for workers.



Semiconductor

2%

of Group revenue

Electrical products are used in printing production processes to ensure thermal uniformity which is critical during the chemical production process; clean and pure steam generators supply the humidification system to ensure the air is not too dry or wet.



Pulp & Paper

2%

of Group revenue

Our steam, electric and pump products facilitate the accurate control of critical processes, such as washing, bleaching, dyeing, drying and finishing, in the manufacture of paper and a wide range of domestic and industrial tissues.

Chair's Statement

A resilient response to a challenging year



Our robust operational and financial performance demonstrates the commitment of our people, the strength of our business model and the resilience of our Group."

Jamie Pike
Chair

Introduction

In a year when industrial production was down between 4% and 5%, and amidst a global pandemic, our robust operational and financial performance demonstrates the commitment of our people, the strength of our business model and the resilience of the Group.

Recognising our colleagues

On behalf of the Board, I would like to thank our colleagues throughout the world for their outstanding individual and collective contributions during this unprecedented time. Our teams have pulled together, often in challenging personal circumstances to meet the needs of our customers, enabling us to play our part in supporting industrial processes in critical, frontline industries including Food & Beverage, Healthcare and Pharmaceutical & Biotechnology. They have also made exceptional efforts to provide support to our communities, helping those who need it most. We sincerely appreciate their hard work and dedication as we engineer a more efficient, safer and sustainable world.

Our resilient response to a challenging year

Supporting the health and wellbeing of our people throughout the global pandemic has and will continue to be our priority. Our response to COVID-19 was swift and decisive, enabling us to continue operating our manufacturing and sales companies safely and with only a few short-duration shutdowns in the second quarter of the year. The actions taken to protect our people and to support our customers and communities are outlined in more detail in the Strategic Review.

We did not lose focus on the importance of safety and made good progress with the implementation of our plans, despite the challenges of the year. Our continued focus on maintaining a strong safety culture drove an improvement of both our leading and lagging indicators, including our lost time injury rate reducing compared to 2019.

Financial highlights

Following a stronger than anticipated fourth quarter, Group sales in 2020 were £1,193.4 million (2019: £1,242.4 million), down 3% on an organic basis, reflecting a robust performance against a backdrop of a 4% to 5% contraction in global industrial production. Currency movements had a 2% negative effect on sales during the year, while the full year effect of sales from Thermocoax, acquired in May 2019, increased sales by over 1%. Sales for the Group were down 4% compared to 2019, with the currency movement accounting for more than half of the full year revenue decline.

Our Steam Specialties business, comprising Spirax Sarco and Gestra, experienced an organic decline of 6%, broadly in line with global industrial production, with sales in all three geographical reporting segments down year-on-year.

Our Electric Thermal Solutions business, comprising Chromalox and Thermocoax, experienced a 12% organic sales decline but ended the year with a significantly larger order book. Chromalox secured a US\$14 million order from the US Navy, the largest single order in our Group's history, helping bolster the yearend order book.

Watson-Marlow had an excellent year, delivering organic sales growth of 9%. Sales to the Pharmaceutical & Biotechnology sector grew 20% as customers redirected their activities and expanded their manufacturing capabilities in support of COVID-19 vaccine development and production. Demand was particularly strong in the last quarter of the year, leading to an increased order book that will ship in 2021. Sales to the other industrial sectors declined 3%, which resulted in the Pharmaceutical & Biotechnology sector accounting for over 55% of Watson-Marlow sales in 2020.

Group adjusted operating profit declined 4% to £270.4 million. On an organic basis, adjusted operating profit was down 1%. Currency movements reduced the Group adjusted operating profit by 4%, due to translation and transaction effects, while the net impact of acquisitions and disposals added 1%.

The Group adjusted operating margin fell by 10 bps, to 22.7%, largely due to the negative foreign exchange impact. Organically, the adjusted operating margin increased by 40 bps despite an organic sales decline of 3%, due in part to the strong performance of Watson-Marlow and temporary cost containment initiatives taken in each of our businesses. These cost initiatives mostly reduced expenses related to travel, marketing and employment, lowering Group overheads by £22 million, with most of the benefits realised in Steam Specialties.

Statutory operating profit was up 2% at £249.0 million (2019: £245.0 million) and the statutory operating profit margin increased from 19.7% to 20.9% due primarily to the impact of UK and Canadian defined benefit pension schemes being closed to future accrual during the year.

The Group adjusted pre-tax profit was £261.5 million, 5% below the prior year. Adjusted basic earnings per share was 3% behind at 256.6 pence (2019: 265.7 pence).

The pre-tax profit on a statutory basis was £240.1 million, up 1% on 2019 (£236.8 million). The statutory basic earnings per share were 235.5 pence (2019: 226.2 pence).

Cash and dividends

Cash generation was robust throughout the year, with adjusted cash conversion of 102% (2019: 84%), reflecting enhanced inventory management practices that increased our customer service performance during the pandemic while also improving cash management. At 31st December 2020 we had a net debt balance of £229 million, a net debt to EBITDA ratio of 0.7 times, compared with net debt of £295 million at 31st December 2019.

The interim dividend paid on 6th November 2020 was 33.5 pence per share, an increase of 5% (2019: 32.0 pence per share). The Board is recommending an increase in the final dividend of 8% to 84.5 pence per share (2019: 78.0 pence). Subject to approval of the final dividend by shareholders at the Annual General Meeting (AGM) on 12th May 2021, the total Ordinary dividend for the year will be 118.0 pence per share, an increase of 7% over the 110.0 pence per share for the prior year.

Corporate governance

In September 2020, Kevin Boyd, Chief Financial Officer and Executive Director retired from the Group. On behalf of shareholders and the Board, I acknowledge with gratitude his significant contribution to the Group's growth and development during his almost five-year tenure. We wish him a happy and healthy retirement.

Kevin's successor, Nimesh Patel, joined the Group in July 2020. Nimesh assumed the role of Chief Financial Officer and was appointed an Executive Director in September 2020. We were delighted to welcome Nimesh to the Group and the Board and appreciate the contribution he is already making. He brings 22 years of experience in senior roles, including as Group Head of Corporate Finance for Anglo American plc and most recently Chief Financial Officer of De Beers.

Neil Daws, Managing Director, Steam Specialties and Executive Director also retired from the Company on 31st December 2020, following an outstanding career in the Group spanning 42 years. Neil joined us in 1978 as an apprentice and held positions in production and design engineering, moving from Product Director in 1996 to UK Supply Director in 2003. He held many senior Divisional roles in Steam Specialties before becoming Managing Director in 2018. Neil was appointed to the Spirax-Sarco Engineering plc Board in 2003. On behalf of shareholders and the Board, I acknowledge with much appreciation the substantial contribution to the Group's growth and success achieved by Steam Specialties under Neil's leadership.

Dividend per share p

118.0p

2020	118.0
2019	110.0
2018	100.0
2017	87.5
2016	76.0

On 1st January 2021, Maurizio Preziosa succeeded Neil to become Managing Director Steam Specialties and a member of the Group Executive Committee, following a handover period with Neil during the fourth quarter of 2020. Maurizio joined the Group in November 2011 as General Manager for Spirax-Sarco Italy, progressing to the role of Regional General Manager for Southern Europe in 2014 before becoming Divisional Director Gestra in May 2017. We are delighted to have Maurizio's experience and leadership in this role and it is testament to the calibre of our leaders that we were able to fulfil this key appointment from within the Group.

The Board was pleased to welcome Angela Archon and Olivia Qiu as independent Non-Executive Directors, following their appointment on 1st December 2020.

Angela held various senior executive positions within IBM Corporation, including as Vice President, Transformation and Chief Operating Officer of the Watson Health Division. Angela also represented IBM for eight years as Board Liaison for The National Action Council for Minorities in Engineering. Angela has strong strategic and operational experience and combines her ability to drive transformational change with a clear focus on providing excellent customer support.

Olivia held a range of executive positions with large global organisations, including Chief Executive Officer and Board Director of Alcatel-Lucent Shanghai Bell. She is currently Chief Innovation Officer with Signify (formerly Philips Lighting). Olivia has digital transformation and innovation skills as well as strong international business experience.

On 9th March 2021, we announced the appointment of Richard Gillingwater as an Independent Non-Executive Director with immediate effect. Richard will succeed Dr Trudy Schoolenberg as Senior Independent Director on 1 August 2021, when Trudy will step down from the Board after completing nine years as a Director.

Richard has held a range of executive positions within global investment banks including Kleinwort Benson, Credit Suisse and Barclays de Zoete Wedd. He is currently Chair at SSE plc (stepping down at the end of March), Chair of Janus Henderson Group plc, Senior Independent Director of Whitbread plc and Governor at the Wellcome Trust.

All Board changes formed part of the succession planning undertaken by the Nomination Committee to recruit Non-Executive Directors with the skills and experience required to support the implementation of our strategy for growth.

Chair's Statement *continued*

Outlook

The latest forecasts predict global industrial production will grow over 7% in 2021. These forecasts are contingent on the swift and successful roll-out of vaccination programmes across the world and assume no emergence of new virus variants against which the available vaccines would be materially less effective.

As always, the currency outlook remains uncertain. If current exchange rates were to prevail for the remainder of the year there would be a less than 4% adverse impact on sales from translation and a more than 4% adverse impact on profit from translation and transaction, compared with the full year 2020. Movements in exchange rates are often volatile and unpredictable, therefore the actual impact could be significantly different.

We anticipate most of the Group's organic revenue streams in 2021 to expand broadly in line with global industrial production growth. Additionally, Electric Thermal Solutions ended 2020 with a higher-than-normal order book, which should add at least a further £8 million to sales in the year. Watson-Marlow experienced extraordinary demand from the Pharmaceutical & Biotechnology sector, which accounted for over 55% of sales in 2020, also ending the year with a higher-than-normal order book that will ship in 2021. We anticipate this strong demand to continue in 2021, driving organic sales growth of over 35% for that sector, with Watson-Marlow's other industrial sectors growing organic sales in line with global industrial production growth.

During 2021, we will step-up our revenue investments, including for sustainability and digital initiatives, to underpin future organic growth and trading margin progression. We believe close to three-quarters of the £22 million savings achieved by the temporary cost containment initiatives taken in 2020 will reverse in 2021. Short-term capacity expansion initiatives in Watson-Marlow will also generate incremental operating costs. Taken together, we anticipate these initiatives will reduce the full year drop-through from the organic increase in sales to operating profit to close to 30%.

We anticipate that cash conversion, which has been above 80% for the last 5 years, will return to those levels as we step up capital investments and increase working capital in line with revenue.

Section 172 Statement

In accordance with the Companies Act 2006 (the Act) (as amended by the Companies (Miscellaneous Reporting) Regulations 2018), the Directors have prepared a statement describing how they have had regard to the matters set out in section 172(1) of the Act, when performing their duty to promote the success of the Company, under section 172. The statement can be found on page 94 of the Governance Report.

We confirm that to the best of our knowledge:

- the Financial Statements, prepared in accordance with the applicable set of accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation, taken as a whole;
- the Annual Report for 2020, taken as a whole, is fair, balanced and understandable, and provides the information necessary for shareholders to assess the Group's financial position, performance, business model and strategy;
- the Directors have a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due over the three-year period to 31st December 2023. For the full Viability Statement, see page 57; and
- the Annual Report contains the information required for compliance with the Companies, Partnerships and Groups (and Non-Financial Reporting) Regulations 2016, see page 86.

The Strategic Report was approved by the Board on 9th March 2021

Signed by:

Jamie Pike

Chair

on behalf of the Board of Directors
9th March 2021

Efficient, Safer, Sustainable

Around the globe, often in challenging circumstances, our people have continued to create sustainable value for all our stakeholders through the application of our products and solutions. Engineering a more efficient, safer and sustainable world.

Efficient

Find out how Spirax Sarco is helping food producers to implement more efficient processes.

pages 14 to 15

Safer

Find out how Watson-Marlow's technology is helping to fight the pandemic and create a safer world for future generations.

pages 16 to 17



Sustainable

Find out how Electric Thermal Solutions is supporting the transition towards a more sustainable future.

pages 18 to 19

Steam Specialties



Spirax Sarco exhaust vapour condenser, helping create consistent noodle quality for less.

Engineering a more efficient world

Recovery of flash steam helped a noodle manufacturer improve process and productivity, while saving water, energy and CO₂.

The challenge

A team at a noodle production facility based in South Africa engaged Spirax Sarco's local sales team after discovering issues with pumping sunflower oil from their storage tanks due to poor temperature control, resulting in high oil viscosity, which was exacerbated on cold winter days.

The sunflower oil used for noodle frying is stored in five insulated stainless steel vessels and should preferably be pre-heated to improve pumping efficiency and reduce sudden temperature drops in the oil fryer, which may result in product spoilage and production losses.

A steam systems audit was conducted by Spirax Sarco's engineers to assess the situation and provide recommendations for improvement. The aim was to increase temperature of the sunflower oil supplied to the fryers by 60% and recover 100 kW of electricity to be used for electrical jacket coil heating.

The solution

It was noted during the audit that there was a free heat source next to the oil storage plant in the form of flash steam. High temperature condensate was being released from the noodles steam systems (fryers and pre-dryers). 282 kW of energy was available to be recovered and made available to heat processes in the plant.

A Spirax Sarco exhaust vapour condenser (EVC) was installed to capture energy and water from the vented flash steam to pre-heat the oil in jacketed piping. The EVC is a reliable, innovative solution for pre-heating make-up or process water by utilising the waste heat that would otherwise be lost to the atmosphere and turned into hot water. The hot water was then circulated in jacketed piping to heat the oil using a 2kW electric circulating pump.

The result

This single solution provided the customer with process and productivity gains whilst also saving them energy and money. Projected annual savings of R 440,611, including reductions of 118 tonnes of coal, 258m³ of water, 161 MWh of electricity and 287 tonnes of CO₂.



258m³
of water savings per
annum projected



Watson-Marlow



Watson-Marlow 400 series pump, providing stable and sterile pumping solutions to avoid contamination in critical COVID-19 diagnostic tests.

Engineering a safer world

Peristaltic pumps are used in the rapid production of Chemiluminescent immunoassay (CLIA) devices to meet the urgent diagnostic need throughout the COVID-19 pandemic.

The challenge

When the Wuhan province of China was first impacted by COVID-19, the market experienced explosive demand for COVID-19 testing throughout China and as such, leading Chinese medical device manufacturers were required to rapidly and significantly scale-up production of testing devices.

Widespread testing and diagnosis of COVID-19 is a key pillar in preventing its spread and bringing an end to the global pandemic. Chemiluminescent immunoassay (CLIA) is a diagnostic technique that is used for detection of antibodies for many diseases. It has been applied in the diagnosis of both current COVID-19 cases and the confirmation of those who have previously had the disease and still have antibodies. CLIA is faster, more accurate and more stable than previously used methods of chemical analysis and an increasing number of hospitals are now using this technique.

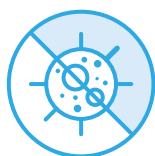
The solution

CLIA diagnostic instruments contain multi-channel pumps which transfer the waste liquid produced after the test and clean the reaction cell to avoid cross-contamination. Watson-Marlow's peristaltic pumps were recommended for this purpose as they provide a stable flow rate across all pump channels and a tube life of more than six months.

Watson-Marlow's team assisted in the adoption and incorporation of these devices to ensure customers could rapidly assemble the CLIA devices and meet this urgent need. The Watson-Marlow team was on hand at all times to make the process as efficient and seamless as possible.

The result

Watson-Marlow's customers in China were able to rapidly produce CLIA devices which were used to meet the urgent diagnostic need throughout the COVID-19 pandemic. The devices helped to diagnose patients in the early stages of COVID-19, facilitating earlier treatment and self isolation in order to reduce the spread of the virus and limit the number of people affected.



100%

sterile design with incomparable accuracy and repeatability in clinical diagnostics



Electric Thermal Solutions



Chromalox MOS system is helping green technology to be even more sustainable.

Engineering a sustainable world

Our heat transfer system provides an electric vehicle and clean energy company with a point-of-use CO₂-free heating solution that met strict equipment code requirements, tight time schedule and space constraints.

The challenge

An American electric vehicle and clean energy company working on an innovative production process required a heating solution, in keeping with its “green ethos”, for high temperature heat transfer fluid to circulate through critical production tools. The heating solution needed to fit within an existing building with space constraints, meet the US state and local equipment code requirements and due to their strict testing schedule, was required within a short timeframe.

As experts in advanced thermal technologies for the world’s toughest industrial heating applications, Chromalox was well placed to develop a heating solution to meet these requirements.

The solution

Following technical advice from Chromalox’s engineers, the customer selected one of Chromalox’s packaged solutions. The MOS (Mid-sized oil system) heat transfer system selected provides a pre-engineered electric hot oil circulation heater with required ancillary products mounted on a skid base. This was further customised with the addition of pre-designed ship loose isolation valves and pump strainers to deliver an optimal solution for the customer’s needs.

As electric heating solutions are considered to be “green” technologies, environmental permitting is not required, unlike with alternatives such as gas-fired heating solutions. This, along with the integrated end-to-end solution offered by Chromalox, helped to support delivery within the customer’s tight schedule.

The result

Chromalox’s MOS system provided the customer with a “green” heat transfer solution certified to the required standards, which avoided the need for environmental permitting (which could have led to schedule delays) and met all US state and local codes facilitating the acceleration of the customer’s testing schedule to meet the project deadline.

The facility where the system is installed, is on a journey towards deriving 100% of its electricity from solar panels. The move to a Chromalox MOS system means the process will become emissions free once the transfer to a complete photovoltaic renewable power supply is complete, projecting a saving of 1,063 tonnes of CO₂ per annum.



1,063 tonnes
of CO₂ savings projected per annum
once construction is complete



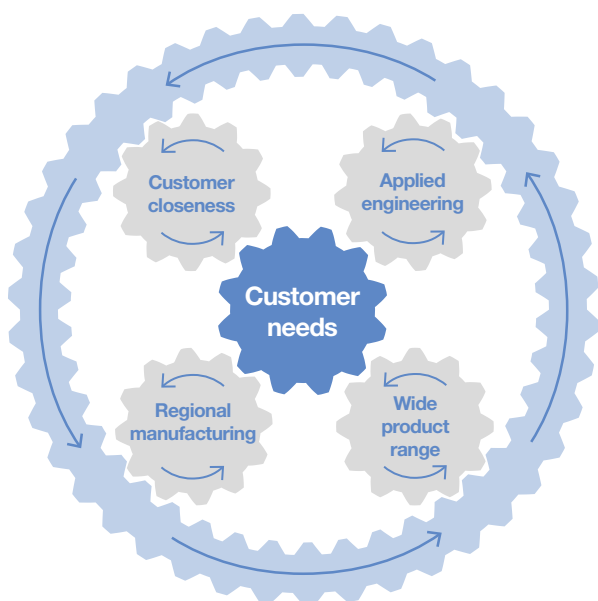
Our business model

Creating value through meeting customer needs

Our customers' needs drive all that we do, ensuring our activities and behaviours deliver our purpose to create sustainable value for all our stakeholders as we engineer a more efficient, safer and sustainable world.

1. Our competitive strengths

At the heart of our value creation is our deep engagement with and understanding of our customers and their processes. This closeness enables us to meet our customers' needs as we combine our specialist knowledge and locally-available, industry-leading products and services to deliver value-adding engineered solutions.



Customer closeness

Our direct sales business model creates a unique understanding of our customers' needs. We build deep, long-term relationships as we help our customers solve their difficult productivity, control and energy efficiency problems and improve their operational performance, safety and sustainability.

Applied engineering

It is not our products alone that provide value to our customers, but also the application of our extensive knowledge of systems design, operations and maintenance. Our customers increasingly rely on our expertise to deliver unique engineering solutions to achieve enhanced and sustainable operating efficiencies.

Wide product range

The breadth of our product offering is unmatched by our competitors and our one-stop-shop approach simplifies the procurement process for our customers who are increasingly seeking partnerships with competent full-service suppliers. We are committed to research and development (R&D) to further widen our range of products and pre-fabricated engineered packages.

Regional manufacturing

Local availability of a wide range of products, which meet applicable regional design codes, is critical to our business model and enhances top-line revenue growth. We have strategically located our major manufacturing plants across the world in Europe, North America, Latin America and Asia and are continuing to invest in new and upgraded manufacturing facilities across our Group.

Our strategy

Our strategy is designed to help us do what we do better. To understand more, read about our strategy in action on pages 28 to 35.

Further reading

To see our business model in action, view our customer case studies.

See pages 14-19

Our Values

Our business may be global, but wherever we operate in the world, our people share the same Values. Our Values are the foundation for all we do and an integral part of our culture, shaping everything from day-to-day decision making to our strategic global operations.



Customer Focus

Customers are at the heart of our business. Through expertise, passion and professional insight we achieve extraordinary results for both external and internal customers.



Excellence

We approach challenges with passion, aiming for excellence in all we do. We continually strive for further improvements to build a sustainable business for the future.

2. Our core activities

Our core activities are those things we do that enable us to meet the needs of our customers and achieve our Company purpose.



Innovate and design

Through innovative R&D we develop and enhance our already broad range of products, pre-fabricated packages and site services, ensuring that we meet customers' changing needs. Our technically-expert direct sales force allows us to leverage these new products and develop new applications for existing products, which increases the amount of plant spend that we can capture in the small-scale projects and maintenance activities that lie at the heart of our business.

No. core product lines

1,600+



Monitor and measure

We offer a comprehensive range of site audits, maintenance services and digital monitoring solutions, to keep our customers' systems operating efficiently. Approximately 50% of our revenue is derived from our end users' maintenance, repair and overhaul activities.

Revenue from maintenance activities

50%



Manufacture

We manufacture industrial and commercial steam system products, electrical process heating and temperature management products, and peristaltic and niche pumps and associated fluid path technologies. We manufacture over 1,600 core product lines in 32 manufacturing sites, located across four continents.

No. manufacturing sites

32



Apply and solve

We combine our specialist knowledge with our industry-leading products and services to deliver value-adding engineered solutions to customers, who increasingly rely on our service, solutions and expertise to achieve enhanced and sustainable operating efficiencies.

No. sales and service engineers

1,900+



Sell

With a resident direct sales presence in 68 countries and non-resident direct sales or distributors in a further 62 countries, we serve customers in 130 countries worldwide. Our offering to customers ranges from single products to bespoke engineered solutions or full system design and supply. We also provide site surveys and audits, and customer training.

No. countries with direct sales presence

68



Educate

We help our customers to identify in-house engineering knowledge skill gaps and offer a wide range of training courses, delivered in our 58 training centres worldwide, to help plug those knowledge gaps.

No. training centres

58



Respect

Everyone matters, both inside and outside our Company. We listen to diverse perspectives to help us generate new ideas and make better decisions. We respect the natural environment and the local communities in which we operate.



Integrity

We work in a way that is fair and honest. We do the right thing at all times. Success only matters when achieved fairly. We believe that winning with integrity leads to sustainable results.



Safety

The safety and wellbeing of our people is our first consideration. We anticipate dangers and report hazardous situations to prevent accidents before they happen. We care about people, helping them stay safe and look after our own wellbeing.



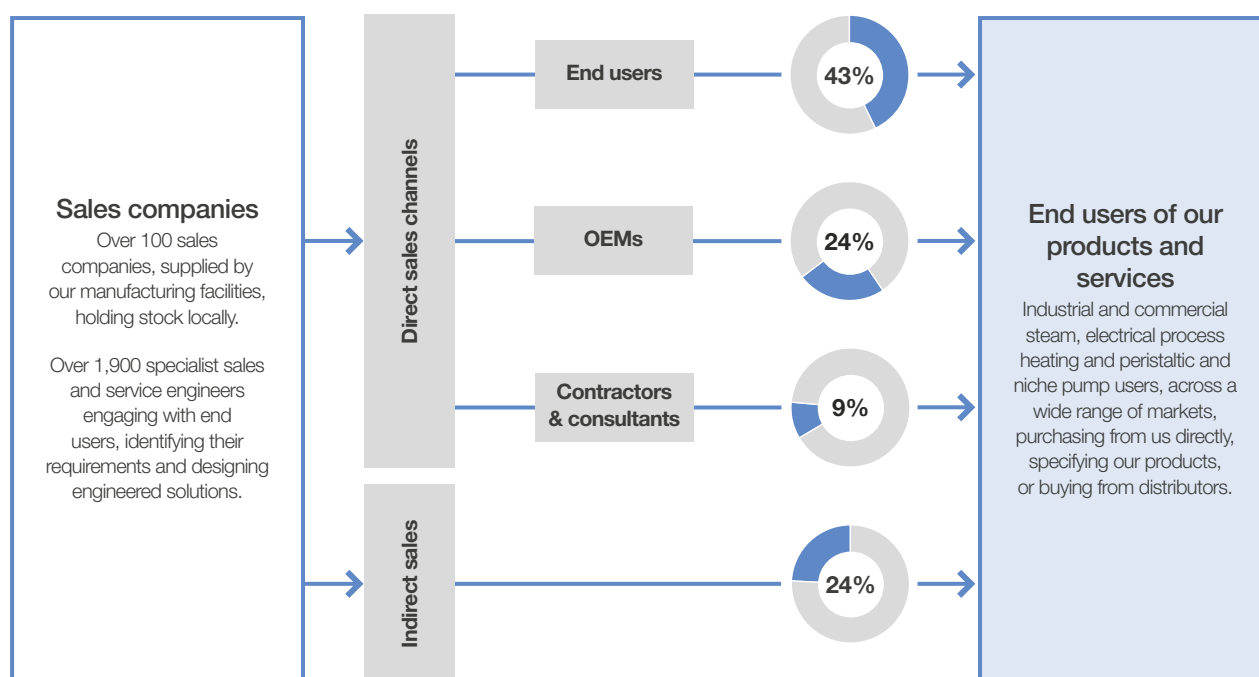
Collaboration

We are most successful when we trust each other and work together. Building relationships across the business allows diverse teams to work together, share expertise and help others.

Our business model *continued*

3. Our routes to market

Our direct sales approach is instrumental in delivering on our purpose and creating value-adding opportunities for self-generated growth.



Routes to market

Our direct sales approach plays an important role in all routes to market – whether direct or indirect – as our engineers engage with end users to highlight the benefits of our products, solutions and services. End users can then purchase from us directly, specify our products in OEM equipment, request that contractors specify our products, or purchase from a distributor.

Direct sales

Our specialist sales and service engineers visit end users in 68 countries, offering expert advice and providing products and solutions to optimise process efficiency, safety and sustainability. Our territories are covered segmentally where possible, geographically where not, with sector specialists allocated to our core industries. We call this sectorisation. Sectorisation enables us to provide industry-leading support to end users.

End users

As we combine a detailed understanding of our end users' processes with our broad range of regionally-manufactured products, engineered packages and services, we build deep, long-term relationships with our customers who trust us as a valued engineering partner and expert adviser. This customer closeness further strengthens our ability to design and develop products, services and solutions that deliver value to customers, and self-generate growth.

Self-generated growth

Our sales and service engineers spend a lot of time in our customers' plants physically and now virtually. They are highly effective at self-generating growth opportunities as they identify often unrecognised customer needs and design solutions to meet those needs. Importantly, these small improvement projects are generally funded through operating expenditure budgets and have a short pay-back period for the customer, meaning that they remain attractive even during challenging economic times.

4. Value for our stakeholders

We recognise the importance of operating in a way that delivers long-term sustainable value for our stakeholders. We engineer sustainable value creation as we manage relationships in a way that reflects our Values; effectively use financial, human and natural resources; understand our associated risks and opportunities; and implement our strategy for growth.



Customers

Creating value for our customers is at the heart of our Company purpose and is exemplified by our direct sales business model, which is driven by our customer needs. We create sustainable value for our customers as we provide products and services that enable them to improve operational efficiency, productivity and safety, meet regulatory requirements and increase their sustainability.

15.8m

tonnes of CO₂ saved annually from products sold in 2020



Colleagues

We have almost 7,900 Company colleagues across 68 countries worldwide. Our people are our greatest asset and we always aim to treat them with respect. We create value for our colleagues by extensively investing in developing their knowledge and skills, providing safe and inclusive working environments and remunerating them fairly for the work that they do.

£365m

paid in wages, salaries and pension contributions in 2020



Shareholders

As we focus on meeting our customers' needs we consistently achieve growth that outperforms our markets. This, in turn, enables us to create and deliver a strong track record of shareholder value. We have a progressive dividend policy that has delivered over 50 years of dividend progress, with an 11% dividend Compound Annual Growth Rate over the last 10 years.

£82m

paid as dividends in 2020



Suppliers

We operate a regional manufacturing strategy and use a wide range of local, national and international suppliers who adhere to our Supplier Sustainability Code. Having a broad manufacturing footprint, the beneficiaries of our value creation are geographically widespread and they, in turn, create value for their stakeholders.

£496m

paid to suppliers for materials and services in 2020



Communities

We are committed to "Engineering better futures" for the people in our local communities. We create value in our communities as we offer support to charities, non-profit organisations and education providers through employee volunteering, financial and in-kind charitable donations and educational provision.

£542,000

cash, in-kind donations and employee time to community engagement activities worldwide in 2020



Environment

We create value for the environment by providing products and services that improve the sustainability of our end users' operations, in particular reducing energy and water use, lowering carbon emissions and reducing waste. We are also committed to minimising our own environmental impacts through reducing energy consumption, emissions, water use and waste.

78.6m

m³ of water saved by customers annually from products sold in 2020

Creating sustainable value for our shareholders

We have a clear understanding of our customers and markets, allowing us to see where and how our revenues are generated and where best to invest for future returns.

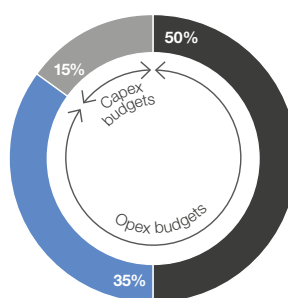
With the majority of our income coming from our customers' maintenance activities and small improvement projects...

85%* of Group revenue is generated from annual maintenance and operational (Opex) budgets, rather than from capital (Capex) budgets.

Why is this important?

Capex budgets are more likely to be cut during periods of slower growth or recession. Therefore, the high proportion of revenue deriving from Opex budgets gives us resilience during economic downturns. Additionally, through our direct sales approach, we are able to self-generate business by providing bespoke engineered solutions, typically with better margins.

* Based on internal estimates.



- Maintenance and repair sales** that *maintain existing systems*, supported by the end users' Opex budgets, with a typical invoice value of around £1.2k
- Small project sales** that *improve existing systems*, supported by the end users' Opex budgets, with a typical invoice value of £10k-£50k
- Large project sales** that *build new systems*, supported by the end users' Capex budgets, with a typical invoice value of over £100k

...and over a third of sales coming from self-generated opportunities...

35%* of revenue is derived from self-generated opportunities. This reflects our overall strategic objective to deliver growth that outperforms our markets. We achieve this by staying close to our customers – through our direct sales approach – understanding their system requirements and providing them with innovative products and solutions to solve their process challenges.

Further reading

Our direct sales approach is our greatest competitive advantage and is covered in more detail in our business model and customer case studies.

See pages 14-23

Why is this important?

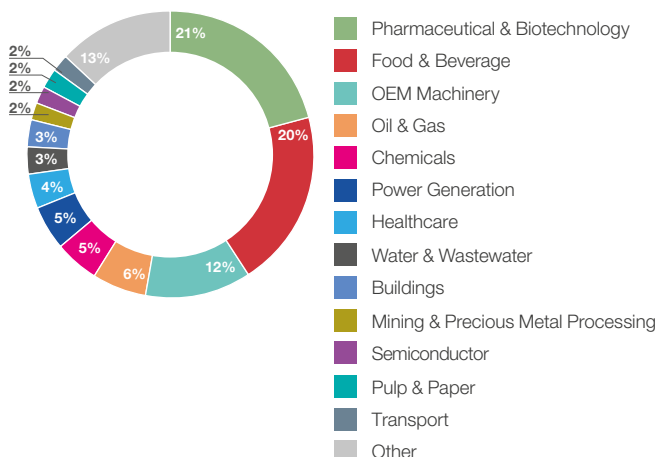
By focusing on self-generated growth we identify problems and design solutions that deliver significant operational benefits for customers. Typically, these bespoke, engineered projects have higher margins and relatively short sign-off timeframes as they are funded by maintenance and operational budgets at plant level. As we deliver engineered solutions we self-generate growth, reinforce our customers' trust in our engineering expertise and forge sustainable business relationships.

...our revenue is balanced across multiple less-cyclical industries...

55+ %* of Group revenue is derived from defensive, less cyclical end markets, including: Food & Beverage, Pharmaceutical & Biotechnology, Healthcare and Power Generation.

Why is this important?

Not only do we derive revenue from a diverse range of industry sectors, we also have an excellent balance between higher-growth end markets and those that are more defensive and resilient.



* Based on internal estimates. Where there is little visibility of end user industry sector (primarily in sales via distributors), sales have been allocated across industries on a pro-rata basis. In 2020 these "unknown" sales accounted for 18% of total revenue. OEM sales to identifiable industries have been allocated to those industries. Sales to OEM customers accounted for 24% of Group revenue in 2020.

...and our long-term market drivers remain positive.

12%* is our share of addressable market, which is valued at £10.3 billion at the end of 2020.

Our markets have significant growth potential due to a number of positive long-term market drivers (see the table below) at a macroeconomic and sector level.

Long-term market growth drivers

Population growth

Increased consumption and demand in all our major industry sectors.

Economic development in emerging markets

New markets and increased consumption.

Ageing population

Increased demand for healthcare and pharmaceutical products.

National and international climate change mitigation strategies

Requirement for companies to manage energy more efficiently, increasing demand for energy management products and services.

Increase in global energy consumption

Increased investment in renewable and non-renewable energy and power generation industries, with increased demand for energy management solutions.

Industrial production

Our markets reflect changes in industrial production growth rates but our sales have consistently outperformed them as we have expanded our addressable markets, extended our geographic penetration and grown our market share.

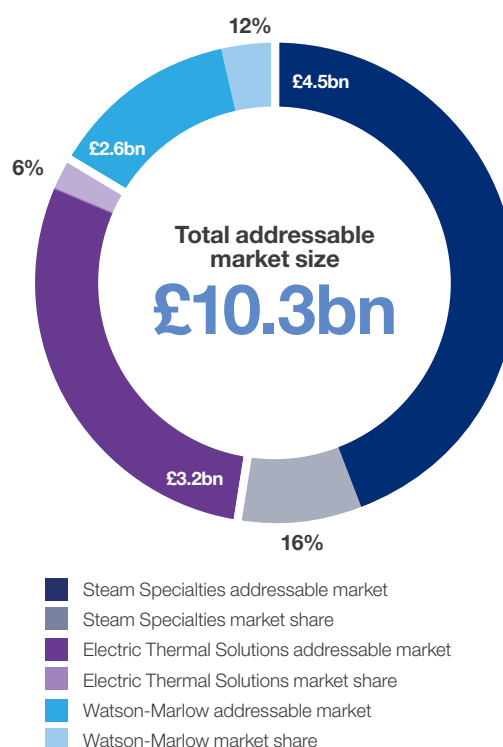
Our competitive landscape

As the global market leader in steam systems and peristaltic pumping, and a significant player in the electric thermal solutions market, we have a strong competitive position in relatively fragmented markets.

Our competitors generally fall into two categories: system specialists that supply a wide range of products and services, and product specialists that compete on a small part of our product range. Most system specialists are relatively small, privately owned, regional players, while product specialists lack the whole system expertise and application knowledge offered by our direct sales force. Our broad product range, global presence, applications knowledge and direct sales business model give us a strong competitive advantage in our markets.

Why is this important?

Our long-term growth prospects are promising. Although we are the market leaders in Steam Specialties as well as pumps and fluid path technologies, we have a relatively small market share of these large addressable markets, at 16% and 12% respectively, and with just a 6% share of the Electric Thermal Solutions market we have good opportunities for growth. We can grow by targeting self-generated sales, extending our geographical reach and increasing the size of our addressable market through innovative product development. In addition, our addressable markets and sectors continue to demonstrate headroom for long-term growth.



* Based on internal estimates. The increase in market size in 2020 reflects underlying changes in market segment sizes, expansion of the addressable market as a result of product development and the impact of exchange movements.

Strategic Review

A stable strategy at the core of reliability



Against the backdrop of the COVID-19 pandemic, the work we do to create a more efficient, safer and sustainable world has never been more important.”

Nicholas Anderson
Group Chief Executive

Efficient, Safer, Sustainable

Our Company purpose continued to guide our decisions in 2020. Against the backdrop of the COVID-19 pandemic, the work we do to create a more efficient, safer and sustainable world has never been more important. Across the globe and in the critical sectors we serve, our teams have supported our customers to keep their manufacturing and industrial processes operational.

Resilience and reliability when it matters

Our diverse products and solutions, which are deeply embedded in industrial and commercial sites all over the world, combined with our extensive engineering expertise, have helped our customers – including those who are on the frontline in the fight against the COVID-19 pandemic – rapidly respond to their needs.

Our direct sales business model is highly effective at uncovering opportunities to improve the efficiency and effectiveness of our customers' processes. By “walking our customer sites” our engineers often identify unrecognised needs and design bespoke engineered solutions to meet those needs. These solutions generally have a short payback period for the customer and are typically paid for from customers' operating budgets which means they remain attractive even during challenging economic times. Alongside this, we have continued to help our customers reduce their environmental impacts, improve product quality, provide safer working environments for their people and to achieve regulatory compliance.

Our Group supports a diverse range of industries with over 55% of sales destined to critical sectors such as Food & Beverage, Pharmaceutical & Biotechnology, Healthcare and Power Generation, which helped mitigate the impact of reduced customer demand in cyclical sectors that suffered larger contractions during 2020. Our largest sector in 2020 was Pharmaceutical & Biotechnology accounting for 21% of Group sales. No single customer accounts for more than 1% of Group sales. The total proportion of Group sales which are funded by our customer's operating budgets remains close to 85%, with the balance coming from the customers' capital budgets.

Further reading

Information on the strategic review of the Group Sustainability strategy.

 **Sees page 67-68**

These market drivers and our business model have continued to serve us well throughout the COVID-19 pandemic. Unable to physically walk our customers' sites in many cases, our network of more than 1,900 sales and service engineers – unique in number and expertise amongst our competitors – rapidly embraced virtual tools to engage with our customers and in this respect continued to support our business model for self-generated sales, which represent close to 35% of our Group revenue.

Although we have not been immune to the detrimental economic impacts caused by the global pandemic, the high proportion of sales that derive from our customers' maintenance budgets combined with our ability to continue to self-generate sales in the wide variety of sectors we serve, has enabled our business to be highly resilient during this global crisis.

Performance during a difficult year

2020 has not been without its challenges and we would like to pay tribute and give thanks to every colleague in our Group, for their outstanding efforts and dedication in line with our Values. Our teams have worked diligently, with innovation and entrepreneurship, to meet the needs of our customers without losing focus on the importance of safety, health and wellbeing.

Our response to the global pandemic has been comprehensive. Protecting everyone in our workplaces and helping our dispersed teams adjust to the new realities of remote working has been at the forefront of our efforts. For our critical workforce still accessing our facilities around the world, the measures we have taken include the provision of medical-grade masks and hand sanitiser, increased distancing between workstations, implementation of one-way systems and enhanced cleaning regimes.

We have stepped up our communications activity to connect with colleagues working remotely at home and introduced flexible measures to help those with responsibility for caring for loved ones. The global roll-out of our Group Employee Assistance Programme (EAP) ensured that everyone has access to support and resources when and where needed. COVID-19 infection levels among our employees have remained low, with the majority of cases being contracted outside the workplace from family or friends. We continue to actively monitor and engage to ensure that the risks do not become “normalised” as time goes on.

We took decisive and early action to introduce temporary cost containment initiatives in the first half of the year. These included the restriction of non-essential spend, a reduction in temporary staff and salary reductions for senior management. As we moved into the second half of the year, the way in which our people adapted, and the continued resilience of our business model became clear to see. We were able to lift some temporary cost containment measures earlier than anticipated and a number of the voluntary salary reductions put in place in April, ceased by August with all salary sacrifices being repaid in December. Throughout the year we realised savings from activity curtailment as a direct consequence of the global restrictions, such as reduced travel and lower marketing expenditure.

Enhanced inventory management practices increased our customer service performance during the pandemic, improving our competitive position and our cash management.

Planning for long-term resilience

Our strategy, underpinned by six strategic themes, aims to deliver self-generated growth that outperforms our markets.

Our six strategic themes are:

- Increase direct sales effectiveness through market sector focus
- Develop the knowledge and skills of our expert sales and service teams
- Broaden our global presence
- Leverage our R&D investments
- Optimise supply chain effectiveness
- Operate sustainably and help improve our customers' sustainability

Our strategy has been in place since 2014 and has consistently delivered strong results. Watson-Marlow and Electric Thermal Solutions completed planned strategy refreshes during the year, identifying the key initiatives for strategic implementation over the next five years. In January 2021, Steam Specialties also initiated a similarly planned exercise that will be completed during the year.

Despite the challenges of remote working our teams launched 42 new product, service or solution offerings during the year, with 15 new product introductions in Steam Specialties, 20 in Electric Thermal Solutions and seven within Watson-Marlow, accelerating the Group's Product Vitality (a measure which compares total revenues from new products, services or solutions introduced in the previous five years, against overall Group revenue). Work continued throughout 2020 on the development of the Group's new product pipeline, which will support the launch of further products and solutions in 2021.

To ensure we are well positioned to meet the growing needs of our customers in the medium term, we continue to invest significantly to expand both the capacity and performance of our business. Our "future factory" initiative is driving our focus on operational excellence in Steam Specialties; as is the consolidation of manufacturing sites into single-site facilities across all our businesses.

Within Electric Thermal Solutions we are well progressed with a project to consolidate Thermocoax's four manufacturing facilities in Normandy (France) and integrate these within a new purpose-built facility. We expect to complete the integration by the end of this year.

In Watson-Marlow, we are increasing capacity in some of our existing manufacturing sites and expanding our footprint to add further capacity. For Aflex in Yorkshire (UK), we have consolidated four of five sites into a 16,200m² purpose-built facility, with the fifth site to be integrated later this year. Additionally, we have initiated construction of a new 11,000m² facility for BioPure in Portsmouth (UK), which will commence operations towards the end of 2021.

In 2021, we are further accelerating our investment in Watson-Marlow to better serve our customers. The Board has approved an US\$88 million investment to build a 12,800m² state-of-the-art manufacturing facility on a 25.4 acre site in Massachusetts (USA), which will significantly expand our capacity to serve customers in the Americas region, particularly the fast-growing Pharmaceutical & Biotechnology sector. Negotiations with local authorities and contractors are well advanced and first customer deliveries are expected before the end of 2022.

The additional capacity from these investments combined with enhanced inventory management practices, which increased our customer service performance and improved our cash management, leaves us well positioned to better serve our customers as markets recover.

We are also investing in digital and technology, such as upgrading our systems to future proof our business and to identify opportunities to create additional value for our customers, through digital products and solutions. The global pandemic has accelerated digital adoption and we have fast-tracked digital solutions across the Group and for our customers. This will continue in 2021 and beyond as we seek to accelerate digital initiatives that improve our customer targeting, innovation, operational effectiveness and people processes.

During 2020 we also invested in key roles within our Human Resources organisation, including the appointment of a Group Head of Inclusion, Diversity and Wellbeing. This reflects our aspiration to be an increasingly inclusive employer and to create a culture where diversity thrives. In March 2021, 31% of senior executives across the Group are female, up from 21% in mid-2019.

Building a sustainable future

In 2020, we committed to achieve net zero greenhouse gas emissions before 2040 and to source 50% of our electricity from renewable sources by 2030.

To ensure we can achieve these and other important targets, we are accelerating our investments in sustainability and we appointed our first Group Head of Sustainability, who reports directly to the Group Chief Executive. This important role will enable us to work collaboratively with both internal and external stakeholders to accelerate our sustainability performance, and that of our customers, while addressing key global sustainability challenges. During the final quarter of 2020 we commenced a sustainability strategy refresh and completed a range of activities such as stakeholder engagement, a materiality assessment, climate change scenario analysis, and a biodiversity impact assessment. We also commenced the development of our net zero greenhouse gas roadmap.

We are exploring synergies within our thermal energy management portfolio, which will enable us to combine core capabilities from our Steam Specialties and Electric Thermal Solutions businesses to develop our products and service capabilities for quantifiable sustainability benefits. This will enable us to support the evolving needs of our customers as they seek to mitigate the impact of their operations on the environment.

The Group remains committed to organic growth as the predominant source of growth. Nevertheless, we regularly refresh our pipeline of acquisition opportunities across our businesses and market sectors. We look for complementary companies that have strong potential to underpin the Group's organic growth over the long term at similar margin levels.

Strategic Review *continued*



Increase direct sales effectiveness through market sector focus

As we sectorise our sales and service engineers around key industries, and align our products and services in support of this, we increase our ability to self-generate growth and provide value to customers.

Progress in 2020

The global pandemic intensified our sector-focused activities in 2020. Reacting to the rapidly changing needs of our customers, a number of targeted activities were launched. With hospital staff having to stand in for each other, Spirax Sarco UK introduced a “drop in” webinar session on the subject of “safety in the boiler house” for the National Health Service (NHS) to ensure customers were up to date with essential boiler house checks. Watson-Marlow also developed and launched a COVID-19 marketing campaign (see “Strategy in action” for more information).

Steam Specialties expanded its range of Clean Steam Generators (CSG) through the release of a CSG specifically designed for the Food & Beverage sector.

Watson-Marlow ensured its sales engineers’ knowledge was up to date through the delivery of two training events at the start of 2020. The purpose over the two days was to drive Watson-Marlow’s continuing sales growth, particularly in Pharmaceutical & Biotechnology and Food & Beverage (its biggest sectors), through a series of interactive sessions covering existing products and introducing an incredible ten new products and features.

Focus for 2021

- Developing industry and application-focused products and engineered solutions to align our offering with the needs of customers in our target industries.
- Watson-Marlow micro-segmentation of industries and customers for stronger alignment of product value propositions with customer buying objectives.
- Continue focus on critical industries serving on the frontline, which are already our core industry sectors such as Pharmaceutical & Biotechnology, Healthcare, Food and Beverage.

Strategy in action

When the COVID-19 pandemic broke, it was time to pause, reflect and refocus Watson-Marlow’s marketing activity. The team examined how behaviour and preferences had changed and discussed where a different approach was needed.

Consensus was found in one simple fact: people in all our target industries needed a little help – it was important to be very clear about how our products could be used in the fight against COVID-19.

A specific COVID-19 marketing campaign supporting five industry sectors across multiple platforms and in 14 languages was launched in four weeks.

By partnering with Cobra Biologics, one of a consortium working on the AstraZeneca COVID-19 vaccine, Watson-Marlow launched a “vaccine development” campaign which included a webinar covering how to accelerate vaccine production. The webinar included endorsement from Cobra Biologics of Watson-Marlow’s single-use product range used for vaccine development, which includes assemblies and individual components such as the Q-Clamp.

As a result of this campaign’s unique and informative content, distributed utilising a mix of social media, video, digital marketing and media relations, 600 people registered for the webinar. Approximately 40% of the registered individuals attended it live, with the remainder having viewed the webinar “on-demand”. These 600 prospects, from Pharmaceutical & Biotechnology, Medical Technology, Food & Beverage, Environmental, and Industrial industries, were then shared with the global sales team for follow up. This initiative has already resulted in a pipeline of new global sales opportunities for single-use technology, Watson-Marlow pumps and larger fill finish technology – all of which is used in different stages of vaccine or medicine development and production.

Watson-Marlow will continue innovating and adjusting its marketing approach to deliver value and help its markets to continue to thrive into 2021 and beyond.



Develop the knowledge and skills of our expert sales and service teams

The knowledge of our sales and service engineers is a key differentiator. We invest extensively in the professional development of our people, building a level of expertise that is unrivalled.

Progress in 2020

Despite the challenges posed by the pandemic during 2020, we continued to invest in training and development initiatives during the year, prioritising it in many cases.

In January and February Watson-Marlow launched two regional training conferences in the US and Italy, sharing sector specific content with more than 350 attendees across the Pharmaceutical & Biotechnology, Food & Beverage, Industrial and Environmental sectors. In addition to existing planned webinars, Watson-Marlow also created daily online training meetings for Sales Engineers, Technical Support and Applications Engineers to “drop into”.

Development of Blue (more advanced technical) and Purple belt (global sector or product specialist) content for the Spirax Sarco Academy was fast-tracked to support the increased usage from sales engineers due to access to customer sites being restricted. The Academy’s programmes are structured in levels, called “belts”, with each “belt” being allocated a colour and representing an increasing level of expertise from White belt (introduction to sales and specific health & safety subjects) through to Black belt (global sector or product specialist). Online “Consultative Selling” courses were also rapidly authored to help with the need for remote selling. Four training modules for the “Sales Management Development” programme were also released. Gestra launched a global webinar initiative, in conjunction with Gestra sales and technical specialists, to encourage continuous development of newer sales colleagues who were unable to attend face-to-face training.

Elsewhere in the Group, Chromalox expanded upon its video training library for field sales engineers, with over 300 videos made available.

Focus for 2021

- Continuing development and roll-out of the programmes of the Spirax Sarco Academy and Sales Management Development programme.
- Begin developing training material for Chromalox and integrate into the Spirax Sarco training platform (The Academy).
- Further development of Watson-Marlow’s training materials.

Strategy in action

Ben Pringle, Sales Manager, Spirax Sarco UAE has spent many years in different parts of the business throughout his career. “I realised how coaching has personally enabled me to increase my confidence and grow in my roles. In my current position, I immediately saw the potential to support and develop my new team of sales engineers through coaching.”

One of the first areas that Ben initiated was a team assessment on their knowledge of our key technical products and systems. “The results gave insight into the developmental needs of my team and that of each individual within it. We have been able to target our training and personal development plans to support each sales engineer’s particular needs, as well as that of the whole team, to improve their performance in their roles.”

The Middle East has recently started to participate in the Sales Excellence First Line Sales Manager Capability Development Coaching programme. “I really like this approach because the coaching programme is specifically about coaching in the sales environment and is targeted at supporting behavioural transformation to achieve excellence in the role.”

The programme covers the skills required of the coach and how to target and apply these skills. One of the key tools in the programme is the Coaching Engagement Planner. Through careful observation, this is a tool which helps a First Line Sales Manager focus on what areas to coach in order to build excellence in sales. “As a result of using this tool my coaching is not arbitrary; instead it is focused on the individual needs of my team and the way in which they execute their roles.”

Despite only engaging with the programme in recent months, Spirax Sarco UAE have already improved their customers’ experience by reducing response times by up to 50%. Ben indicated that, with the roll-out of OPAL CRM in the Middle East, coaching will become even more of a key success factor in supporting the adoption and sustainability of a new CRM system.

Strategic Review *continued*



Broaden our global presence

Our strong global infrastructure enables us to branch into adjacent markets rapidly and leverage our existing infrastructure to establish our businesses and technologies in new markets.

Progress in 2020

Having a local sales presence with expert sales and service engineers on-the-ground, unlocking self-generated sales by engaging customers and identifying their needs is what our direct sales business model is all about. The geographic expansion of our direct sales presence is a key element of our strategy, enabling us to increase our coverage and offer customers easier access to our expertise.

Each of our businesses across the Group established a direct sales presence in a number of new countries in 2019, and much of the focus in 2020 has been on supporting these teams with developing their new businesses during this difficult year.

Three new Watson-Marlow operating companies began trading in 2020. Watson-Marlow Hungary began trading in the first quarter of the year. Watson-Marlow Finland and Watson-Marlow Norway were operational from the third quarter of 2020. In September, Watson-Marlow opened a new representative office in Serbia (managed by Watson-Marlow Austria) to strengthen direct sales, service and support for customers in Serbia, Bosnia and Herzegovina, Montenegro, Albania, Kosovo and North Macedonia.

Focus for 2021

- Continuing geographical expansion and strengthening of Gestra, Chromalox and Thermocoax's direct sales presence internationally.
- Strengthening Watson-Marlow's direct sales presence in Asia and Latin America.
- Investing in Watson-Marlow's global manufacturing capacity.
- Strengthening Spirax Sarco's direct sales presence in developing markets.

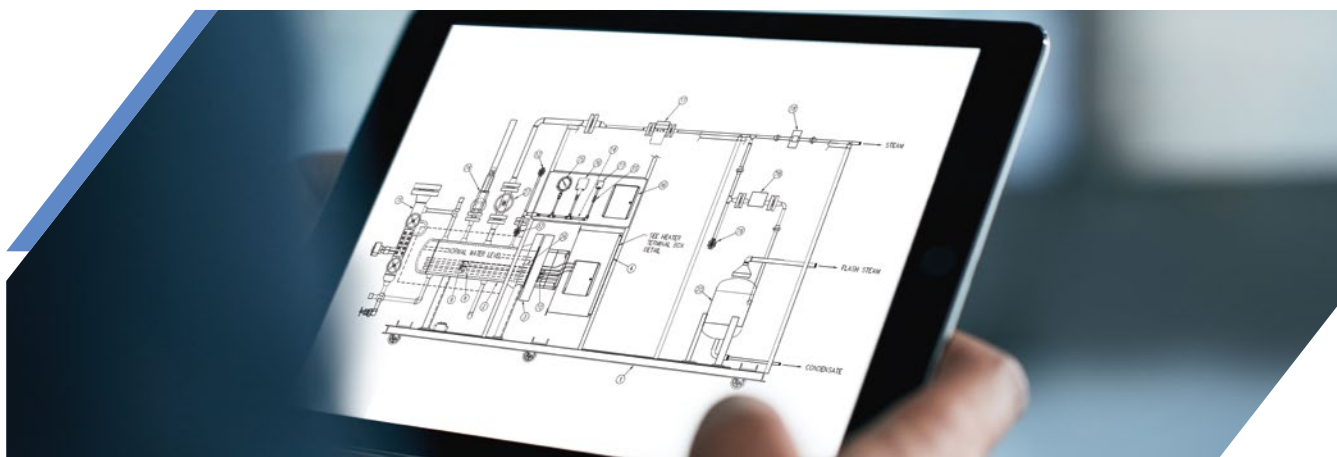
Strategy in action

Hungary is often considered to be a gateway into Central and South-eastern Europe and therefore provides an attractive market for foreign investment. Pharmaceutical & Biotechnology and Food & Beverage are among its main industries, and are a core focus for Watson-Marlow.

With a direct sales presence in Hungary, Watson-Marlow can serve local customers more effectively and broaden the range of products it sells to this market. Local engineers can draw on the company's 60+ years of expertise to advise customers on the most suitable pump for their application, demonstrating the value of peristaltic pumps to customers who may not be familiar with the application of this pumping technology.

Watson-Marlow Hungary began trading in the first quarter of 2020, a difficult time to begin new operations due to the height of the COVID-19 pandemic. The majority of sales to date have come from Pharmaceutical & Biotechnology customers, with a large variety of orders for pumps and tubing. Following a challenging start, Watson-Marlow Hungary is on a growth path. Next year they plan to take on BioPure and Flexicon, currently being serviced from Watson-Marlow Austria.

The Hungarian office is based in Budapest and supports Watson-Marlow's business in Hungary, Romania and Bulgaria. Attila Pal is the Country Manager and the operating company currently employs six people.



Leverage our R&D investments

We leverage R&D investments to meet changing customer requirements, improve our offering, respond to market trends, expand our addressable market and maintain our market-leading position in each of our business niches.

Progress in 2020

2020 has been a productive year for new product releases with 42 new products and solution offerings launched across the Group accelerating the Group's Product Vitality (a measure which compares total revenues from new products, services or solutions introduced in the previous five years, against overall Group revenue). Steam Specialties added to its range of Spirax Sarco Clean Steam Generators (CSG) with the launch of a CSG specifically developed for the Food & Beverage industry. A state-of-the-art steam trap survey tool to be used by our service engineers was also introduced and our range of manifolds was extended. SPECTORconnect, the new Gestra technology for boiler controls launched in 2019, has been successfully introduced into the market as a new standard.

Within our Electric Thermal Solutions business, Chromalox released its new ChromaTrace™ for Buildings 1.0 design software specially created for the Building & Construction market, architects and engineers, and expanded its DirectConnect™ MV Boiler product line to 11MW. Thermocoax developed seven new, bespoke heating solutions for use in the Semiconductor industry, in response to customer needs.

Watson-Marlow introduced a number of new products including three new EtherNet/IP™ process pumps which provide digital connectivity, as well as a range of model extensions for the MasoSine Certa™ pump. A targeted launch of a revolutionary new patented-technology pump head, the ReNu 30 CWT (Conveying Wave Technology), was initiated in June. The pump head, which fits onto existing Qdos pumps, gives superior accuracy in chemical metering and dosing applications, expanding our addressable market in sectors requiring higher flow, pressure and enhanced chemical resistance.

Throughout the COVID-19 pandemic, we have continued to invest in the development of innovative new products to ensure that we maintain our industry-leading position and stay ahead of our customers' changing needs.

Focus for 2021

- Continue to develop innovative, sector-aligned new products through effective R&D processes.
- Broaden the application scope of existing products through range extensions, to meet customer needs.
- Continue our digital transformation journey.

Strategy in action

The use of electric heaters to generate steam is not a new concept. Providing steam generation at the scale required for customer sites that are planning to decarbonise their steam supply has been beyond the capabilities of low voltage electric heat sources. Driven by an ambition to achieve net zero greenhouse gas emissions by 2050, Equinor, a broad energy company, is planning to reduce emissions at one of their Oil & Gas processing facilities.

Chromalox and Equinor have engaged in a testing programme which will include building a test steam generator to utilise medium voltage electricity (6,600V) to generate high pressure steam at the temperature required at the facility. Chromalox will be monitoring and recording pressure, temperature, flow, water quality, as well as other measurements to ensure proper operation at full scale for any potential installations in the future.

The testing equipment was designed and assembled in 2020, and installation, commissioning and testing was started early in 2021. Testing will run for a period of time to validate Chromalox's medium voltage heating technology for the purpose of generating and super-heating high pressure steam.

The objective of the project is to confirm the viability of using medium voltage resistance heaters to generate and superheat high pressure steam, with the aim of supplementing or replacing fossil fuel fired steam generation.

Alongside the intended reduction in emissions, this electric steam generation application will deliver additional benefits including increased efficiency and reduced maintenance.

Steam Specialties



M850 flow computer from Spirax Sarco, communicating data for real-time analysis of steam system performance.

Engineering a more efficient world

A remote monitoring system to measure steam flow is already proving the value of digital in driving increased efficiency and sustainability.

The challenge

The sustainability team at Aspen Pharmacare (Aspen) in South Africa was looking for ways to improve the energy efficiency, process productivity and reliability of the steam system in their manufacturing and packing facility in Port Elizabeth.

In February 2020, the local Spirax Sarco team conducted a comprehensive steam system and energy audit. Our experienced engineers identified several opportunities to achieve energy reduction and process productivity improvements through combining our products, solutions and know-how with digital technologies.

The audit findings identified the need to produce KPIs and to validate savings, while improving heat exchange, controls, boiler performance, process quality and reliability through upgrading the steam trapping to discharge condensate, air and other incondensable gases more effectively from the steam.



24/7

real-time and remote monitoring for efficient resolution of any identified issues

The solution

Priorities for the work arising from the audit were agreed and divided into manageable phases, starting with the critical processes. The first priority was to implement a solution to meter steam energy to establish how effectively steam was being distributed and used. Progress was hampered when COVID-19 lockdowns swept across the world, limiting travel and access to site. However, Spirax Sarco and Aspen adapted, continuing to work together virtually, to complete the installation designs, technical assessments and secured stakeholder approvals for a turnkey solution to enable remote monitoring of steam flow on one specific part of the steam system.

The remote monitoring system for phase one involved the fabrication, installation and commissioning of five flow metering stations to measure the flow of steam, which were connected to our Cloud Monitoring and Connected Expert platform, allowing the data to be monitored and analysed in real time by our remote engineers. The data transmitted by the flow computer was processed by our systems and teams, providing Aspen with 24/7 monitoring, alarms, notifications and periodic expert assessments, supported by a maintenance package to resolve any identified issues.

The result

The new system went live in December 2020 and the data collected has already helped our thermal engineers develop a deeper understanding of the areas for improvement in the system being monitored.

One of the critical areas identified was the high levels of steam load on the boilers and the need for the boilers to respond quickly to the variations in the steam load occurring, due to the increased demand.

The teams are now actively planning the monitoring of the steam boilers to ensure steam generation is optimised to support the increased production requirements and to identify efficiency and productivity improvements that could be implemented as part of the next phase of the project.

The project is in its early stages, but is a great example of how our products, solutions and know-how can be combined with digital technology to enhance efficiency, remotely and in real time.



Strategic Review *continued*



Optimise supply chain effectiveness

We have a global manufacturing footprint and focus on increasing supply chain agility and compressing lead times to enable greater responsiveness, reduce costs and improve customer service.

Progress in 2020

Many sites within the Steam Specialties business have achieved their best ever On Time to Customer Request (OTTR) results, with Italy seeing the most progress due to a strong focus on driving service and operational improvements. Gestra also saw a significant improvement in OTTR as a result of planning and capacity improvements. The Americas division designed an Inventory Quality Management (IQM) champion certification programme for the Spirax Sarco Academy that has been rolled out across the division and made available to others.

Watson-Marlow saw its first production output from its new state-of-the-art manufacturing facility in Yorkshire for Aflex (see “Strategy in action” for more information). Construction of the new manufacturing facility at Dunsbury Park for BioPure is underway, which will commence operations towards the end of 2021.

In February 2020, construction commenced on a new manufacturing site and office facility in Normandy, France, to integrate Thermocoax's four existing sites into a new purpose-built facility which is expected to complete in the second half of 2021.

The Board has approved an US\$88 million investment to build a major state-of-the-art manufacturing facility in the USA state of Massachusetts for Watson-Marlow, which will significantly expand our capacity to serve customers in the Americas region. Negotiations with local authorities and contractors are well advanced and first customer deliveries are expected before the end of 2022.

Chromalox has partnered with a third party to support the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and Restriction of Hazardous Substances (RoHS) declarations of key products for specific customer requirements in a timely manner.

Focus for 2021

- Increase our focus on supplier performance, making use of improved data to accelerate improvements in our supply chain, improve quality and support our customer service metrics.

- Further improve the alignment between sales and supply companies, making use of improved internal and customer data, to reduce lead times and support OTTR improvements.
- Complete the consolidation of Aflex's UK manufacturing sites into one new, purpose-built facility. Complete the construction of the new BioPure site at Dunsbury Park which will commence operations towards the end of 2021.

Strategy in action

Aflex Hose, the leading manufacturer of PTFE lined flexible hose products located in Yorkshire, joined the Watson-Marlow Fluid Technology Group in 2016. With ambitious expansion plans, a new factory was required that was specifically designed to accommodate Aflex's bespoke processes.

Planning permission to develop waste land close to its existing sites into a new state-of-the-art manufacturing and office facility was received in 2018, and construction at Bradley Park commenced at the beginning of 2019.

The relocation and consolidation of its existing five manufacturing, office and product development facilities to a single, nearby, purpose-built site ensured its highly skilled workforce would be retained.

Once the build and handover were completed, a carefully phased transfer of Aflex's existing five sites began, ensuring zero disruption to customers. Four of the five sites successfully transitioned to the new site in 2020, with the final site due to complete its move in the second quarter of 2021.

Aflex Managing Director, Neil Hooper, commented, “The success of Aflex has been driven by the skills, creativity and commitment of our people. The opening of our new facility is truly a pivotal moment in the company's development and will underpin an exciting and sustainable future. The investment in the new Bradley Business Park facility is an outstanding example of strategy and sustainability in action.”

Despite a demanding timeline, the project is on plan and budget. The facility, consisting of a three-storey office building and 17,000m² factory, includes investments in new extrusion lines and processing equipment, increases Aflex's production by 70%.



Operate sustainably and help improve our customers' sustainability

As we focus on improving our own sustainability and deliver innovative solutions that improve the sustainability of our customers' operations, we create value and drive growth.

Progress in 2020

In the first half of 2020, our Group Chief Executive, Nicholas Anderson, was invited to join the Council for Sustainable Business (CSB), and subsequently attend a virtual environmental sustainability meeting of over 200 business leaders from the UK's largest companies alongside government representatives. In preparation for this event, we made a number of climate change and biodiversity commitments, including: achieve net zero GHG emissions before 2040; source 50% of our electricity from renewable sources by 2030 and establish a 2030 biodiversity net gain target.

In July 2020, we appointed a Group Head of Sustainability to accelerate our Sustainability agenda and performance in conjunction with the Sustainability Managers in each of our three Group businesses. During the second half of 2020, we have undertaken a number of actions including a third-party assisted materiality assessment, stakeholder engagement exercise, peer benchmarking and risk assessment. The Sustainability strategy has been refreshed and implementation plans developed in the first half of 2021.

While the COVID-19 pandemic put a stop to many of our pre-planned local volunteering activities in 2020, our colleagues found other ways to engage with and support their local communities during this time of need; from the production and distribution of personal protective equipment (PPE) and groceries, to financial donations for local causes and virtual fundraisers.

Focus for 2021

- Complete the refresh of our Group Sustainability strategy, including setting stretching targets.
- Roll out and implement the refreshed strategy across the Group.
- Further develop the Group's net zero greenhouse gas emissions roadmap.

Strategy in action

Initially driven by a quality improvement exercise to improve the longevity of the paint used on our products, our UK manufacturing operation set themselves the additional target of completely overhauling the paint process to deliver process efficiency gains, via a project that was to be completed in just one month.

Following a review of the process from end-to-end, the project team made a number of upgrades to the paint process including sourcing a new local paint supplier; introducing pressurised paint pots for consistent viscosity and application as well as to reduce the potential for spills; removal of fans from the floorspace and replacing them with uprated fans located on top of the oven to declutter the floor area, upgraded paint booths with water curtains at the back to catch overspray and a change in the paint and water separation method from floating to sinking the paint.

Following the many process enhancements implemented by the team, not only has the business seen an improvement in the quality of the finished products but they have also realised other benefits too. The introduction of sequence rules and dedicated product booths and flow lanes have improved product flow and throughput, and eliminated the bottleneck caused by increase demand. Water tanks are now drained down once every three weeks instead of once a week, meaning the spray booths are now operational for longer and the number of waste disposal tankers coming on site have reduced from 48 to 18.

Compared with the same 10 month period in 2019, the project has delivered a saving of 3,600 litres of paint, £31,423 of treatment chemicals and a reduction in disposal to waste stream of 142,800 litres. Allowing for a slight reduction in output as a result of COVID-19, the project still delivered a total saving of £70,620.

Further reading

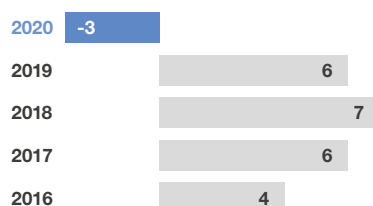
2020 Community Engagement Awards.

See page 84-85

Key performance indicators

Our key performance indicators are used to measure the successful implementation of our strategy.

1. Organic Revenue Growth[†] %



Definition

Organic revenue growth measures the change in revenue in the current year compared with the prior year from continuing Group operations. The effects of currency movements, acquisitions and disposals have been removed.

Progress in 2020

Organic sales declined by 3%, with 6% organic decline in the Steam Specialties business, a 12% organic contraction in the Electric Thermal Solutions business and a 9% organic increase in Watson-Marlow.

Link to remuneration

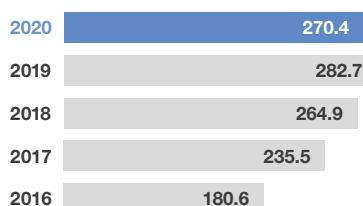
Revenue growth is a key driver of profit generation and a central element in the annual planning process. Bonus targets are driven off annual plans and therefore revenue growth drives a key measure of variable remuneration.

Link to risk



● Direct link ○ Indirect link ○ No link

2. Adjusted operating profit* £m



Definition

Adjusted operating profit is the profit earned from our business operations before interest, taxes, the share of profit of Associate companies and certain other items.

Progress in 2020

Adjusted operating profit declined by 4% to £270.4 million. The reported figure reflects a 1% organic decline and a net 1% increase as a result of acquisitions and disposals, partially offset by a currency headwind.

Link to remuneration

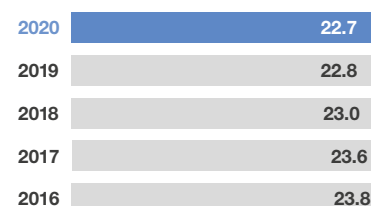
Executive Directors' variable remuneration is based on two financial components: adjusted operating profit and cash generation. Adjusted operating profit margin is a key driver of both bonus measures.

Link to risk



● Direct link ○ Indirect link ○ No link

3. Adjusted operating profit margin* %



Definition

Adjusted operating profit margin is defined as adjusted operating profit expressed as a percentage of revenue.

Progress in 2020

The adjusted operating profit margin fell by 10 bps to 22.7% largely due to the negative foreign exchange impact. On an organic basis the adjusted operating profit margin increased by 40 bps.

Link to remuneration

Executive Directors' variable remuneration is measured on two main indicators: profit and cash generation. Adjusted operating profit margin is a key driver of both.

Link to risk



● Direct link ○ Indirect link ○ No link

[†] Organic growth is at constant currency and excludes contributions from acquisitions and disposals, see Note 2.

* Based on adjusted operating profit. Adjusted operating profit excludes certain items as set out and explained in the Financial Review and in Note 2.

Further reading

More information about our remuneration measures.

See pages 118 onwards

More information about our principal risks.

See pages 60-65

4. Adjusted basic earnings per share (EPS)* p

2020	256.6
2019	265.7
2018	250.0
2017	220.5
2016	171.5

Definition

Earnings per share is a measure of the profit performance of the Group, taking into account the equity structure. EPS is defined as the adjusted after-tax profit attributable to equity shareholders divided by the weighted average number of shares in issue.

Progress in 2020

Adjusted basic earnings per share declined by 3% to 256.6 pence as organic decline and the net positive impact of acquisitions and disposals, partially offset by exchange headwinds, contributed to a decline in earnings.

Link to remuneration

EPS measured over three-year periods is one of the two components of the Performance Share Plan.

Link to risk

● Direct link ○ Indirect link ○ No link

5. Cash generation* £m

2020	275.8
2019	238.1
2018	242.9
2017	203.8
2016	185.0

Definition

Cash generation is adjusted operating profit after adding back depreciation and amortisation, less cash payments to pension schemes in excess of the charge to operating profit, equity settled share plans, net capital expenditure excluding acquired intangibles, working capital changes and repayment of principal under lease liabilities.

Progress in 2020

Cash generation increased by 16% to £275.8 million, primarily as a result of improvements in working capital and a reduction in capital expenditure.

Link to remuneration

Cash generation is one of two financial measures on which Executive Directors' variable remuneration is based.

Link to risk

● Direct link ○ Indirect link ○ No link

6. H&S over three-day lost time injury rate per 1,000 employees

2020	2.9
2019	3.6
2018	4.9
2017	4.6
2016	6.0

Definition

The number of workplace injuries that resulted in over three days of absence per 1,000 employees. The workplace is any location in which an employee is present as a requirement of employment. Employees include all permanent and temporary staff and contractors. All injuries that occur in workplaces, regardless of cause, are included, as are road traffic accidents.

Progress in 2020

Our over three-day lost time injury rate improved during 2020, falling from 3.6 per 1,000 employees in 2019 to 2.9 per 1,000 employees in 2020.

Link to remuneration

The safety of our employees is central to the sustainability of our business and has an impact on the financial success and profitability of the Group. Improving the health, safety and sustainability of our Group is one of the personal strategic objectives of each Executive Director, creating a direct link with remuneration.

Link to risk

● Direct link ○ Indirect link ○ No link

* Based on adjusted operating profit. Adjusted operating profit excludes certain items as set out and explained in the Financial Review and in Note 2.

Operations Review

Market environment and progress in 2020



Despite a challenging macro-economic environment, we continued to create value for our stakeholders, invest in our businesses, implement our strategy and ensure a strong foundation for continued, sustainable growth.”

Nicholas Anderson
Group Chief Executive

Introduction

Despite a challenging macro-economic environment in 2020 and a global recession triggered by the COVID-19 pandemic, we continued to create value for our stakeholders, invest in our businesses, implement our strategy and ensure a strong foundation for continued, sustainable growth. In 2020, we delivered resilient sales and profit, experiencing a 4% revenue decline against 2019, or a 3% decline on an organic basis. Adjusted operating profit margin for the Group was down 10 bps. Excluding the impact of currency, the adjusted operating profit margin was up 40 bps organically.

What we do

Our Steam Specialties, Electric Thermal Solutions and Watson-Marlow businesses all provide engineered products, services and solutions that play a vital role in industrial processes worldwide. We have remained an essential supplier throughout the global pandemic, as many of our customers operate in the critical industries of Pharmaceutical & Biotechnology, Healthcare, Food & Beverage and Power Generation.

Steam is relatively easy to control, environmentally safe, clean and sterile, and is capable of transferring large energy loads (in the form of heat) into industrial processes. Steam is used across a broad range of industries, in all geographical markets and a wide range of applications including: heating, curing, cooking, drying, cleaning, sterilising, space heating, humidifying, vacuum packing and producing hot water on demand.

Electrical heating solutions are a complementary medium to steam and there are synergies in terms of the broad industrial and geographical application. Electrical heating solutions are particularly utilised in applications that require rapid “on-off” control, higher temperatures, concentrated power loads, easy installation or zero emissions at point of use.

Peristaltic and other niche pumps and associated fluid path components are also widely used across an extensive range of industries to address mission critical or difficult pumping needs. Peristaltic pumps are particularly suitable for hygienic applications (as the fluid is contained within a tube and sterile tubing creates a sterile pump), precise metering or low-shear applications, as well as handling corrosive or abrasive materials that would otherwise damage the pump.

The wide applicability of our products across a broad range of industries, combined with our extensive geographical presence and close to 85% of revenues derived from end users' maintenance and operating budgets, mean that our markets closely correlate with industrial production growth.

Market environment

Global industrial production declined 4% at the start of 2020 as COVID-19 began spreading from Asia to Europe and the Americas. As governments around the world enforced social restrictions to contain the spread of the virus, global industrial production collapsed by close to 12% in the second quarter. With social restrictions easing in the third quarter, global industrial production improved in the second half of the year. Across the full year, global industrial production contracted between 4% and 5% returning close to December 2019 levels by December 2020.

Industrial production rates were down across all regions in 2020, with Europe experiencing the worst impact, down 8%. The Americas also experienced a significant decline in industrial production, down 7% in both North and Latin America. Excluding China, industrial production in Asia Pacific was down by 6%, while industrial production grew almost 3% in China.

With revenue down 3% organically, against a 4% to 5% decline in industrial production, we again outperformed our markets, in part due to maintaining a focus on excellence, reacting rapidly and decisively to the changing needs of our customer base and continuing to invest in our internal capabilities and capacity.

Despite the continuing uncertainty surrounding Brexit throughout 2020, its impact on market confidence was very quickly overshadowed by the global pandemic. Overall, Brexit uncertainty had a relatively limited impact on our business during 2020 as over 90% of our sales and operating profit are generated outside the UK.

Our direct sales business model is highly effective at uncovering opportunities to improve our customers' performance and this has continued to serve us well throughout the pandemic.

Our Group supports a diverse range of industries with more than 55% of sales destined to critical sectors such as Food & Beverage, Pharmaceutical & Biotechnology, Healthcare and Power Generation. This has helped mitigate the impact of reduced customer demand in cyclical sectors that were affected during 2020. Our largest sector, Pharmaceutical & Biotechnology, accounts for 21% of sales and no single customer accounts for over 1% of sales.

Forecasters predict global industrial production growth will reach 7% to 8% in 2021 with an exit rate of 3% to 4% in the fourth quarter of the year. With the huge task ahead to complete the global vaccination programme for COVID-19 and the possibility of tighter restrictions for longer, there is still a strong element of uncertainty at the current time.

Summary of progress in 2020

Sales

Group sales were down 4% to £1,193.4 million (2019: £1,242.4 million) and down 3% on an organic basis. Sales in Steam Specialties were down 6% on an organic basis, with the Electric Thermal Solutions business down 12% organically. Watson-Marlow's sales grew 9% on an organic basis.

Acquisitions and disposals added £15.2 million, or 1%, while foreign exchange had a 2% adverse impact on Group sales.

The Steam Specialties business, which accounted for 58% of Group revenue in 2020, experienced a decline in all regions. Sales of £694.1 million were down 8%, or 6% down on an organic basis.

The Electric Thermal Solutions business, which accounted for 15% of Group revenue in 2020, delivered sales of £178.0 million, 4% below 2019 and down 12% organically. Thermocoax, which joined the Group in May 2019, delivered double-digit organic sales growth, helping to offset a sales drop in Chromalox.

Watson-Marlow, which accounted for 27% of Group revenue in the period, had an excellent year and delivered sales of £321.3 million, 7% above 2019 and 9% up on an organic basis. This growth was largely due to increased demand from the Pharmaceutical & Biotechnology sector, which accounted for 55% of Watson-Marlow's sales in 2020, as customers in this market redirected their activities and expanded their manufacturing capabilities in support of COVID-19 vaccine development and production.

Adjusted operating profit

Group adjusted operating profit was down 4% to £270.4 million and down 1% on an organic basis. The £3.1 million full-year benefit from the acquisition of Thermocoax in May 2019, was more than offset by a £12.0 million exchange headwind.

In the Steam Specialties business, adjusted operating profit of £154.3 million was down 9% on an organic basis, and a negative exchange impact resulted in profit being down 13% compared with 2019.

The Electric Thermal Solutions business delivered an adjusted operating profit of £24.6 million, 11% down on an organic basis and flat compared with 2019.

Watson-Marlow's adjusted operating profit was up 15% organically, notwithstanding continued investment in the business, and was up 12% compared with 2019 due to a currency headwind.

Adjusted operating profit margin

The Group adjusted operating profit margin of 22.7% was down 10 bps due to a negative currency impact. On an organic basis, the adjusted operating margin improved by 40 bps.

Within the Steam Specialties business, the adjusted operating profit margin declined 140 bps to 22.2%, as our 80 bps organic decline was compounded by a currency headwind. Declines in adjusted operating profit margin in EMEA and the Americas regions were partially offset by a 200 bps organic increase in Asia Pacific.

The adjusted operating profit margin for the Electric Thermal Solutions business was up 50 bps to 13.8% as a very positive contribution from Thermocoax was partially offset by a small currency headwind and an organic margin decline in Chromalox.

Watson-Marlow's operating profit margin was up 160 bps to 33.4%, driven by a strong 180 bps organic margin expansion.

Statutory operating profit and margin

Statutory operating profit of £249.0 million was up from £245.0 million in 2019, primarily as a result of a £10.5 million credit from defined benefit retirement plans in the UK and Canada being closed to future accrual. As a result, the statutory operating profit margin of 20.9% was up 120 bps (2019: 19.7%).

	2019	Exchange	Organic	Acquisitions and disposals	2020	Organic	Reported
Revenue	£1,242.4m	(£27.2m)	(£37.0m)	£15.2m	£1,193.4m	-3%	-4%
Adjusted operating profit	£282.7m	(£12.0m)	(£3.4m)	£3.1m	£270.4m	-1%	-4%
Adjusted operating profit margin	22.8%				22.7%	+40 bps	-10 bps
Statutory operating profit	£245.0m				£249.0m		+2%
Statutory operating profit margin	19.7%				20.9%		+120 bps

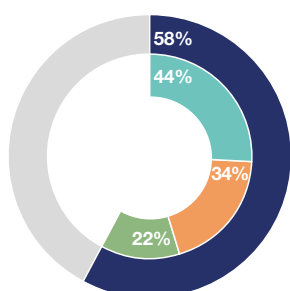
Operations Review *continued*

Performance at a glance

Steam Specialties

Spirax Sarco & Gestra

Revenue £m



£694.1m

Reported **-8%** Organic **-6%**

Adjusted operating profit £m

£154.3m

Adjusted operating margin %

22.2%

No. of operating units at year end

62

Key Industries



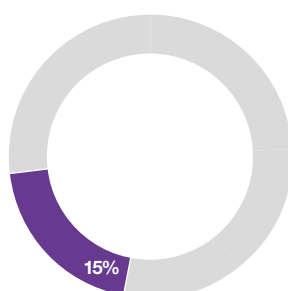
Performance summary

Organic sales down 6%; organic operating profit down 10%. All geographic segments contracted. Reported results impacted by negative FX. Operating profit margin 22.2%; down 80 bps organically. Gestra sales also down. Temporary cost containment initiatives effective at reducing fixed costs. Continued to invest in digital technologies, sustainability, new product development and implementing new integrated information systems.

Electric Thermal Solutions

Chromalox & Thermocoax

Revenue £m



£178.0m

Reported **-4%** Organic **-12%**

Adjusted operating profit £m

£24.6m

Adjusted operating margin %

13.8%

No. of operating units at year end

22

Key Industries



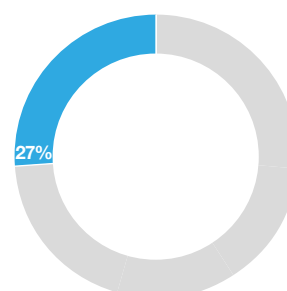
Performance summary

Organic sales down 12%; down 4% on a reported basis. Sales decline largely driven by COVID-19 pandemic in the USA and fall in oil price. Thermocoax, acquired May 2019, benefitted from strong growth in Semiconductor sector. Restructured Chromalox France; divested ProTrace (Canada). Operating profit down 0%. Operating margin up 50 bps.

Watson-Marlow Fluid Technology Group

Watson-Marlow

Revenue £m



£321.3m

Reported **+7%** Organic **+9%**

Adjusted operating profit £m

£107.3m

Adjusted operating margin %

33.4%

No. of operating units at year end

48

Key Industries



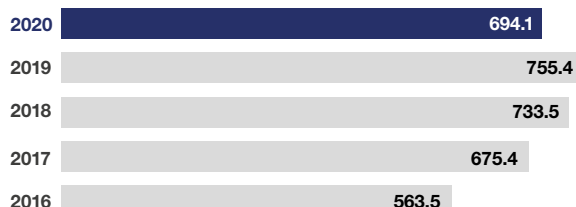
Performance summary

Organic sales up 9%; strong growth in all regions. Pharmaceutical & Biotechnology sector drives stronger sales growth. Operating profit up 12%; organic profit up 15%. Organic margin up 180 bps; increased investments for growth. New sales companies in Hungary, Finland, and Norway. Well positioned to deliver above-market organic sales growth.

Steam Specialties

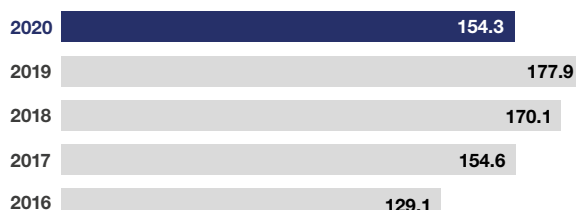
Revenue £m
£694.1m
 2019: £755.4m

Reported **-8%**
 Organic **-6%**



Adjusted operating profit £m
£154.3m
 2019: £177.9m

Reported **-13%**
 Organic **-9%**



Adjusted operating margin %
22.2%
 2019: 23.6%

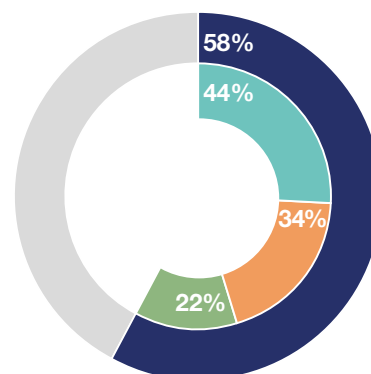
Reported **-140 bps**
 Organic **-80 bps**

Steam Specialties at a glance (at year end)

62 operating units*
67 countries with a resident direct sales presence
4,679 employees

* Operating units are business units that invoice locally.

Group revenue %



spirax sarco
 First for Steam Solutions

GESTRA
 Engineering steam performance



Sales of £694.1 million were down 8% against a backdrop of a strong contraction in IP. Sales derived from our customers' operational and maintenance activities declined 4%, while larger project sales related to customers' capital budgets declined almost 12%."

Neil Daws
 Managing Director,
 Steam Specialties



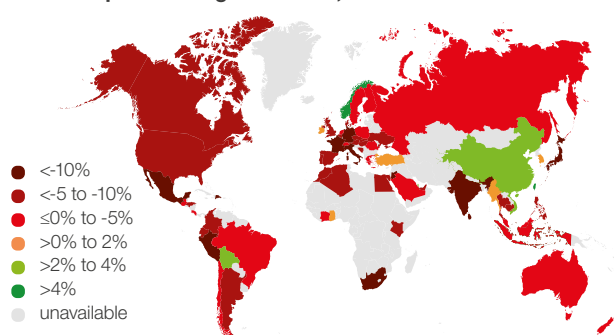
Key market performance



Positive
 Neutral
 Negative

- Industrial production contracted in many core markets during 2020
- Pharmaceutical & Biotechnology sector a good driver for growth; Food & Beverage and Healthcare generally robust
- OEMs, Oil & Gas and Chemical industries weaker

Industrial production growth rates, 2020*



* Compared with the prior year. (Source: Oxford Economics, February 2021.)

Operations Review *continued*

Steam Specialties *continued*

Market overview

Industrial production (IP) in the Europe, Middle East and Africa (EMEA) division contracted 6% during 2020 with COVID-19 and Brexit affecting market conditions. With the exception of the UK, which contracted close to 9%, our large European markets saw double-digit IP declines with France and Germany both contracting over 10% and Italy contracting 11%. Elsewhere across EMEA, many of our smaller markets experienced negative IP rates between 2% and 11%. The only markets with IP growth were Norway at 4% and Turkey at 2%.

In Asia Pacific, IP contracted strongly in the first half of the year, with the region returning to low growth in the second half as China recovered quickly from the effects of the pandemic and achieved industrial production growth close to 3% for the year. The strong IP recovery in China and Korea, our second largest market in the region, lessened the overall decline in Asia Pacific's industrial production growth rate from over 6% to under 1%. Singapore, Taiwan and Vietnam all experienced IP growth while India, Japan, most of Southeast Asia and Australasia experienced negative IP rates between 1% and 11%.

Industrial production contracted 7% across the Americas in 2020, with the most severe impact felt in the second quarter, when IP declined more than 15%. On a full-year basis, IP in North America contracted 7%, while declines across Latin America varied between 1% and 13%. Aside from COVID-19, the collapse of the oil price had an additional but varied impact across the region.

Market growth in critical sectors was resilient including in Pharmaceutical & Biotechnology (+4%) and Food. In contrast, sectors that are more cyclical, such as Oil & Gas (-7%), declined significantly.

Progress in 2020

Sales of £694.1 million were down 8% in the Steam Specialties business. On an organic basis, sales were down less than 6%, reflecting the 4% to 5% contraction of industrial production across our global markets. Sales derived from our customers' operational and maintenance activities declined 4%, while larger project sales related to customers' capital budgets declined almost 12%.

As a result of our focus on critical sectors, such as Food & Beverage, Healthcare and Pharmaceutical & Biotechnology, we have been able to continue providing products and services during this difficult year, as steam systems are essential to many critical manufacturing and industrial operations. Despite the challenges brought about by COVID-19, we have still been able to self-generate opportunities in the areas of energy savings, quality control and production improvement, helping our customers achieve business continuity.

At times during the year our direct sales and service engineers were restricted from physically accessing customers' sites due to lockdowns as a result of COVID-19 protection measures.

Customer visits at the start of the pandemic initially decreased but picked up again as we rapidly switched to digital models of providing service support remotely, together with new audit solutions and remote customer training. We believe that this swift action to maintain our customer service, together with the resilience of our business model, contributed to our robust sales in the majority of our core sectors.

All our manufacturing sites remained open and operational during 2020 with some exceptions including short, government-enforced shutdowns linked with lockdowns primarily at the start of the pandemic. We have maintained a focus on further improving customer service and, as a result, our Steam Specialties on-time-to-request (OTTR) customer service measure improved to over 94% on a global basis.

Gestra sales were also down in 2020, with some scheduled maintenance and projects in the Power Generation sector being postponed. The biggest impacts were felt in the Oil & Gas sector, due to the drop in oil price, and sales to distributors, as they reduced the volume of their inventory. Sales of boiler house control products, including the new SPECTORconnect range that was launched in 2019, remained robust. Gestra China performed well as a result of establishing a new operating company there in April 2019.

The temporary cost containment initiatives taken by the Steam Specialties business were very effective at reducing costs, by over £15 million, mostly in the areas of travel, advertising and employment costs. We focused on cost reduction initiatives that enabled us to manage the impact of the pandemic without damaging our ability to respond quickly to a recovery. As such we continued to invest in digital technologies, sustainability, new product development and implementing new integrated information systems.

Adjusted operating profit was £154.3 million, down 9% organically and down 13% compared to 2019, due to a negative currency impact. At 22.2%, the Steam Specialties business' adjusted operating profit margin declined 140 bps and 80 bps organically.

Statutory operating profit of £157.8 million was down 9% from £172.6 million in 2019 for the same reasons as the decline in adjusted operating profit.

	2019	Exchange	Organic	Acquisitions and disposals	2020	Organic	Reported
Revenue	£755.4m	(£20.6m)	(£40.7m)	–	£694.1m	-6%	-8%
Adjusted operating profit	£177.9m	(£9.1m)	(£14.5m)	–	£154.3m	-9%	-13%
Adjusted operating profit margin	23.6%				22.2%	-80 bps	-140 bps
Statutory operating profit	£172.6m				£157.8m		-9%
Statutory operating profit margin	22.8%				22.7%		-10 bps

Strategy update

Across Steam Specialties we remained focused on our “Customer first” business strategy, despite the disruption caused by the COVID-19 pandemic.

Our business model adapted well to the changing landscape as our direct sales and service engineers swiftly adjusted their work patterns, including the adoption of new digital technologies, to maintain contact with our customers and continue self-generating sales. Through the adoption of digital engagement tools and the development of digital technologies which combine the Internet of Things (IoT), cloud solutions and wearable technology to create a virtual and augmented reality experience, our engineers are still able to uncover problems and provide bespoke solutions to meet customers’ needs. Continuous improvement activities continued to receive attention and delivered good results, such as an improvement in our On-Time-To-Request (OTTR) customer service measure.

The pandemic accelerated the roll-out of our eCommerce platform across our operating companies in the Netherlands, UK & Republic of Ireland, Germany, Switzerland and in our EMEA Developing Markets in the second half of the year. The Americas began piloting an eCommerce platform in 2020.

As the pandemic took hold, the opportunity for virtual learning amongst our people increased significantly as our colleagues made use of time they had available as a result of reduced travel. In response to this, the Spirax Sarco Academy rapidly produced and deployed curricula in support of the new ways of working, such as “Remote Consultative Selling” and developed “Wellbeing” programmes to help our colleagues adjust to the new realities of remote working and living with a pandemic. The sales programmes of the Spirax Sarco Academy are structured into levels called “belts”, with each belt representing an increasing level of expertise from White belt (introduction to sales and specific health & safety subjects) through to Black belt (global sector or product specialist). The materials for our Blue belt (more advanced technical) and Purple belt (sector) were also fast-tracked and made available in a basic form, to enable our sales and service engineers to accelerate their learning, while the interactive content was being produced.

In 2020, 15 new products were released. A Clean Steam Generator (CSG) was specifically developed to meet the needs of customers in the Food & Beverage industry and was launched successfully, expanding our range of CSGs. A state-of-the-art steam trap survey tool for use by our service and survey engineers was introduced early in the year, and we extended our range of manifolds. Gestra successfully introduced the SPECTORconnect boiler controls technology as a new standard in the market.

We also continued to invest in upgrades to our business information systems in 2020. “Project OPAL”, initiated in 2019, incorporates ERP (Enterprise Resource Planning), CRM (Customer Relationship Management), CPQ (Configure, Price, Quote) and BI (Business Intelligence) modules. The implementation of this new integrated system is set to improve operational effectiveness and deliver improved customer focus and insight, as well as effective strategic account management and rapid quoting and processing to further improve our customer delivery performance. Among the first countries to “go live” were Norway, Sweden, Finland and Denmark in September, with a further six countries successfully switching to the new CRM platform by the end of the year. Investment in Argentina to move to a common Spirax Sarco manufacturing ERP platform was also initiated as the first step in a multi-year roll-out across the Americas to upgrade to a single system.

Since its acquisition in 2017, Gestra has made further progress in line with the acquisition strategy, moving several transformational projects into business as usual. The synergy with Spirax Sarco will deliver further tangible results with the new range of SPECTORconnect boiler controls range envisaged to fully replace the current Spirax Sarco technology.

Our plans for further geographical expansion were largely on hold during 2020. We expect this to pick up again once we see a stable return to more normal customer demand-levels. Gestra expanded its direct sales presence in India in 2020, with the addition of an internal application engineering capability. During the final quarter of 2020, we worked to set up a new Gestra operating company in France, ready to begin trading in the first quarter of 2021.

Health and safety of our employees remains our top priority and in 2020 we stepped up our focus on the mental and physical wellbeing of our colleagues, whether they are working from home or at one of our sites, with the introduction of COVID-19 training, enhanced sanitary regimes, enforced social distancing and correct self-isolation procedures introduced across the entire business.

In 2020, we also stepped up our sustainability initiatives, with a particular focus on accelerating offerings to customers that help them manage their environmental impacts, as well as activities to improve our own energy efficiency and reduce our greenhouse gas emissions.

As planned, in January 2021 we initiated a refresh of the “Customer first” strategy to reinforce areas of success while accelerating the strategic implementation of digital and sustainability initiatives.

Outlook

Steam is used across a broad range of industries and in all geographic markets, and therefore the Steam Specialties business could not escape the effects of the COVID-19 pandemic on global industrial production. Thanks to our resilient business model, ability to self-generate sales and significant maintenance and repair revenues, the organic decline of sales in 2020 was contained to 5.5%, broadly in line with the decline in global industrial production.

The latest forecasts predict global industrial production will grow over 7% in 2021. Industrial production is predicted to grow over 5% in EMEA with growth in the UK forecasted at a more modest 2%. Across the Americas, industrial production growth is predicted to reach 6%, with North America growing over 5% and Latin America growing over 7%. In China, industrial production is predicted to grow a further 9% in 2021, ahead of the Asia Pacific region as a whole that is forecasted to grow over 8%.

Typically, organic sales growth in Steam Specialties would exceed growth of global industrial production. However, in 2021 we anticipate that reduced demand from larger capital projects, which lag the recovery of operational and maintenance driven demand, will limit sales growth to slightly above global industrial production.

In early 2021, we initiated investments to merge our Italian businesses, which will benefit our performance in future years. We have also planned additional revenue investments in sustainability and new digital applications in support of organic sales growth and stepped up the global implementation of our integrated IT systems. We believe close to 75% of the savings derived from cost containment initiatives taken in 2020 will reverse in 2021, particularly in manufacturing overheads and employment costs.

As a result of the expected currency headwind and the increased revenue investments listed above, we anticipate the adjusted operating profit margin in 2021 to be marginally ahead of the prior year.

Operations Review *continued*

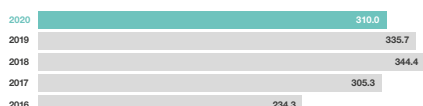
Steam Specialties *continued*

Europe, Middle East and Africa (EMEA)

Revenue £m

£310.0m

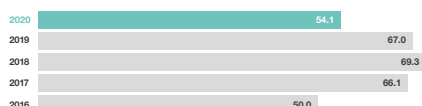
2019: £335.7m



Adjusted operated profit £m

£54.1m

2019: £67.0m



Adjusted operating margin %

17.5%

2019: 20.0%

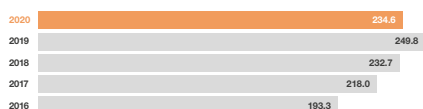
	2019	Exchange	Organic	Acquisitions and disposals	2020	Organic	Reported
Revenue	£335.7m	(£1.0m)	(£24.7m)	–	£310.0m	-7%	-8%
Adjusted operating profit	£67.0m	(£0.9m)	(£12.0m)	–	£54.1m	-18%	-19%
Adjusted operating profit margin	20.0%				17.5%	-220 bps	-250 bps
Statutory operating profit	£63.4m				£57.7m		-9%
Statutory operating profit margin	18.9%				18.6%		-30 bps

Asia Pacific

Revenue £m

£234.6m

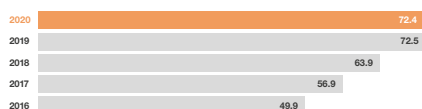
2019: £249.8m



Adjusted operated profit £m

£72.4m

2019: £72.5m



Adjusted operating margin %

30.9%

2019: 29.0%

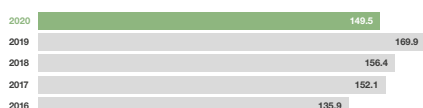
	2019	Exchange	Organic	Acquisitions and disposals	2020	Organic	Reported
Revenue	£249.8m	(£3.7m)	(£11.5m)	–	£234.6m	-5%	-6%
Adjusted operating profit	£72.5m	(£1.4m)	£1.3m	–	£72.4m	+2%	0%
Adjusted operating profit margin	29.0%				30.9%	+200 bps	+190 bps
Statutory operating profit	£72.5m				£72.4m		0%
Statutory operating profit margin	29.0%				30.9%		+190 bps

The Americas

Revenue £m

£149.5m

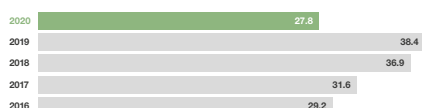
2019: £169.9m



Adjusted operated profit £m

£27.8m

2019: £38.4m



Adjusted operating margin %

18.6%

2019: 22.6%

	2019	Exchange	Organic	Acquisitions and disposals	2020	Organic	Reported
Revenue	£169.9m	(£15.9m)	(£4.5m)	–	£149.5m	-3%	-12%
Adjusted operating profit	£38.4m	(£6.8m)	(£3.8m)	–	£27.8m	-12%	-28%
Adjusted operating profit margin	22.6%				18.6%	-190 bps	-400 bps
Statutory operating profit	£36.7m				£27.8m		-24%
Statutory operating profit margin	21.6%				18.6%		-300 bps

Progress in 2020

Europe, Middle East and Africa (EMEA)

Sales of £310.0 million were down 8% in EMEA or 7% down on an organic basis. Against a backdrop of over 6% industrial production contraction, sales declined broadly in line with our markets. Economic activity in the second half of the year returned to more stable activity levels, as customers adapted to the new economic landscape and ways of working.

The impact of the global recession on organic sales was felt across all core territories, with the biggest effect in the Middle East and Africa that contracted over 20% following the decline of the oil price and as the region did not substantively benefit from government stimulus packages. Our core European markets, including the UK, Germany, Italy and France, experienced a close to 6% organic sales decline.

EMEA adjusted operating profit of £54.1 million was down 18% organically, as inventory reductions across the sales companies globally further reduced demand levels at European manufacturing facilities. A currency headwind further reduced the adjusted operating profit to be down 19%. At 17.5%, the adjusted operating margin was down by 250 bps. On an organic basis, the adjusted operating margin was down 220 bps.

Statutory operating profit was down from £63.4 million to £57.7 million, which is reflective of the reduced adjusted operating profit partially offset by a credit as a result of the UK pension schemes being closed to future accrual.

Asia Pacific

Sales of £234.6 million were down 6% in Asia Pacific or 5% down on an organic basis, compared to a 1% industrial production decline. Asia Pacific is the region most exposed to larger capital projects that were down by double digits.

Organic sales in China, our largest operating company, were down less than 3% for the full year, as a result of almost 15% sales decline in the first half being partially offset by a strong second half recovery of almost 9% sales growth. While some customers were still restricting physical site visits, we remained in close contact, using digital methods to support them and ensure smooth operations. Since April, sales to customers in China have continued to recover with the economy, cushioning the sales decline in the rest of Asia Pacific.

Our operations in Korea and Australasia experienced a similar sales decline to China. Although initially less affected by the pandemic, subsequent waves of infection and eventual lockdowns in these countries impeded customer interactions and delayed deliveries. Japan, India and Southeast Asia operations were particularly impacted by customers delaying capital investments when economic conditions worsened, as well as routine maintenance work being postponed when plants and facilities closed due to lockdowns.

Adjusted operating profit of £72.4 million was flat compared to 2019 as currency movements offset an organic increase of 2%. At 30.9% the adjusted operating margin was up 200 bps organically due to improved operational performance, a favourable sales mix and temporary cost containment measures.

Statutory operating profit was also flat against the prior year at £72.4 million.

The Americas

Sales of £149.5 million were down 12% or 3% down on an organic basis, while industrial production contracted 7% across the region.

Organic sales in North America were down less than 9%, impacted by the spread of COVID-19, the global recession, and the decline in the Oil & Gas sector. Our distribution network in the USA chose to reduce their inventory levels, due to the decline in industrial production and market uncertainty, thereby reducing demand for our products.

In Latin America, sales grew over 8% organically as we experienced strong sales performance in Spirax Sarco Brazil and Hiter Controls that were able to effectively pivot business into new sectors, in response to the decline of the Oil & Gas and Ethanol sectors. Argentina also achieved organic sales growth in 2020, as strong devaluation of the Peso drove local price increases to more than offset real term demand declines. Excluding Argentina, organic sales growth in Latin America was 3%.

Our five factories across the Americas have been able to meet demand, helping mitigate currency effects and take market share from our competitors who are dependent on imports. Our focus on strategic implementation and our strong cash position has ensured we retain sufficient inventory levels to help our customers meet their business continuity plans.

Adjusted operating profit of £27.8 million was down 28% or 12% down organically, the difference being the result of a significant negative currency impact. The adjusted operating profit margin was down 400 bps, strongly impacted by currency movements. On an organic basis, the adjusted operating profit margin was down by 190 bps to 18.6%.

Statutory operating profit was down from £36.7 million to £27.8 million, broadly in line with the reduction in adjusted operating profit.



Strategy in action

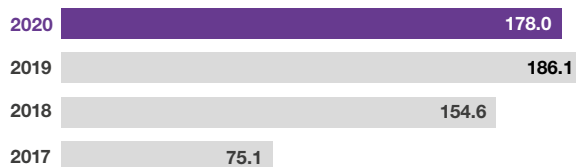
Before COVID-19, a team at Spirax Sarco UK was researching wearable technology to help develop its service engineers. They identified augmented reality headsets which connect to company systems via 4G networks, enabling expert engineers to provide real-time support and share technical documents and drawings through the headset. When Daryl Andrews joined the Service team during lockdown in November 2020, he was the first to try this digital technology at customer sites. During one service visit, Daryl was presented with a complex issue that due to limited experience he was unable to solve on his own. Daryl requested support via the headset to show the scenario to an experienced engineer who was able to provide clear instructions on how to fix the problem. The benefits of this new technology include reduced travel time and associated emissions, as well as reduced footprint on site, increased availability of specialist resource and improved efficiency.

Operations Review *continued*

Electric Thermal Solutions

Revenue £m **Reported** **Organic**
£178.0m **-4%** **-12%**

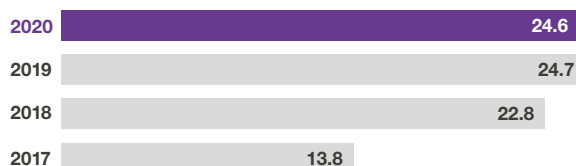
2019: £186.1m



* Chromalox acquired in July 2017.

Adjusted operating profit £m **Reported** **Organic**
£24.6m **0%** **-11%**

2019: £24.7m



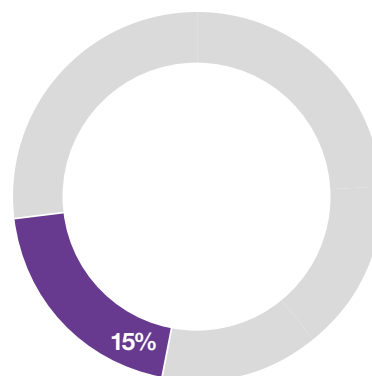
* Chromalox acquired in July 2017.

Adjusted operating margin % **Reported**
13.8% **+50 bps**
 2019: 13.3% **Organic**
+10 bps

Electric Thermal Solutions at a glance (at year end)
22 **19** **1,387**
 operating units* countries with a resident direct sales presence employees

* Operating units are business units that invoice locally.

Group revenue %



CHROMALOX **THERMOCOAX**
 Advanced Thermal Technologies

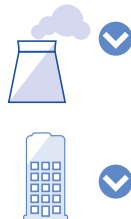


Sales of £178.0 million were 4% down or 12% down on an organic basis as the additional five months of Thermocoax sales in 2020 expanded revenues by 8%."

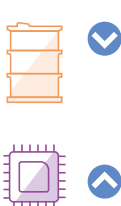
Dominique Mallet
 President,
 Electric Thermal Solutions



Key market performance

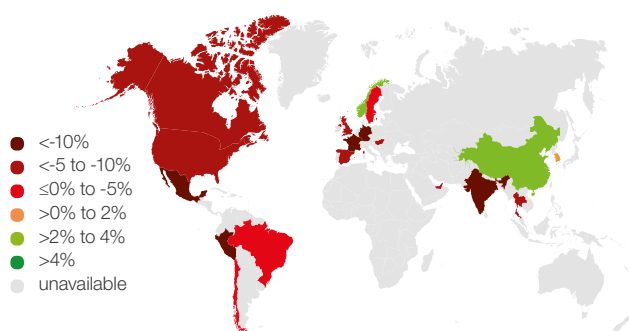


Positive
 Neutral
 Negative



- Industrial production contraction in core markets of North America and EMEA
- Power Generation and Oil & Gas lower; Chemical down
- Growth in Semiconductor

Industrial production growth rates, 2020*



* Compared with the prior year. (Source: Oxford Economics, February 2021.)

Market overview

The geographical footprint of the Electric Thermal Solutions business differs greatly from Steam Specialties and Watson-Marlow, with two-thirds of its revenue generated in the Americas and less than 10% generated in Asia Pacific. It also has a greater weighting of sales to the Oil & Gas, Power Generation and Semiconductor sectors than Steam Specialties, plus lower weighting to the Food & Beverage and Pharmaceutical & Biotechnology sectors.

Chromalox, which accounts for three-quarters of revenue in the Electric Thermal Solutions business generates close to 75% of its revenue in North America and therefore has a higher exposure to industrial production in the USA that reported 7% industrial production decline in 2020. In particular, Chromalox was impacted by the contraction of the Oil & Gas sector and the lack of growth in the Power Generation sector.

Thermocoax, acquired in May 2019, accounted for a quarter of Electric Thermal Solutions' revenue in 2020. Almost 60% of sales are directed to European markets, with 35% of sales to the USA and less than 10% of sales supplied into Asia.

Progress in 2020

Sales of £178.0 million were 4% down or 12% down on an organic basis as the additional five months of Thermocoax sales in 2020 expanded revenues by 8%. The sales decline was largely driven by the COVID-19 pandemic, particularly in the USA, combined with the fall in oil price. Sales to Semiconductor OEMs, a strategic sector for the Electric Thermal Solutions business, grew significantly in both Europe and the USA, as we expanded our offering and displaced competitors with superior technological solutions.

Large project business declined at a faster rate than the base business, with projects being deferred due to customer capital expenditure reductions. However, in late 2020, Chromalox secured the largest single order in the Group's history, a US\$14 million order from the US Navy, ending the year with a significantly higher order book to be shipped in 2021 and 2022.

Chromalox sales declined in its core markets of Oil & Gas, Petrochemical and Power Generation, although some specific sub-sectors, such as Liquefied Natural Gas, remained strong. The sales of Heat Trace products also declined, impacted by distributors reducing inventory and a milder winter in the USA, but the rapid growth of decarbonisation efforts by countries and industry, has proven to be a valuable growth trend for Chromalox in 2020.

In its first full year with the Group, Thermocoax benefitted from strong growth in the Semiconductor sector and sustained growth in the Nuclear sector. As a result of strong operational performance and orders carried over from 2019, Thermocoax achieved 27% like-for-like sales growth in 2020.

Following a comprehensive consultation period, we agreed a restructuring programme at our loss-making Chromalox manufacturing facility in Soissons, France, resulting in a reduction of 34 roles primarily in direct production. The restructuring negotiations were completed amicably in August and with limited disruption to operations. The site will now focus on manufacturing complex engineered solutions for European markets, with heating elements and components sourced from other Chromalox manufacturing facilities. This restructuring initiative will significantly reduce our cost base and create a more appropriately sized production facility, which will improve the site's efficiency and help to secure its long-term profitability.

In March 2020, we disposed of ProTrace Engineering, a small, loss-making and non-core electrical engineering services business in Canada which was inherited through the original acquisition of Chromalox.

At £24.6 million, the adjusted operating profit was flat due to the increased contribution from Thermocoax, however declined 11% organically. In 2020, Chromalox closed out a loss-making customer project that had a £1.7 million negative impact on operating profit in the year.

The adjusted operating profit margin was up 50 bps to 13.8%, up 10 bps on an organic basis, driven by improved operating efficiencies and supported by cost containment initiatives as well as a positive mix impact from the higher margin Thermocoax.

Statutory operating profit was down 39% from £7.9 million in 2019 to £4.8 million, largely due to the restructuring costs incurred in the business during 2020 as disclosed in Note 2 to the Financial Statements.

Strategy update

We carried out a strategy review for the Electric Thermal Solutions business in the first half of 2020, and the subsequent "Engineering Premium Solutions" strategy was approved by the Board in June. Targeting high margin, high growth sectors, the main components of this strategy include a drive towards total customer solutions, sustainability and sectorisation. It is designed to deliver value to customers and stakeholders, while enhancing the business' operating efficiency and profitability. We strengthened our senior and executive teams through several strategic appointments including: Vice President of Global Sales; Vice President of Human Resources; IT Director; EH&S Director and Manufacturing Manager in France. This enhanced leadership team will be key to supporting the implementation of the strategy as it is deployed to colleagues during 2021.

In February 2020, construction commenced on a new manufacturing site and office facility in Normandy, France, to integrate Thermocoax's four existing sites into a new purpose-built facility which is expected to complete in the second half of 2021.

Operational improvements across the Electric Thermal Solutions business delivered a reduction of underlying manufacturing costs, an increase in On-Time Delivery (OTD) and improved most Health & Safety Key Performance Indicators (KPIs).

Electric Thermal Solutions introduced 20 new products throughout the year. Chromalox's new ChromaTrace™ for Buildings 1.0 design software, a free heat tracing system design programme specially created for the Building & Construction market, architects and engineers, was released to the public. Chromalox also expanded its DirectConnect™ MV Boiler product line to 11MW, offering the advantages of electric process heating, emissions-free operation and significant cost savings over low-voltage, higher installation cost designs. Thermocoax launched two new chucks (heating plates used during the process of atomic layer deposition) and new heating solutions for the Semiconductor market, as well as continuing the development of new InCore instrumentation systems for the Nuclear sector to measure key areas of plant operation, including temperature, neutron flux and reactor water level.

Operations Review *continued*

Electric Thermal Solutions *continued*

Outlook

Industrial production growth rates are forecasted to recover in the core markets of the Electric Thermal Solutions business in 2021, with over 5% growth in the USA (that accounted for more than 60% of sales in 2020) and over 7% growth on a global basis. We will continue to benefit from broadening our geographical direct sales footprint, as well as from the sales of new products launched during 2020, which align strongly with customer trends such as decarbonisation, emissions control, energy efficiency, process productivity and digitalisation.

We therefore anticipate underlying organic sales growth to be similar to global industrial production growth. Electric Thermal Solutions ended 2020 with a higher-than-normal order book, with shipment of these orders anticipated to add at least a further £8 million to sales in 2021.

As a result of underlying performance improvement initiatives progressing across Chromalox, the non-repeat of 2020 project losses, the reversal of close to half the £3 million cost containment measures and the operational gearing from the strong sales growth, we anticipate the adjusted operating profit will expand by more than twice the rate of the 2021 organic revenue growth.

	2019	Exchange	Organic	Acquisitions and disposals	2020	Organic	Reported
Revenue	£186.1m	(£1.6m)	(£21.7m)	£15.2m	£178.0m	-12%	-4%
Adjusted operating profit	£24.7m	(£0.5m)	(£2.7m)	£3.1m	£24.6m	-11%	0%
Adjusted operating profit margin	13.3%				13.8%	+10 bps	+50 bps
Statutory operating profit	£7.9m				£4.8m		-39%
Statutory operating profit margin	4.2%				2.7%		-150 bps



Strategy in action

Thermocoax, which became part of the Group in 2019, has been designing and providing electrical heating technologies to customers for over 60 years. To meet the growing demand for its products and to improve efficiency, the company took the decision to consolidate four manufacturing facilities in Normandy (France) into one single purpose-built site.

The new facility, consisting of a two-storey building and 13,000m² factory, has been designed with sustainability in mind. It is being equipped with solar panels and specialist technology that will improve process efficiency. The new site is near to Thermocoax's existing sites ensuring its highly skilled workforce are retained.

Thermocoax Managing Director, Inès Hamon, said: "Thermocoax has a unique know-how and industrial capacity, and this combined with the technical expertise of our highly skilled and professional colleagues, enables us to work in support of high-technology operators and original equipment manufacturers. The opening of our new purpose-built facility is a major milestone in the long history of Thermocoax, it will ensure we can continue to produce high quality products and is a key part of our sustainable future."

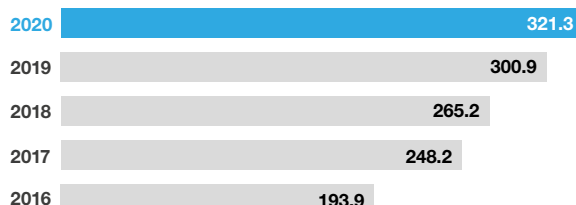
Handover of the new facility is scheduled for the end of 2021. A carefully planned and phased transition plan for the sites will begin after handover with minimum disruption to operations and customers.

Watson-Marlow

Revenue £m **Reported +7%** **Organic +9%**

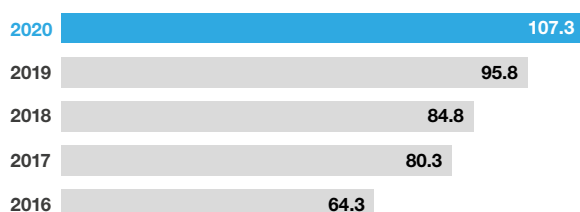
£321.3m

2019: £300.9m



Adjusted operating profit £m **Reported +12%** **Organic +15%**

2019: £95.8m



Adjusted operating margin % **Reported +160 bps**

2019: 31.8%

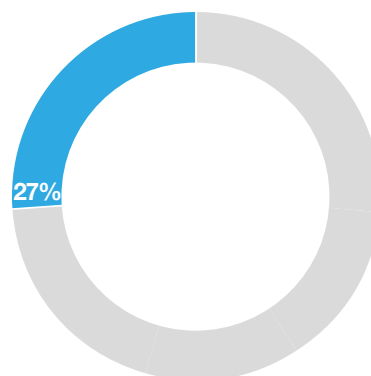
Organic +180 bps

Electric Thermal Solutions at a glance (at year end)

48 operating units* **43** countries with a resident direct sales presence **1,685** employees

* Operating units are business units that invoice locally.

Group revenue %



**WATSON
MARLOW**

Fluid Technology Group



Sales of £321.3 million were up 7% or 9% up on an organic basis. All regions delivered strong year-on-year sales growth with Asia Pacific particularly strong."

Andrew Mines
Managing Director,
Watson-Marlow



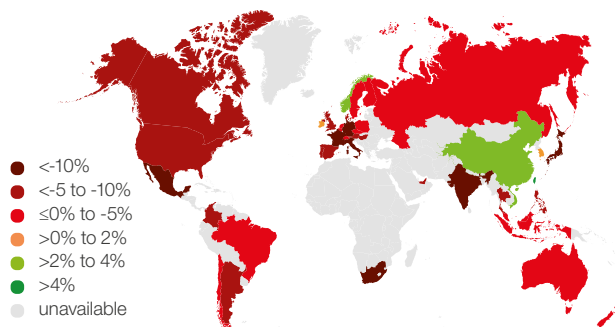
Key market performance



Positive
Neutral
Negative

- Contraction in industrial production in many geographical markets
- Exceptional growth in Pharmaceutical & Biotechnology; growth in Food & Beverage
- Water & Wastewater and Mining & Precious Metal Processing lower

Industrial production growth rates, 2020*



* Compared with the prior year. (Source: Oxford Economics, February 2021.)

Operations Review *continued*

Watson-Marlow *continued*

Market overview

Watson-Marlow was similarly impacted by economic conditions and industrial production growth rates as those experienced by the Steam Specialties business, albeit with a different geographical footprint as sales carry a higher weighting in the Americas and a lower weighting in Asia Pacific.

Progress in 2020

Sales of £321.3 million were up 7% or 9% up on an organic basis.

All regions delivered strong year-on-year sales growth with Asia Pacific particularly strong. Following the earlier impact of COVID-19 compared with the rest of the world, China and the Asia Pacific region sustained a faster and more robust recovery.

Demand from the Pharmaceutical & Biotechnology market was very robust, boosted by the development of COVID-19 vaccines and the commencement of a global production roll-out. Customers in this sector ramped up their existing manufacturing capacity to meet the increased COVID-19 vaccine production demand, diverting their focus from other activities such as gene therapies. As a result, sales to the Pharmaceutical & Biotechnology sector grew over 20% and Watson-Marlow ended the year with a sizeable order book for delivery in the first half of 2021.

Sales to the Food & Beverage and Water & Wastewater sectors were also strong in 2020, but overall sales across non-Pharmaceutical & Biotech industrial sectors were down 3%.

Serving so many critical customers on the front line of the pandemic, it has been essential for Watson-Marlow's supply locations to remain fully operational. Having implemented rigorous health and safety processes on site, we have been able to operate our manufacturing sites at close to normal capacity, with minimum disruption throughout the height of the pandemic, no production stoppages linked to suppliers and all suppliers remaining in business.

The combined impact of sales growth and prudent cost controls are reflected in Watson-Marlow's 2020 strong operating profit.

Watson-Marlow's adjusted operating profit was a record £107.3 million, up 12% or 15% up organically, the difference being the result of exchange rates. The 33.4% adjusted operating profit margin was up 160 bps or up 180 bps on an organic basis.

Statutory operating profit was up 24% from £82.7 million in 2019 to £102.2 million, for the same reasons as those improving the adjusted operating profit and also the impact of the UK pension scheme's closure to future accrual, as detailed in Note 2 to the Financial Statements.

Strategy update

Watson-Marlow progressed its geographical expansion plans in 2020, establishing new sales companies in Hungary, Norway and Finland. A new sales company was also established in Czech Republic which began trading in January 2021.

We are investing to increase manufacturing capacity at our main UK facility in Falmouth, including an expansion of the clean rooms to add a third tube extrusion line, as well as trebling our offsite warehousing capacity.

We are also investing in two new UK manufacturing facilities for Aflex and BioPure. The new £23 million, 16,200m², state-of-the-art manufacturing site for Aflex, in Yorkshire, delivered its first production output during the second quarter of 2020. This facility consolidates Aflex's original five sites into one purpose-built site, with four of these having successfully transitioned to the new site in 2020 and the final site due to complete its move in 2021.

In 2020, the Board approved a £24 million investment to construct a new 11,000m² manufacturing facility in Portsmouth for BioPure; a supplier of niche fluid path technologies for the Pharmaceutical & Biotechnology sector, acquired in 2014. Five times the size of the current site, the new site will also have a six-fold increase in machines and a five-fold increase in cleanrooms. This significant investment will further support Watson-Marlow's strength and growth in the Pharmaceutical & Biotechnology sector.

Manufacturing investment continued into 2021 with the announcement of a planned new manufacturing facility in North America. Representing an investment of US\$88 million, the 12,800m² facility on a 25.4 acre site in Massachusetts will be Watson-Marlow's first regional manufacturing hub in the USA and is expected to start production by the end of 2022. When complete, the facility will improve lead times and customer service in the USA and its adjacent markets, significantly increase Watson-Marlow's global capacity and speed of response to growing customer demand.

2020 was a successful year for product launches, with seven new products released throughout the year. In June, we commenced a targeted launch of a revolutionary new pump head, utilising Conveying Wave Technology (CWT), the ReNu 30 CWT, which fits onto our existing range of Watson-Marlow Qdos pumps. The new patented-technology pump head delivers superior accuracy and in chemical resistance for metering and dosing applications, establishing the next level of high performance for our industry. An evolution in long-life chemical metering, it expands our addressable market downstream into sectors requiring higher flow, pressure and enhanced chemical resistance.

Also launched during the year were three new EtherNet/IP™ Watson-Marlow process pumps which broaden our range and provide digital connectivity, as well as a range of model extensions for the MasoSine Certa™ pump and the MasoSine 800 pump.

During the first half of the year, Watson-Marlow also undertook a comprehensive strategic review and the refreshed business strategy received Board approval in June. With a strong history of profitable growth and clear market fundamentals "Strategy 25" focuses on further strengthening the business to sustain profitable growth. Within the strategy we prioritise the key industries and markets where we have potential to increase our addressable market, accelerate people development, drive technical innovation, achieve excellence in the supply chain and deliver improvements in our sustainability performance.

Outlook

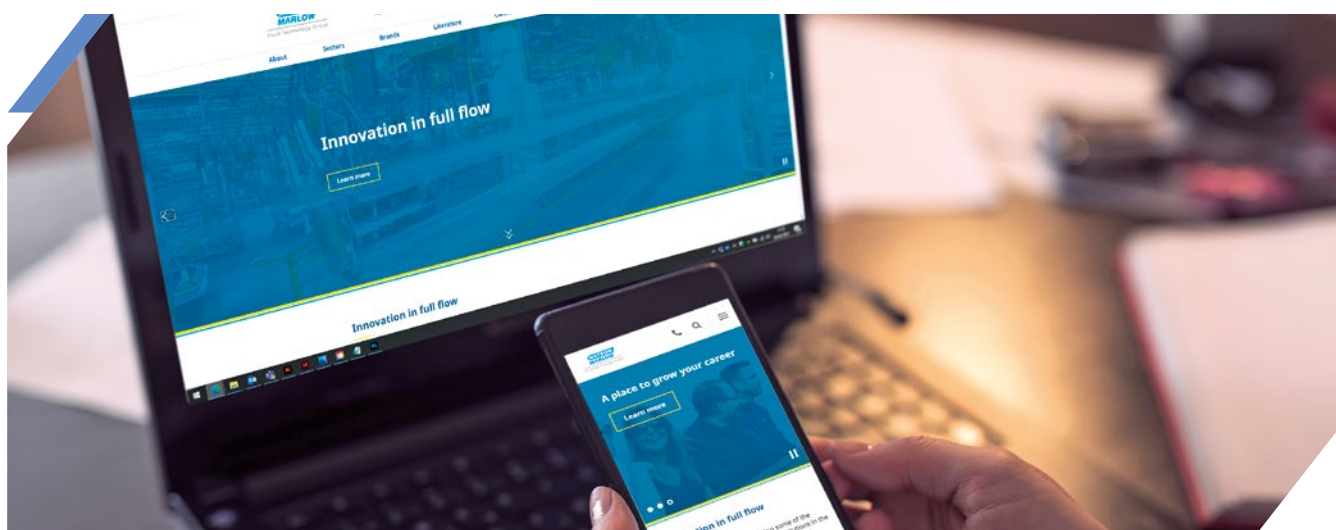
During 2020, many of our Pharmaceutical & Biotechnology customers repurposed some of their capacity, which would have been designated for gene therapy applications, towards expanding their research and manufacturing capabilities for COVID-19 vaccine development and production. This resulted in significantly stronger sector demand, especially in the fourth quarter, driving the sector to represent over 55% of sales in 2020 and end the year with a higher-than-normal order book that will ship in 2021. Strong COVID-19 related demand is anticipated to continue into 2021 with customers also seeking to rebuild gene therapy related capacity later in the year.

As a result of both stronger underlying demand and a larger opening order book, we anticipate over 35% organic sales growth to the Pharmaceutical & Biotechnology sector in 2021. Across Watson-Marlow's other industrial sectors, we anticipate organic sales growth to be consistent with global industrial production.

Meeting this extraordinary demand growth will require additional short-term capacity expansion investments in some of our manufacturing facilities. Alongside this, we continue our medium-term investment programmes to increase manufacturing capacity across Watson-Marlow globally. As production from new sites ramps-up, including in 2021, we anticipate some dilution to margins as we incur additional manufacturing overheads ahead of realising the benefits from increased sales and economies of scale. We will also continue to invest in our direct sales and new product development capabilities in support of future organic sales growth and we expect the £3 million cost containment measures of 2020 to reverse entirely in 2021.

The expected currency headwind combined with the increased operational costs listed above, will partially offset the operational gearing benefits from higher sales. We therefore anticipate a moderate adjusted operating profit margin improvement in 2021.

	2019	Exchange	Organic	Acquisitions and disposals	2020	Organic	Reported
Revenue	£300.9m	(£5.0m)	£25.4m	–	£321.3m	+9%	+7%
Adjusted operating profit	£95.8m	(£2.4m)	£13.9m	–	£107.3m	+15%	+12%
Adjusted operating profit margin	31.8%				33.4%	+180 bps	+160 bps
Statutory operating profit	£82.7m				£102.2m		+24%
Statutory operating profit margin	27.5%				31.8%		+430 bps



Strategy in action

In support of its strategic focus on sectorisation and digital adoption, Watson-Marlow's marketing team embarked on a three-year project to restructure and upgrade its website. The aim was to "future proof" the site by adopting technology and best practice, to support expansion geographically, by sector and by brand.

Some of the most significant upgrades included a new Product Information Management (PIM) system and AX integration. These upgrades have enabled Watson-Marlow to create master product data or "one version of the truth". This feeds consistent, accurate data into the website as well as the technical and marketing collateral helping to support productivity and consistency and therefore customers are able to find what they need more easily.

To ensure the best possible user experience for customers, the team completed functional user acceptance testing with 66 Watson-Marlow colleagues. The tests were based on the critical tasks understood to deliver the most value to its customers while using the site, "the user journey".

Watson-Marlow's new website has delivered a rich and targeted online browsing experience which also supports clearer identification and engagement with its brands, products and areas of expertise resulting in longer viewing times, more page visits and measurable conversions.

The website launched with the UK and US versions in December 2020 and the localised roll-out will continue throughout 2021.

Financial Review



We delivered a robust financial performance and increased the dividend, while continuing to invest in the capacity, capability and quality of our businesses to build a sustainable future.”

Nimesh Patel
Chief Financial Officer

The Group reports under International Financial Reporting Standards (IFRS) and also uses adjusted and organic figures where the Board believes that they help to effectively monitor the performance of the Group and aid readers of the Financial Statements to draw comparisons with our peers. Certain alternative performance measures also form a meaningful element of Executive Directors' variable remuneration and some are used in calculating debt covenants. Adjusted results quoted in the text below are referred to as “adjusted” (see Note 2 to the Financial Statements). A reconciliation of adjusted operating profit to statutory operating profit is provided below and more detail can be found in Note 2 to the Financial Statements.

We are a multi-national Group of companies that trade in a large number of foreign currencies and regularly acquire and sometimes dispose of companies. Therefore, we also refer to organic performance measures, which strip out the effects of the movement of foreign currency exchange rates and of acquisitions and disposals, not included in the prior year. The Board believes that this allows readers of the Financial Statements to gain a further understanding of how the Group has performed.

Revenue

Group sales in 2020 were £1,193.4 million (2019: £1,242.4 million), down 3% on an organic basis that reflects a strong performance against a backdrop of between 4% to 5% contraction in global industrial production. Currency movements had a 2% negative effect on sales during the year, while the full year effect of sales from Thermocoax, acquired in May 2019, resulted in a 1% increase. Sales for the Group were down 4% compared to 2019.

Steam Specialties experienced an organic decline of less than 6%, reflecting the decline in global industrial production, with sales in all three geographical reporting segments down year-on-year: 7% in EMEA, 5% in Asia Pacific and 3% in the Americas. Electric Thermal Solutions experienced a 12% organic sales decline. Chromalox secured a US\$14 million order from the US Navy, the largest single order in our Group's history, contributing to a significantly larger order book at the end of the year. Watson-Marlow had an excellent year, delivering organic sales growth of 9%, as sales to the Pharmaceutical & Biotechnology sector grew by 20%.

	Operating profit 2020 £m	Operating profit margin 2020 %	Operating profit 2019 £m	Operating profit margin 2019 %
Europe, Middle East and Africa	54.1	17.5%	67.0	20.0%
Asia Pacific	72.4	30.9%	72.5	29.0%
Americas	27.8	18.6%	38.4	22.6%
Steam Specialties	154.3	22.2%	177.9	23.6%
Electric Thermal Solutions	24.6	13.8%	24.7	13.3%
Watson-Marlow	107.3	33.4%	95.8	31.8%
Corporate expenses	(15.8)		(15.7)	
Adjusted operating profit	270.4	22.7%	282.7	22.8%
Post-retirement benefit plan in the UK & Canada being closed to future accrual	10.5		–	
Restructuring costs	(4.3)		–	
Amortisation of acquisition-related intangible assets	(26.6)		(26.8)	
Acquisition-related items	–		(2.6)	
Reversal of acquisition-related fair value adjustments to inventory	(1.0)		(4.1)	
Impairment of goodwill	–		(4.2)	
Statutory operating profit	249.0		245.0	

Adjusted operating profit and margin

Adjusted operating profit was £270.4 million (2019: £282.7 million), down 4% at reported exchange rates and 1% down on an organic basis. Steam Specialties was down 9% compared with 2019 on an organic basis and a negative exchange impact resulted in profit being 13% down on an adjusted basis. Electric Thermal Solutions was down 11% on an organic basis and flat on an adjusted basis. Watson-Marlow was up 15% organically and 12% up on an adjusted basis, impacted by a currency headwind.

Currency movements negatively impacted adjusted operating profit with translational losses of £8.9 million and an additional transactional loss of £3.1 million. The main transactional exposure flow affecting the Group is the export of products from our factories in the UK, invoiced in sterling, less the import of goods from overseas Group factories and third parties priced predominately in euros and US dollars. The net exposure is approximately £100 million.

The net effect of the acquisition of Thermocoax in 2019 and the disposal of ProTrace Engineering in the first half of 2020, added 1% to adjusted operating profit on a constant currency basis.

The Group adjusted operating profit margin of 22.7% was down 10 bps due to a negative currency impact. On an organic basis, the adjusted operating margin improved by 40 bps.

Steam Specialties' adjusted operating profit margin was down 80 bps organically and 140 bps down on an adjusted basis due to the impact of currency movements. Declines in adjusted operating profit margin in EMEA and the Americas were partially offset by a 200 bps organic increase in Asia Pacific. Electric Thermal Solutions was up 50 bps on an adjusted basis as a very positive contribution from Thermocoax was partially offset by a small currency headwind and an organic margin decline in Chromalox. Watson-Marlow was up by 160 bps driven by a strong 180 bps organic margin expansion.

Statutory operating profit and margin

Statutory operating profit of £249.0 million was up from £245.0 million in 2019, primarily as a result of a £10.5 million credit from defined benefit retirement plans in the UK and Canada being closed to future accrual. As a result, the statutory operating profit margin of 20.9% was up 120 bps (2019: 19.7%).

Finance costs

Net finance costs increased slightly to £8.7 million from £8.4 million in 2019. Net bank interest increased to £6.0 million from £4.9 million in 2019, due to the refinancing of the Revolving Credit Facility and issuing of a private placement bond in the second quarter.

Net costs under IAS 19 in respect of the Group's defined benefit pension schemes decreased to £1.5 million (2019: £2.2 million). The IFRS 16 interest charge for the year was £1.2 million (2019: £1.3 million).

We anticipate total net interest charges to be at a similar level in 2021.

Associates

The Group has one Associate holding, a 26.3% interest in Econotherm, a heat pipe technology business. Econotherm's performance weakened in 2020, with our share net of tax, falling to a loss of £0.2 million (2019: £0.2 million profit).

Adjusted profit before tax

Adjusted profit before tax was £261.5 million (2019: £274.5 million), down 5% at reported exchange rates. On an organic basis, adjusted profit before tax declined 1%.

Statutory profit before tax

The statutory profit before tax was £240.1 million (2019: £236.8 million) and includes the items listed below that have been excluded from the adjusted profit before tax:

- a charge of £26.6 million (2019: £26.8 million) for the amortisation of acquisition-related intangible assets;
- a £1.0 million (2019: £4.1 million) reversal of acquisition-related fair value adjustments to Thermocoax;
- a credit of £10.5 million (2019: £nil million) resulting from the defined benefit retirement plans in the UK and Canada being closed to future accrual; and
- a restructuring charge of £4.3 million (2019: £nil million) relating to the reorganisation of Chromalox's French operations and divestment of its small Canadian subsidiary, ProTrace.

The principal reasons for the movement between years are explained in the "Statutory operating profit and margin" section above.

Taxation

The tax charge on the adjusted profit before tax decreased by 100 bps to 27.5% (2019: 28.5%), due to the claiming of additional deductions in the year and innovation tax relief. The Group's overall tax rate reflects the blended average of the tax rates in nearly 50 tax jurisdictions around the world in which the Group trades and generates profit. The Group comprises in the region of 130 operating units, the majority of which are small, reflecting our local direct sales business model. On a statutory basis the Group's effective tax rate was 27.6%.

For 2021, we currently anticipate that based on the forecast mix of adjusted profits, the Group effective tax rate will be approximately 27%, absent a potential rise in the US Federal Tax rate.

In April 2019, the European Commission's investigation into the UK's Controlled Foreign Company regime concluded that certain aspects constituted State Aid. This requires the UK tax authority to recover the benefit from affected taxpayers and a Charging Notice for £4.6 million was received on 1st March 2021. No provision has been recognised and further details are included in Note 9 to the Financial Statements.

Earnings per share

Adjusted basic earnings per share declined 3% to 256.6 pence (2019: 265.7 pence). Statutory earnings per share were 235.5 pence (2019: 226.2 pence). The fully diluted earnings per share were not materially different in either year.

Financial Review *continued*

Dividends

The Group has a progressive dividend policy where dividend payments follow underlying earnings per share growth while maintaining prudent levels of dividend cover. The aim is to provide sustainable, affordable dividend growth, building on our 53-year record of dividend progress, with a compound annual increase of 11% over that period and an 11% per annum increase over the last 10 years. The Board is proposing a final dividend of 84.5 pence per share for 2020 (2019: 78.0 pence) payable on 21st May 2021 to shareholders on the register at 23rd April 2021. Together with the interim dividend of 33.5 pence per share (2019: 32.0 pence), the total Ordinary dividend for the year is 118.0 pence per share, an increase of 7% on the Ordinary dividend of 110.0 pence per share in 2019.

The total amount paid in dividends during the year was £82.5 million, 8% above the £76.3 million paid in 2019.

Brexit

Despite the continuing uncertainty surrounding Brexit throughout 2020, its impact on market confidence was very quickly overshadowed by the global pandemic. Overall, Brexit uncertainty had a relatively limited impact on our business during 2020 as over 90% of our sales and operating profit are generated outside the UK. In 2020, to mitigate the risk of delays at ports, we maintained over £5 million of buffer stock of raw materials and components in the UK and finished goods outside the UK.

We are well prepared and well placed to take on the challenges and identify the opportunities resulting from the UK exiting the EU. We have navigated periods of economic and political uncertainty in many different places around the world and have a long and successful history of doing so.

Capital employed

	2020 £m	2019 £m
Capital employed		
Property, plant and equipment	261.3	251.2
Right-of-use assets (IFRS 16)	36.3	40.8
Software & Development costs	37.1	36.2
Inventories	180.1	185.9
Trade receivables	226.3	240.7
Prepayments and other current assets	41.3	44.6
Trade, other payables, current provisions and current tax	(194.9)	(205.0)
Capital employed	587.5	594.4
Acquired intangibles including goodwill	665.6	685.4
Investment in Associate	–	0.2
Post-retirement benefits	(98.6)	(71.3)
Net deferred tax	(28.5)	(43.1)
Non-current provisions and long-term payables	(7.1)	(5.2)
Lease liabilities	(34.1)	(38.9)
Net debt	(228.8)	(295.2)
Net assets	856.0	826.3
Adjusted operating profit	270.4	282.7
Adjusted operating profit (excluding IFRS 16)	269.3	281.4
Average capital employed	591.0	556.0
Average capital employed (excluding IFRS 16)	552.5	535.6
Return on capital employed	45.8%	50.8%
Return on capital employed (excluding IFRS 16)	48.7%	52.5%

Research and development

The development of innovative new products and the speed with which we launch those products in-market, is an important element of our strategy for growth. The Group's total spend on research and development in 2020 was £12.7 million (2019: £13.4 million) of which £2.7 million was capitalised (2019: £3.2 million).

Total capital employed has decreased by 1% at reported exchange rates and at constant currency. This compares with an organic sales decline of 3%.

Tangible fixed assets (PPE and IFRS 16 right-of-use-assets) increased by £5.6 million to £297.6 million.

Total working capital decreased by £13.4 million. The ratio of working capital to sales (at constant currency) reduced by 40 bps to 21.2% (2019: 21.6%), and the Group continued to hold over £5 million of Brexit buffer stock. Going forward, we anticipate maintaining a similar percentage of working capital to sales.

Return on capital employed (ROCE)

ROCE measures effective management of fixed assets and working capital relative to the profitability of the business. ROCE decreased to 45.8% (2019: 50.8%), due to the reduction in adjusted operating profit and the full year effect of the adoption of IFRS 16. Excluding the effect of IFRS 16, ROCE declined 380 bps. At constant currency, excluding acquisitions, disposals and IFRS 16, ROCE declined by 350 bps. ROCE is defined in Note 2 to the Financial Statements.

Return on invested capital (ROIC)

ROIC measures the return on invested capital, both equity and debt, relative to the adjusted operating profit after tax. ROIC fell to 17.2% (2019: 18.7%), due to the reduction in adjusted operating profit and the full year effect of the adoption of IFRS 16. Excluding the effect of IFRS 16, ROIC declined 130 bps. At constant currency, excluding acquisitions, disposals and IFRS 16, ROIC declined by 40 bps. ROIC is defined in Note 2 to the Financial Statements.

Post-retirement benefits

The net post-retirement benefit liability under IAS 19 increased to £98.6 million (2019: £71.3 million). Assets rose by £43.9 million (9%), reflecting greater than expected returns. Liabilities rose by £71.2 million (13%), largely due to a change in market conditions that resulted in reductions in the AA corporate bond rates used to discount future cash flows.

The main UK schemes, which constitute 89% of assets, were closed to new members in 2001 and closed to future accrual with effect from 30th June 2020. These schemes continue to be managed under a dynamic de-risking strategy whereby asset and liability values are monitored on a daily basis by the asset manager and appropriate asset allocation decisions taken as the funding level improves against pre-agreed trigger points. The Canadian scheme was also closed to future accrual from 30th September 2020. Following actuarial valuations of the three UK schemes, deficit reduction programmes were agreed with the Trustees and contributions of £4.0 million were made in 2020. The main UK scheme was subject to an actuarial valuation during 2020 and total contributions for all UK schemes in 2021 are expected to be £5.2 million.

Adjusted cash from operations is a measure of the cash flow generated from our companies which reflects the components within the control of local management. A reconciliation between this and statutory operating cash flow can be found in Note 2 to the Financial Statements.

Adjusted cash from operations improved by £37.7 million to £275.8 million (2019: £238.1 million) representing 102% cash conversion.

Movements in working capital are discussed in the Capital Employed section.

The capital intensity of our business is low, with capital expenditure typically between 4% and 6% of sales. During the year, our capital expenditure was £49.6 million, equivalent to 4% of sales. Capital expenditure decreased by £12.8 million, principally as a result of expenditure incurred during 2019 on a new purpose-built factory in the UK for Aflex. The Group continued to invest during 2020 in other significant projects and development of our digital capabilities.

We would expect capital expenditure in 2021 to be at the top-end of our typical range as we invest in new production facilities for Watson-Marlow and increase spending on projects such as OPAL.

Tax paid in the year decreased by £6.5 million to £71.9 million in line with the decrease in profitability during 2020 and the reduction in the effective tax rate. Free cash flow increased to £196.7 million (2019: £154.3 million) as a result of improvements to working capital and the decrease in capital expenditure and tax.

Dividend payments were £82.5 million, including payments to minorities (2019: £76.3 million) and represent the final dividend for 2019 and the interim dividend for 2020.

Cash flow and treasury

	2020 £m	2019 £m
Cash flow		
Adjusted operating profit	270.4	282.7
Depreciation and amortisation (excluding IFRS 16)	36.7	34.3
Depreciation of leased assets	12.1	11.3
Cash payments to pension schemes more than the charge to adjusted operating profit	(3.9)	(5.2)
Equity settled share plans	7.0	6.2
Working capital changes	13.4	(21.4)
Repayments of principal under lease liabilities	(12.2)	(11.2)
Capital expenditure (including software and development)	(49.6)	(62.4)
Capital disposals	1.9	3.8
Adjusted cash from operations	275.8	238.1
Net interest	(7.2)	(5.4)
Income taxes paid	(71.9)	(78.4)
Free cash flow	196.7	154.3
Net dividends paid	(82.5)	(76.3)
Purchase of employee benefit trust shares/Proceeds from issue of shares	(12.5)	(12.5)
(Acquisitions)/Disposals of subsidiaries and restructuring costs	(9.4)	(138.5)
Cash flow for the year	92.3	(73.0)
Exchange movements	(25.9)	13.6
Opening net debt	(295.2)	(235.8)
Net debt at 31st December (excluding IFRS 16)	(228.8)	(295.2)
IFRS 16 lease liability	(34.1)	(38.9)
Net debt and lease liability at 31st December	(262.9)	(334.1)

Financial Review *continued*

There was a cash outflow of £4.8 million related to deferred consideration payable for the acquisition of Qonqave, a small German pre-revenue company acquired in 2018 within Watson-Marlow as well as an additional £4.6 million outflow relating to restructuring within Electric Thermal Solutions. The net of share purchases and new shares issued for the Group's various employee share schemes resulted in a cash outflow of £12.5 million (2019: £12.5 million) reflecting the move to acquire shares on the open market rather than issue new equity.

The Group's Income Statement and Statement of Financial Position are exposed to movements in a wide range of different currencies. This stems from our direct sales business model, with a large number of local operating units. These currency exposures and risks are managed through a rigorously applied Treasury Policy, typically using centrally managed and approved simple forward contracts to mitigate exposures to known cash flows and avoiding the use of complex derivative transactions. The largest exposures are to the euro, US dollar, Chinese renminbi and Korean won. While currency effects can be significant, the structure of the Group provides some mitigation through our regional manufacturing presence, diverse spread of geographic locations and through the natural hedge of having a high proportion of our overhead costs in the local currencies of our direct sales operating units.

The fundamentals of our financial resilience

The operational and financial performance of our Group during 2020 – an unprecedented and challenging year – provides a strong indicator of current and future resilience. Against the backdrop of the global COVID-19 pandemic, we delivered a robust financial performance and increased the dividend, while continuing to invest in the capacity, capability, and quality of our businesses to build a sustainable future.

Our products and solutions are used across a broad range of industries and geographical markets, which links our business performance to movements in global industrial production (IP). In 2020, global IP declined for only the second time in the last 20 years due to the effects of COVID-19. As in previous years, our business model supported our outperformance against global IP due to our ability to self-generate sales (accounting for 35% of sales) and a significant base business in maintenance and repair sales (accounting for 50% of sales). These sales are funded from our customers' operating budgets. The remaining 15% of sales are related to large projects, funded from customers' capital expenditure budgets, which are more heavily influenced by economic cycles. Over 55% of our sales are to defensive, less cyclical sectors and no single customer accounts for more than 1% of Group turnover.

Strong focus on cash generation and liquidity

We remain highly cash generative, delivering an exceptional 102% cash conversion in 2020. This was delivered due to an inflow from working capital as inventory and receivables were reduced through our sustained focus on improving inventory efficiency and cash collection, while also improving on our customer service metrics.

The capital intensity of our business is low, with capital expenditure typically between 4% and 6% of sales. During the year, our capital expenditure was £49.6 million, equivalent to 4% of sales, including investment in new manufacturing facilities for Watson-Marlow.

This performance resulted in a strong year-end net debt position, excluding leases, of £228.8 million (2019: £295.2 million) and a net debt to EBITDA ratio of 0.7 times (2019: 0.9 times). We successfully strengthened our balance sheet through a planned refinancing programme in May, despite the impact of COVID-19 on credit markets, raising a three year revolving credit facility and adding new banks to the lending group as well as issuing a US Private Placement bond. At the end of the year total committed and undrawn debt facilities amounted to £350 million and Cash & Cash Equivalents amounted to £224 million, giving us headroom of £574 million. The average tenor of our debt is 2.5 years with the earliest contractual repayment in March 2022.

Resilience over the short, medium and long term

Our business model and the investments we have continued to make in our business, combined with our high cash generation, position us well to adapt to economic cycles. Our Going Concern and Viability analysis gives us confidence in the robustness of our business and our capital structure, even under downside scenarios.

We have undertaken scenario-based modelling of our key risks, which underpins our confidence in our short and medium-term resilience. The continued implementation of our strategy, which has been in place since 2014, supports our longer-term resilience and we have continued to refresh this strategy, with a focus on the changing economic, environmental and social factors and their ability to impact our businesses in the future.

Going concern

The Group's business activities, together with the main trends and factors likely to affect its future development, performance and position (as well as the financial position of the Group, its cash flows, liquidity position and borrowing facilities) are set out in more detail in the Financial Review. In addition, the Notes to the Consolidated Financial Statements include the Group's objectives, policies and processes for managing its capital, its financial risk management objectives, its financial instruments and hedging activities, its exposures to credit risk and liquidity risk.

The Group has considerable financial resources and holds contracts with a diverse range of customers and suppliers across different geographical areas and industries.

The Group's Going Concern analysis looks at the 12-month period from the signing of the Annual Report and Accounts. In order to assess the Group's continued ability to trade as a Going Concern we model both a reasonable 'worst case' scenario and a 'reverse stress' scenario. Both scenarios support the Group's strong positioning and ability to continue trading during the assessment period.

The 'worst case' scenario is predicated upon an immediate 15% reduction in Group revenue over a 12-month period, with limited ability for the Group to respond through management of expenditure or cash flow. This scenario is significantly more challenging than the Group's recent experience of the impact of COVID-19 during 2020 as well as the impact of the 2008-9 financial crisis and hence is considered to provide a reasonable 'worst case'. Under this scenario the Group continues to trade profitably and does not breach any of the Group's Financial Covenants.

The 'reverse stress scenario' is designed to calculate the reduction in Group revenue, sustained over a 12-month period and without offsetting management mitigations, which would be necessary before the Group would breach its financial covenants. The magnitude of this decline is considered highly unlikely, particularly in light of the recent experience of the COVID-19 crisis, hence supporting the Group's Going Concern assertion.

The Group's credit facilities all have a leverage (defined as net debt divided by adjusted earnings before interest, tax, depreciation and amortisation) covenant of up to 3.5 times and the Private Placements have an interest cover (defined as adjusted earnings before interest, tax and amortisation divided by net bank interest) covenant of more than 3.0 times. The Group regularly monitors its financial position to ensure that it remains within the terms of its covenants. As at 31st December 2020, interest cover was more than 50 times and leverage was 0.7 times.

Taking all these factors into account, the Directors believe the Group is well placed to manage its business risks successfully. The Directors, having made appropriate enquiries, consider that the Group has adequate resources to continue in operational existence and that the Directors intend to do so, for at least one year from the date the Financial Statements were signed, and that it is appropriate to adopt the Going Concern basis in preparing the Annual Report and Accounts.

Viability Statement

In accordance with provision 31 of the UK Corporate Governance Code 2018, the Board has assessed the viability of the Group, taking into account the Group's current financial position, business strategy, the Board's risk appetite and the potential impacts of the Group's principal risks. We set out the eight principal risks we have identified in Note 1 to the Financial Statements.

Based on this assessment, the Board confirms that it has a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due over the three-year period to 31st December 2023.

The Board has adopted a three-year viability assessment, which it believes to be appropriate as the timeframe is covered by the Group's forecasts; takes into account the nature of the Group's principal risks, a number of which are external and have the potential to impact over short time periods; and is in alignment with the Group's bank term-loan durations. While the Board has no reason to believe that the Group will not be viable over a longer period, given the inherent uncertainty involved, the Board believes that a three-year period provides a reasonable degree of confidence while still providing a longer-term perspective.

In making their assessment, the Board completed a robust assessment, supported by detailed modelling, of the principal risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity. As part of the review, sensitivity and stress testing were undertaken to determine the potential impacts of the occurrence of one or more of the principal risks on sales, profit, margin, balance sheet, cash and return on capital employed. In addition to completing an impact assessment of the principal risks, the Board considered the probability of the occurrence of the principal risks, the Company's ability to control them and the effectiveness of mitigating actions. In every modelled scenario the Group is able to demonstrate that it continues to remain viable.

While no Board can ever fully foresee all possible risks facing the business in the future, the Board is of the view that a robust assessment was undertaken of the severe but plausible scenarios that may feasibly impact upon the business over the next three years. Furthermore, the Board remains confident in the Group's risk management process and the risk mitigation actions taken to address identified risks.

Long-term resilience

The Group has a long track record, over 130 years, of consistently adapting to changing macro-economic, environmental and social factors supported by our business model. While our strategy and business model lessen any material impact from our principal risk factors, we nevertheless continuously review our markets, listen to our customers and adapt our solutions, while working responsibly and in line with our Values to build long-term sustainability.

We recognise the need to anticipate and mitigate the impact of climate-related change, although it is not classed as a principal risk for our Group. In 2020, we refreshed our sustainability strategy and appointed a Group Head of Sustainability, to accelerate the implementation of our plans. We undertook analysis to identify climate change risks which will be addressed through our strategy.

Steam remains the world's most efficient heat transfer medium with multiple on-site applications. We have a highly resilient business and strategy that will remain relevant across different climate-related scenarios, but we are not complacent and plan to conduct further scenario and risk analysis at a business level going forward. We continue to invest in research and development into solutions which will reduce our environmental impact and support our customers to reduce their energy use and carbon emissions. We are exploring synergies within our thermal energy management portfolio, which will enable us to combine core capabilities from our Steam Specialties and Electric Thermal Solutions businesses to develop our products and service capabilities for quantifiable sustainability benefits. This will enable us to support the evolving needs of our customers as they seek to mitigate the impact of their operations on the environment.

Capital structure

The Board keeps the capital requirements of the Group under regular review, maintaining a strong financial position to protect the business and provide flexibility of funding for growth. The Group earns a high return on capital, which is reflected in strong cash generation over time. Our capital allocation policy remains unchanged. Our first priority is to maximise investment in the business to generate further good returns in the future, aligned with our strategy for growth and targeting improvement in our key performance indicators. Next, we prioritise finding suitable acquisitions that can expand our addressable market through increasing our geographic reach, deepening our market penetration or broadening our product range. Acquisition targets need to exhibit a good strategic fit and meet strict commercial, economic and return on investment criteria. When cash resources significantly exceed expected future requirements, we would look to return capital to shareholders, as evidenced by special dividends declared in respect of 2010, 2012 and 2014. However, in the near term, we will look to reduce our financial leverage prior to considering new returns of capital to shareholders.

10 year financial summary

Our financial performance demonstrates a strong trajectory of growth and shareholder value creation.

	2011 £m	2012† £m	2013 £m	2014 £m	2015 £m	2016 £m	2017 £m	2018 £m	2019 £m	2020 £m
Revenue	650.0	661.7	689.4	678.3	667.2	757.4	998.7	1,153.3	1,242.4	1,193.4
Operating profit	129.5	125.7	147.0	148.1	142.8	174.1	198.9	299.1	245.0	249.0
Adjusted operating profit*	134.0	136.2	151.6	153.0	152.4	180.6	235.5	264.9	282.7	270.4
Adjusted operating profit margin*	20.6%	20.6%	22.0%	22.5%	22.8%	23.8%	23.6%	23.0%	22.8%	22.7%
Profit before taxation	132.3	124.1	145.7	144.8	139.7	171.4	192.5	288.8	236.8	240.1
Adjusted profit before taxation*	137.2	134.9	151.1	151.1	151.1	177.9	229.1	254.6	274.5	261.5
Profit after taxation	93.2	87.6	102.3	100.6	96.7	121.3	157.9	223.4	167.0	173.9
Adjusted cash from operations	76.3	129.8	143.0	131.5	146.2	185.0	203.8	242.9	238.1	275.8
Cash conversion	56.9%	95.3%	94.3%	85.9%	95.9%	102.4%	86.5%	91.7%	84.2%	102.0%
Capital expenditure††† to sales	7.1%	5.2%	4.3%	5.0%	5.0%	5.7%	3.8%	3.8%	5.0%	4.2%
Basic earnings per share	120.0p	112.2p	133.4p	132.8p	129.9p	165.0p	214.4p	303.1p	226.2p	235.5p
Adjusted earnings per share*	124.8p	122.2p	138.8p	140.4p	142.6p	171.5p	220.5p	250.0p	265.7p	256.6p
Dividends in respect of the year	38.1	119.5	44.5	139.9	50.6	55.8	64.4	73.6	81.1	87.0
Dividends in respect of the year (per share)	49.0p	53.0p	59.0p	64.5p	69.0p	76.0p	87.5p	100.0p	110.0p	118.0p
Special dividend (per share)	–	100.0p	–	120.0p	–	–	–	–	–	–
Net assets	400.1	436.5	403.5	441.9	398.3	524.4	609.5	766.9	826.3	856.0
Return on capital employed* ^ ††	39.7%	37.6%	41.8%	41.4%	41.1%	44.8%	49.8%	51.6%	52.5%	48.7%
Return on invested capital* ††	25.7%	24.8%	27.6%	27.4%	27.1%	28.7%	22.6%	19.3%	19.0%	17.7%

* All profit measures exclude certain items as set out and explained in the Financial Review and in Note 2.

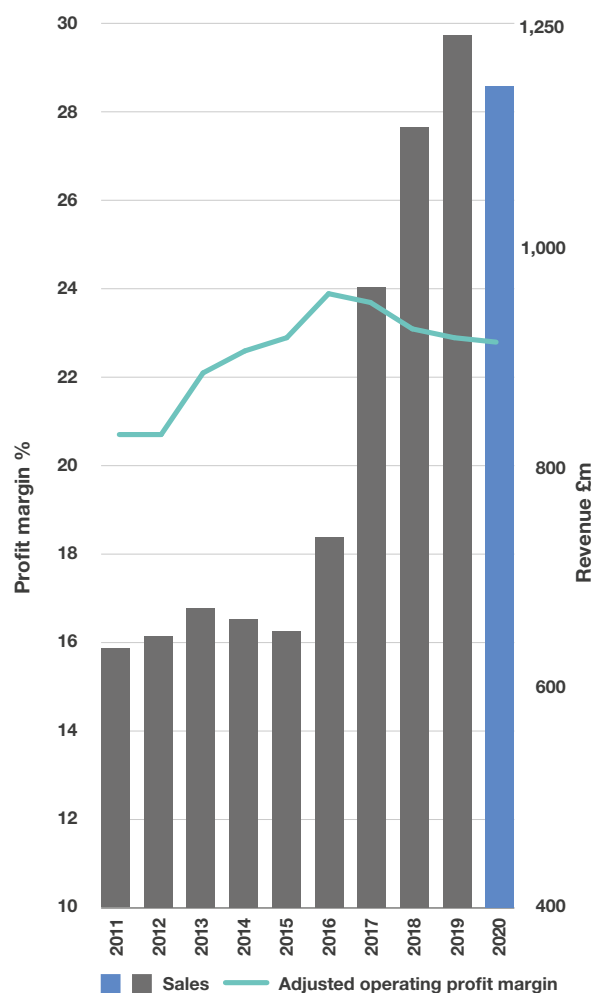
† The results for 2012 were restated to reflect IAS 19(F), prior years have not been restated.

^ The results for 2011 to 2019 have been restated to incorporate the impact of including capitalised software and development costs within capital employed.

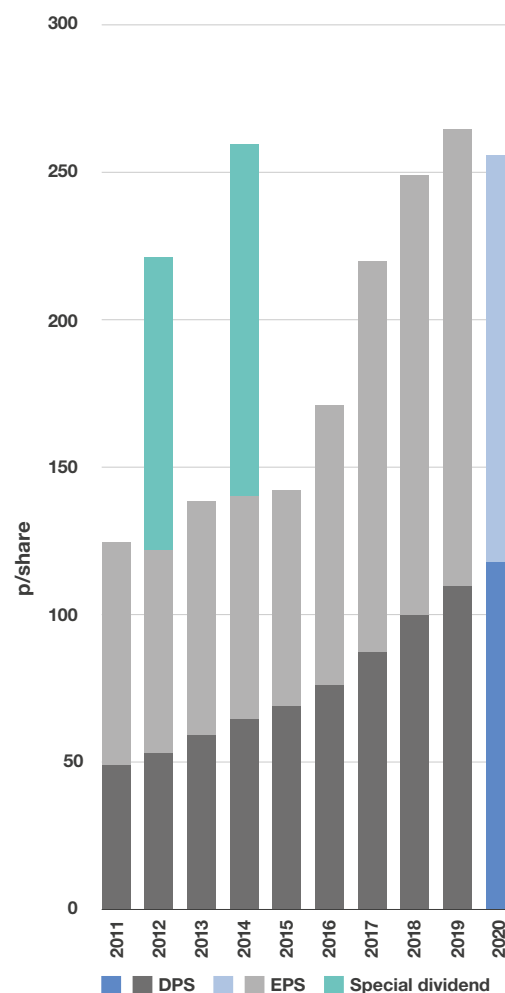
†† The results for 2019 and 2020 exclude the impacts of IFRS 16, which was adopted in 2019.

††† Capital expenditure excludes IFRS 16 lease repayments

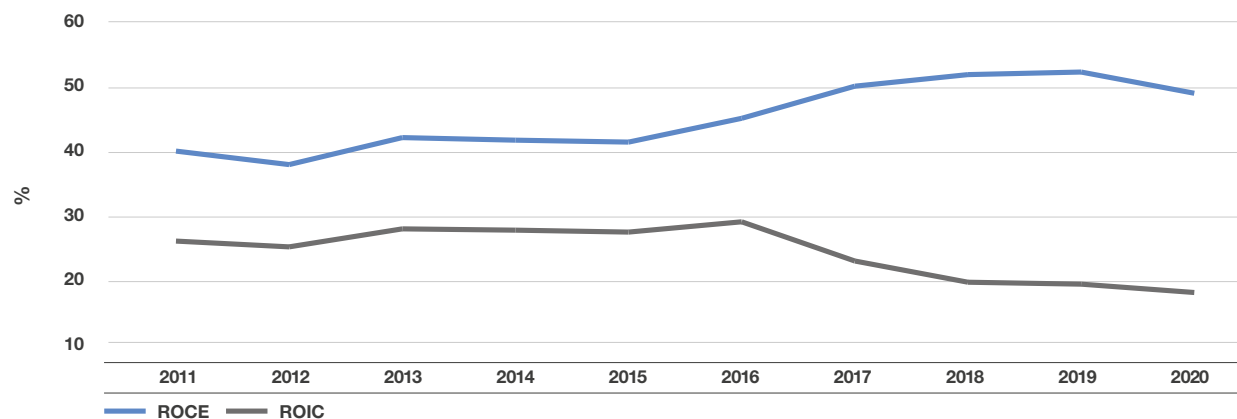
Revenue and adjusted operating profit margin £m / %



Dividends and adjusted earnings per share p



Return on capital employed and return on invested capital %



* All profit measures exclude certain items as set out and explained in the Financial Review and in Note 2.

† The results for 2012 were restated to reflect IAS 19(R), prior years have not been restated.

^ The results for 2011 to 2019 have been restated to incorporate the impact of including capitalised software and development costs within capital employed.

†† The results for 2019 and 2020 exclude the impacts of IFRS 16, which was adopted in 2019.

††† Capital expenditure excludes IFRS 16 lease repayments

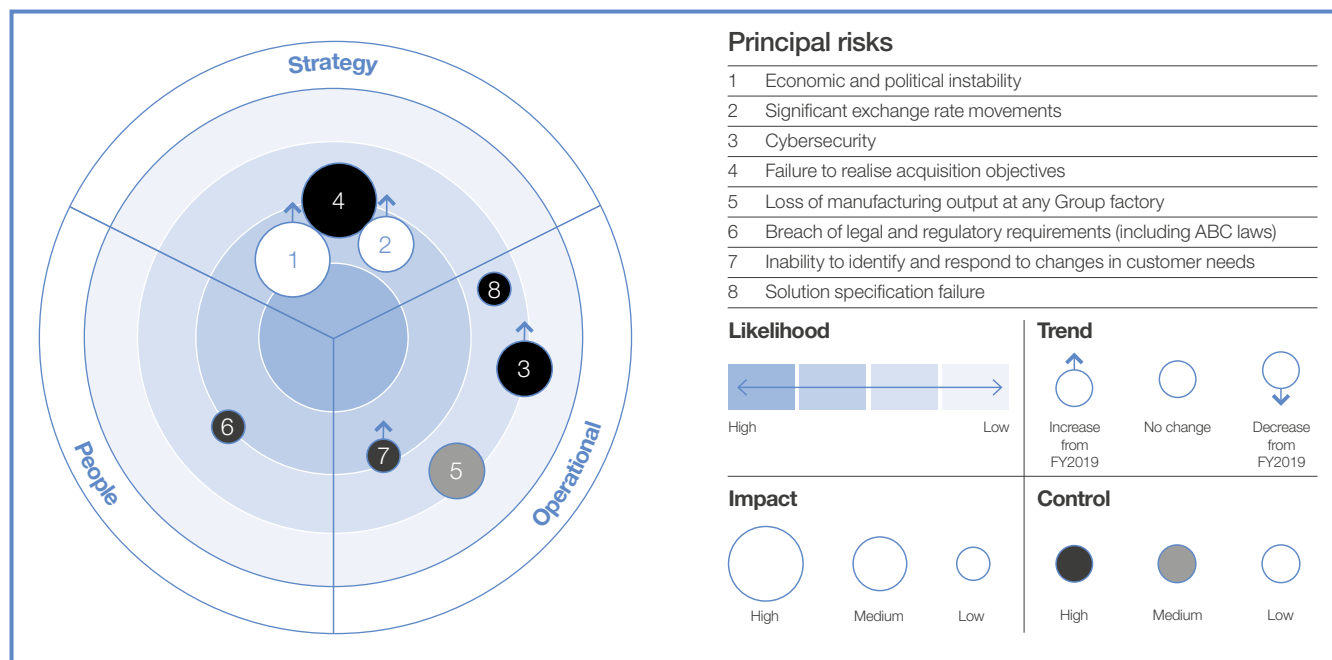
Risk management



Key actions were undertaken by the Group during 2020 in addition to the regular monitoring of existing and developing risks.”

Nicholas Anderson
Group Chief Executive

Risk likelihood, control and impact



Our approach and appetite for risk

We recognise risk as an inherent part of our business operations and we approach risk with the same deliberate, strategic consideration as other aspects of the business. The Risk Management Committee monitors our risks, in particular those identified as principal risks, on an on-going basis, while the Board is responsible for the overall stewardship of risk management and internal control. Using the information and evaluations obtained from our regular top-down and bottom-up reviews, alongside the Committee-led principal risk appetite ratings, the Committee creates an effective system for monitoring, planning and developing a Group-wide approach and culture regarding risk.

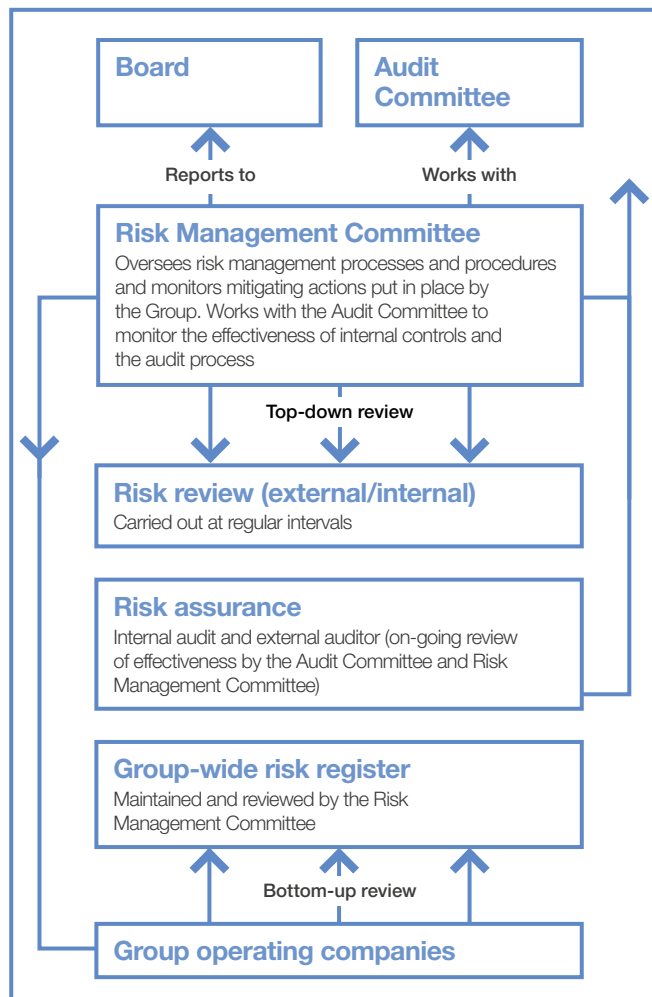
General Managers of our operating units are directly involved in the risk assessment process and the evaluations of the Committee, including the appropriate levels of risk, are communicated to all Group companies.

The on-going monitoring and engagement contributes to the Group's risk register and the management of risks. Both the risk register and the principal risks are dynamic and fluid. They provide a reflection of current conditions across the Group and guidance for on-going monitoring and mitigation activities.

Further reading

The numbers relate to the principal risks.
See pages 62-65

Managing risks



Key risk management actions during 2020

The following key actions were undertaken by the Group during 2020 in addition to the regular monitoring of existing and developing risks:

- **Top-down risk review:** the Committee received high quality responses from its Group companies to the questions posed and determined that the Group companies have sufficiently robust measures in place to effectively mitigate the Group's principal risks;
- **Risk register:** the top-down risk review informed the annual review and update of the risk register;
- **COVID-19 pandemic:** the key risks impacted by the COVID-19 pandemic were reviewed and revised and the risk register was updated on an exceptional basis during the course of 2020;
- **Climate change:** the risk and impact, both short and long term, of climate change on our Group was closely monitored over the course of 2020 and reflected in the risk scoring, which saw the risk advance up the priority list and the trend increase;
- **Risk Appetite Statement:** the Committee confirmed the statement, which can be found on page 117; and

- **Brexit:** the Committee continued to inform and shape the Group's strategy in preparation for a smooth transition through Brexit at the end of the 2020 including any adjustments to provide for the revised framework under the Trade and Cooperation Agreement signed between the UK and the EU at the end of 2020.

The Committee's analysis of the principal risks affecting the Group, before mitigation, is set out in the diagram on page 60.

Assessment of risks in light of the COVID-19 pandemic

The Committee determined that the COVID-19 pandemic was not a risk in itself but was rather of a magnitude where it affected many of the risks on our risk register and that it would be more meaningful for the risk register to be comprehensively revised to take account of the COVID-19 pandemic. This included changes in the level of risk posed and testing the controls in place to deal with such increased level of risk. Therefore, an exceptional review and revision of the Group's risk register was overseen by the Committee in 2020. This assessment resulted in a number of revisions, including:

- an increased risk in economic and political instability (please see section below for action in relation to this increase); and
- an increased risk in cybersecurity due to more frequent phishing attacks being managed during the COVID-19 pandemic.

Improved financial controls and liquidity

In response to the increased risk of volatility in the currency exchange markets, in 2020 we moved to a programme that systematically hedges our transactional exposure to the major currency pairs and mitigates swings in foreign exchange. Despite our resilient business model and spread of our business, both geographically and across industrial sectors, we also expanded our Group's Revolving Credit Facilities and raised banking covenants to ensure access to higher liquidity during the COVID-19 pandemic. The Group did not take advantage of state aid available in any of our markets (e.g. furlough in the UK). Neither did we access COVID-related government loan facilities. The Board was delighted to be in a position to make both final 2019 dividend and 2020 interim dividend payments to shareholders.

Emerging risks

In addition to the principal risks faced by our business, we recognise that there are risks which are more uncertain in nature and difficult to assess or that have the potential to develop and increase in severity over time. The Committee monitors closely all emerging risks that have the potential to increase in significance and affect the performance of the Group and its ability to meet its strategic objectives. Whilst we acknowledge that such risks are not as easily accommodated on the risk scoring matrix or prescribed risk appetite ratings, the Committee meetings and the risk register are both used to identify and closely monitor such risks.

The Group responded to the Trade and Cooperation Agreement agreed between the UK and the EU at the end of 2020 and swiftly implemented all contingency plans to minimise any potential disruption to be caused to the business.

The Board, the Group Executive Committee and the Committee are continuing to monitor the impact of the COVID-19 pandemic and any post-Brexit challenges affecting our business.

Risk management *continued*

Risk register review

Following the review of the risk register and principal risks, the ranking and order of the principal risks remained unchanged in 2020.

Recognising the continued growing impact and importance of climate change, the risk was elevated in ranking in the risk register, albeit not made a principal risk given the current level of risk and potential impact to our business in the short term.

The elevation in ranking of climate change in our risk register demonstrates the fluid and dynamic nature of our risk assessment processes.

The year-on-year trend for each principal risk was assessed and updated and risk appetite ratings validated for each of the principal risks.

Principal risks

The following table sets out the Group's principal risks and describes the links to strategy, the mitigation measures and the appetite for each risk. The trend column sets out the direction of change from 2019.

The table includes those risks that we have identified as currently most relevant to the Group.

Key Trend

 Increased risk
  No change to risk
  Decreased risk

Link to strategy

 Direct link
  Indirect link
  No link

Risk appetite ratings defined:

Very low	Following a marginal-risk, marginal-reward approach that represents the safest strategic route available.
Low	Seeking to integrate sufficient control and mitigation methods in order to accommodate a low level of risk, though this will also limit reward potential.
Balanced	An approach which brings a high chance for success, considering the risks, along with reasonable rewards, economic and otherwise.
High	Willing to consider bolder opportunities with higher levels of risk in exchange for increased business payoffs.
Very high	Pursuing high-risk, unproven options that carry with them the potential for high-level rewards.

Principal risk and why it is relevant	Trend	Key mitigation, sponsor and explanation of change	Risk appetite rating	Rationale for rating
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1. Economic and political instability

The Group operates worldwide and maintains operations in territories that have historically experienced economic or political instability. This type of instability, which includes the uncertainties of regime change, creates risks for our locally based direct sales operations and broader risks to credit, liquidity and currency.



- Strong internal controls, including internal audit and appropriate insurance.
- Operating in accordance with the Group Treasury Policy, including currency exchange hedging and cashpooling arrangements.
- Externally-facilitated scenario planning.
- Resilient business model.
- Well spread business by geography and sector.
- Increased liquidity through more headroom on Group debt facilities.

Executive sponsor: Nicholas Anderson

Change: This risk has increased due to various factors including the impact of the COVID-19 pandemic on world trade and markets and continued trade friction between the USA and a number of other nations in 2020 including China and Iran.

- ☐ Very high
- ☒ High
- ☐ Balanced
- ☐ Low
- ☐ Very low

We have the background and know-how to successfully manage the unique challenges in economically and politically volatile territories. We are willing to accept these challenges where opportunities for growth exceeded the impact of this risk.

Link to strategy: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#)

Principal risk and why it is relevant	Trend	Key mitigation, sponsor and explanation of change	Risk appetite rating	Rationale for rating
2. Significant exchange rate movements				
The Group reports its results and pays dividends in sterling. Operating and manufacturing companies trade in local currency. With sales companies and manufacturing spread across the globe, the nature of the Group's business necessarily results in exposure to exchange rate volatility.	↑	<ul style="list-style-type: none"> • Maintain the spread of manufacturing across currency areas. • Consideration of exchange rate exposures in the manufacturing strategy. • Forward cover where appropriate and in line with the Group Treasury Policy on hedging currency exchange movements. • Focus on reducing manufacturing cost. <p>Executive sponsor: Nimesh Patel</p> <p>Change: This risk has increased primarily as a result of the increased potential for volatility in the currency exchange markets due to the COVID-19 pandemic.</p>	<input type="radio"/> Very high <input type="radio"/> High <input checked="" type="radio"/> Balanced <input type="radio"/> Low <input type="radio"/> Very low	We take a balanced view of this risk as the risk arises as a direct result of our global presence, but our geographic spread means we are not wholly dependent on any one currency.

Link to strategy: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#)

3. Cybersecurity

Cybersecurity risks include risks from malware, accident, statutory and legislative requirements, malicious actions and other unauthorised access by third parties.	↑	<ul style="list-style-type: none"> • Global assessment of our IT environment against UK cyber essentials framework and prioritising actions for improvement. • Deploying security tools to limit the impact and spread of ransomware. • Further strengthening of security for centrally-managed systems for heightened protection and consistency. • Cyber insurance cover for all Group companies. • Mandatory cybersecurity training rolled out globally. <p>Executive sponsor: Shaun Mundy, Group IS Director</p> <p>Change: This risk has increased due to increased threats of phishing during the COVID-19 pandemic.</p>	<input type="radio"/> Very high <input type="radio"/> High <input type="radio"/> Balanced <input type="radio"/> Low <input checked="" type="radio"/> Very low	Concerns of potential impact on the business, in addition to the important considerations surrounding protection of personal data, reinforce our commitment to implement and maintain robust security measures across the Group.
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Link to strategy: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#)

4. Failure to realise acquisition objectives

Whilst the Group mitigates this risk in various ways, including through comprehensive due diligence, professional advisers and contractual protections, amongst others, there are some variables that are uncontrollable or difficult to control, such as economic conditions, culture clashes and employee movement. Therefore, these could impact acquisition objectives.	→	<ul style="list-style-type: none"> • Regular review of acquisition criteria in line with strategic plan. • Board approval of integration plans for major acquisitions. • Scrutiny of targets and implementation plans by external advisers and internal key players. • Use of retainer/escrow to provide protection against warranty claims. • Use of insurance as protection against seller breach and non-disclosure. • Ensuring valuation models show a healthy return on investment. • Regular monitoring of performance by the Board against the approved investment case. <p>Executive sponsor: Nicholas Anderson</p> <p>Change: No change.</p>	<input type="radio"/> Very high <input type="radio"/> High <input type="radio"/> Balanced <input checked="" type="radio"/> Low <input type="radio"/> Very low	Thorough planning and proper due diligence can mitigate many of the potentially risky aspects of an acquisition. Implementation plans must be well-developed and carefully pursued to achieve the full strategic and financial benefits.
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Link to strategy: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#)

Risk management *continued*

Principal risk and why it is relevant	Trend	Key mitigation, sponsor and explanation of change	Risk appetite rating	Rationale for rating
5. Loss of manufacturing output at any Group factory				
The risk includes loss of output as a result of natural disasters, industrial action, accidents or any other cause. Loss of manufacturing output at any important plant risks serious disruption to sales operations.	→	<ul style="list-style-type: none"> Investing in modern flexible machining. Capacity planning and holding stock in sales companies. Conducting audits/inspections. Annual Risk Assessments and business continuity planning. Reviewing and maintaining appropriate insurance cover. Continuing commitment to employee policies, ensuring satisfactory benefits and regular communication with all employees. Investment in new sites to provide availability of alternate lines of supply. <p>Executive sponsors: Neil Daws*, Andrew Mines and Dominique Mallet</p> <p>Change: No change.</p>	<input type="radio"/> Very high <input type="radio"/> High <input type="radio"/> Balanced <input checked="" type="radio"/> Low <input type="radio"/> Very low	Whilst we have mitigated this risk through a geographic spread of factories, calculated replication of capacity and management of stock, the potential negative consequences to the Group and its customers warrants a low appetite for this risk.
Link to strategy: <div>123456</div>				

6. Breach of legal and regulatory requirements (including ABC laws)

We operate globally and must ensure compliance with laws and regulations wherever we do business. As we grow into new markets and territories, we must continually review and update our operations and procedures, and ensure our employees are fully informed and educated in all applicable legal requirements. This is particularly important with respect to anti-bribery and corruption (ABC) legislation. Breaching any of these laws or regulations could have serious consequences for the Group.	→	<ul style="list-style-type: none"> On-going global monitoring of commercial arrangements and agreements, with appropriate professional advice. Established procedures to maintain accreditations. Group-wide ABC training and whistle-blowing hotline. Group Litigation Report and on-going monitoring of cases. Regular updates on Corporate Governance and Stock Exchange rules. General Data Protection Regulation compliance plan implemented. Conducting supplier audits. Engaging suppliers to commit to compliance with the principles of the Supplier Sustainability Code. Monitoring of changing laws and regulations arising as a result of Brexit. <p>Executive sponsor: Andy Robson</p> <p>Change: No change.</p>	<input type="radio"/> Very high <input type="radio"/> High <input type="radio"/> Balanced <input type="radio"/> Low <input checked="" type="radio"/> Very low	We respect the laws, rules and regulations of the jurisdictions in which we operate and believe we have a duty to comply with those requirements.
Link to strategy: <div>123456</div>				

* Neil Daws retired from the Board and its Committees on 31st December 2020. Maurizio Preziosa, Managing Director, Steam Specialties, was appointed to the Committee on 1st January 2021.

Principal risk and why it is relevant	Trend	Key mitigation, sponsor and explanation of change	Risk appetite rating	Rationale for rating
7. Inability to identify and respond to changes in customer needs				
This risk could lead to a loss of business as a result of a failure to respond rapidly to changes in the needs of customers or technology shifts.		<ul style="list-style-type: none"> Stronger presence of sales engineers, compared with competitors, in the market place. Watson-Marlow implemented a product development pipeline process which tracks trends and changes in each industry sector. New product ideas generated by market development managers from close alignment with sales engineers and customers. Sales and competitor analyses undertaken to identify any trends or technology shifts. Digital strategies for Steam Specialties, Watson-Marlow and Electric Thermal Solutions are under preparation with longer term implications on investment, resource levels, new skills and need to develop external partnerships. <p>Executive sponsor: Neil Daws*</p> <p>Change: This risk has increased because of market change dynamics.</p>	<input type="radio"/> Very high <input type="radio"/> High <input type="radio"/> Balanced <input checked="" type="radio"/> Low <input type="radio"/> Very low	The Group continues to focus on its market awareness, invests in technical and sales knowledge via the Spirax Sarco Academy and, through Customer first sectorisation, seeks to be more closely attuned to its customers. There is therefore a good level of control effectiveness, but a low appetite for risk.

Link to strategy: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#)

8. Solution specification failure

This risk relates to loss of output at a customer plant due to a faulty product potentially leading to customer product contamination and/or customer loss of manufacturing output and thereby contractual liability and loss of sales.		<ul style="list-style-type: none"> Product Life Cycle Management rolled out across the Steam Specialties business providing improved failure visibility and analysis. Product data management system rolled out. Watson-Marlow electronic quality system rolled out. Strengthening compliance and quality resource in critical areas including audit of localised manufacturing and establishing global quality and compliance activities to identify high risk. Additional buyer assumption of liability on Original Equipment Manufacturer products. Customer approval process for complex orders and engineered solutions. <p>Executive sponsor: Neil Daws*, Andrew Mines and Dominique Mallet</p> <p>Change: No change.</p>	<input type="radio"/> Very high <input type="radio"/> High <input type="radio"/> Balanced <input checked="" type="radio"/> Low <input type="radio"/> Very low	With our direct market approach, our risk from a control and mitigation perspective is well-managed as we are able to respond to our customers in a timely manner. From a financial standpoint, the price (and hence the margin) we command provides a strong foundation for some risk appetite.
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Link to strategy: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#)

* Neil Daws retired from the Board and its Committees on 31st December 2020. Maurizio Preziosa, Managing Director, Steam Specialties, was appointed to the Committee on 1st January 2021.

Committee focus for 2021

- Bottom-up risk review and annual review of risk register.
- Board review of risk management process.
- Continue to closely monitor COVID-19, taking action to mitigate its effects, particularly the impact on workforce.
- Closely monitor the impact of Brexit.
- Assess emerging risks, including climate change, with focus on risk appetite in light of digital strategies and geographic expansion.
- Reflect on accelerated sustainability implementation and whether this impacts positively on our risks and risk management.

Further reading

Information on the Group's approach to risk, including risk appetite, along with the roles, responsibilities and actions of the Risk Management Committee.
 See pages 114-117

Our Viability Statement.
 See page 57

Our Going Concern Statement.
 See pages 56-57

Sustainability Report



Operating sustainably requires a long-term view to ensure that we consider the impacts of our actions not just now but in the future too and help our customers to do the same.”

Sarah Peers
Group Head of Sustainability

Sustainable value creation

We strive to embed long-term thinking across our decision-making and operate in a way that promotes sustainable value creation for all our stakeholders as we engineer a more efficient, safer and sustainable world. Operating sustainably requires a long-term view, beyond the normal time horizons of a regular business strategy, to ensure that we consider the impacts of our actions not just now but in the future too, and act to manage emerging risks – such as climate change – and help our customers to do the same. In the words of our Group Chief Executive, “we want to leave a world to future generations that is better than the one we inherited” and that is what we are trying to do, every day.

Sustainability governance

During 2020 we further developed our Sustainability governance structures. In July, I was appointed Group Head of Sustainability, a new position for the Group, reporting to the Group Chief Executive and this has strengthened Management and Board oversight of sustainability. Each of our three businesses committed to appointing a full-time Head of Sustainability, reporting to a member of the business’s Executive Committee.

The Group Sustainability Committee continued to meet throughout the year, receiving reports and updates on performance and progress. In 2021, the Committee membership will be refreshed to align with our new governance structure. Sustainability is now a standing agenda item at every monthly Group Executive Committee meeting, during which I provide a progress and performance update, allowing time for discussion, challenge and decision making. We formalised the Board’s oversight of sustainability, with our Directors now receiving a report on sustainability at every Board meeting, which is provided by either the Group Chief Executive or myself.

The adjacent diagram outlines the Sustainability management structure in operation throughout 2020.

Commitments

During 2020 we made a series of public commitments in relation to climate change and biodiversity.

Climate change commitments include:

- Achieve net zero greenhouse gas (GHG) emissions before 2040.
- Source 50% of our electricity from renewable sources by 2030.
- Designate Board accountability for GHG emissions.
- Extend our reporting to include Scope 3 GHG emissions.
- Certify our GHG emission reduction efforts with an external body.

Managing sustainability

Group Chief Executive

Named Board member with responsibility for sustainability.

Board of Directors

Group Executive Committee

Group Head of Sustainability

Group Sustainability Committee

During 2020, Committee members included: Group Head of Sustainability; Steam Specialties Supply Chain and Group EHS Director; Divisional Director Spirax Sarco Americas; Divisional Director Spirax Sarco EMEA; Group EHS Executive; Watson-Marlow Global HR Director; Watson-Marlow Sustainability Coordinator; and Electric Thermal Solutions Environmental, Health, Safety and Sustainability Director.

Sustainability strategy sponsors

Senior managers allocated to each sustainability objective.

Divisional Directors, Regional and General Managers

Ensure the Group’s Sustainability policies are upheld and implemented by operating units.

Sustainability strategy project leaders and teams

Establish strategic priorities, with sponsors, and oversee strategic implementation.

Colleagues and organised colleague groups

Participate in, oversee, record and report on strategic implementation and performance within their local workplaces.

Biodiversity commitments include:

- Identify any harmful direct impacts and dependencies our business has on nature and biodiversity and set targets for reducing them.
- Establish a biodiversity net gain target.
- Commit to publishing the results of our work.

We have begun to address each of these commitments as part of a Sustainability strategy refresh. More information is provided below.

2020 Sustainability strategy refresh

In October we commenced a strategy refresh, supported by an independent sustainability consultancy, Challenge Sustainability. The first stage of the refresh, the strategic review, was completed in January 2021. The review included, but was not limited to, internal and external stakeholder engagement, a materiality assessment, a risk and opportunities assessment, climate change scenario analysis, a net zero greenhouse gas readiness review and a biodiversity impact and dependencies assessment. A brief overview of some of the work undertaken is outlined below. More detailed information will be provided in our 2021 Annual Report, together with the refreshed Sustainability strategy.

Stakeholder engagement

We recognise that the decisions we make and the way we operate have an impact on our stakeholders. As a result, we engaged with stakeholders to understand what sustainability topics are important to them; how our operations are affecting or could affect them, either positively or negatively; and to harness their knowledge to ensure that our refreshed Sustainability strategy focuses on the most material topics for us and our stakeholders.

Stakeholder engagement took two forms: in-depth interviews and surveys of both internal and external stakeholders. Nearly 50 comprehensive interviews were conducted, covering colleagues, customers, suppliers and shareholders and over 600 survey responses were received. The responses to both the interviews and surveys helped to inform our materiality assessment.

Materiality

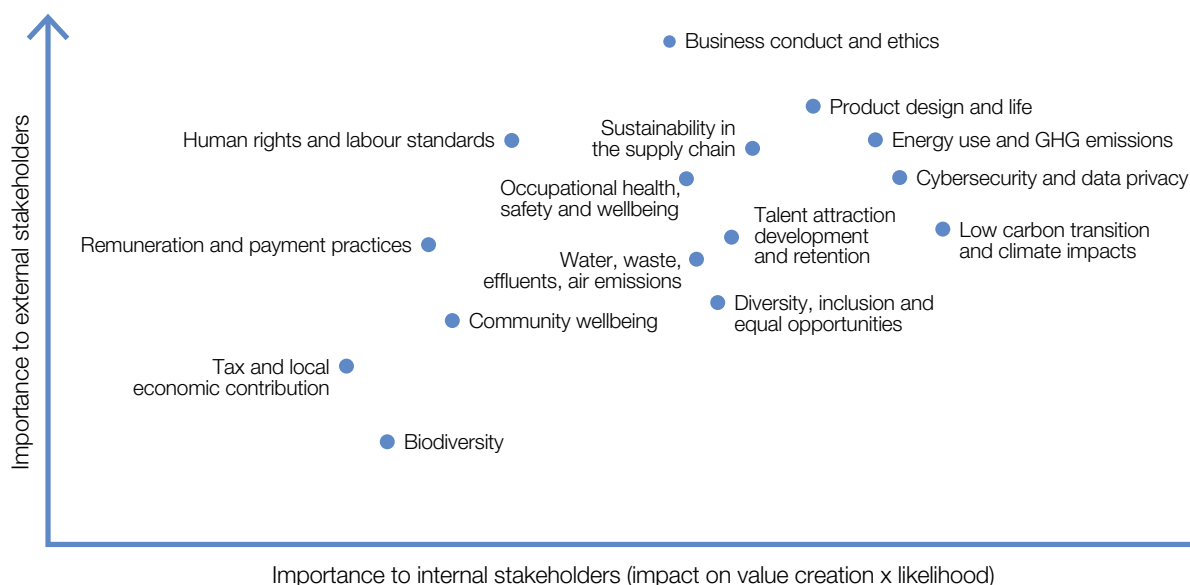
We assessed the materiality of 15 social, environmental and economic sustainability topics. Building on the <IR> Framework, we defined a topic as material if it could substantively affect the organisation's ability to create value in the short, medium or long term. As sustainable value creation for all stakeholders is central to our Company purpose, this definition of materiality strongly resonated with us.

The output of the assessment was four materiality matrices, one for each of our three businesses and a consolidated matrix for the Group. The matrices plot "importance to external stakeholders" against "importance to internal stakeholders", with importance to internal stakeholders assessed on the impact on value creation and the probability or likelihood of that impact occurring.

While there were some minor variations in the position of the points across the three business matrices, there was a significant degree of overlap and importantly, no material differences between the businesses. With the three matrices being highly aligned in their assessment of materiality, the consolidated Group matrix (below) is representative of our individual business, as well as Group, materiality.

In December 2020, we began to develop the refreshed Sustainability strategy, referring to the materiality matrix. While informing the strategy's development, the materiality matrix is being used with judgement. For example, the most material topics, found in the top right-hand side of the matrix, will feature in the strategy only if they are not being strategically addressed elsewhere in the business. A number of important topics, such as H&S, cybersecurity and Diversity & Inclusion, have their own distinct governance structures and strategies and are being actively managed across the Group. It is therefore not expected that they will feature in the refreshed Sustainability strategy. However, we will continue to report on relevant metrics across a range of topics, where we feel that disclosure is useful for stakeholders' understanding of our business and performance. Conversely, some topics that have been identified as less material to the business in terms of value creation or importance to external stakeholders, such as biodiversity, are likely to feature

Group Materiality Matrix



Sustainability Report *continued*

in the strategy because we recognise them as important global sustainability challenges that we believe we have a responsibility to help address and because they provide opportunities to engage our people.

Biodiversity impact assessment

In June 2020 we committed to complete an assessment of our impacts and dependencies on biodiversity, in advance of setting a biodiversity net gain target. We appointed an ecological consultancy to support us in this work. During the last quarter of the year, we conducted a desk-based biodiversity impact assessment on 30 of our global manufacturing sites and our head office in Cheltenham, UK. We chose to focus this initial assessment on our manufacturing sites because, within our direct operations, our manufacturing sites are significantly more likely to impact biodiversity than our office sites.

The desk-based assessment, supported by a questionnaire completed by each site, classified biodiversity interest in a 10km radius of our manufacturing sites, reviewed the nature of our operations in each of those sites and identified any impact pathways through which operations at our sites could affect biodiversity. Each site was then scored as high, medium or low risk for biodiversity impacts.

The assessment found that the majority of our sites are low risk for biodiversity impacts: 28 of our 31 sites were classified as low risk, three were classified as medium risk (although in two of these sites this related to the risk of impact under exceptional conditions – such as fire or flooding – and not during normal operating conditions) and no sites were classified as having a high risk. The medium risk sites were: Spirax Sarco Argentina, where the Rio Reconquista runs close to the site and flows into a network of regionally-important wetlands; Chromalox Mexico, where the Rio Grande River flows close to the site, which is home to two IUCN Endangered Species (the Rio Grande Silvery Minnow and the Golden-cheeked Warbler); and Spirax Sarco USA, which adjoins a local woodland and, as a result, could have a minor local impact on wildlife during normal operations as a result of disturbance from noise or light.

During 2021 we will conduct further work at the sites classified as medium risk to review environmental management plans and, if required, put in place extra processes to mitigate risk during normal or exceptional circumstances.

The assessment also reviewed our direct dependencies on biodiversity and found no significant direct dependencies in any of our manufacturing sites, but some dependency on ecosystem services, notably water and raw materials.

Following the survey, the Group Executive Committee committed to a four-step approach, over the next five years, to achieve biodiversity net gain. First, we will manage our own operations to minimise their impact on biodiversity, with a particular focus on those sites identified as having a medium risk; second, we will deliver a biodiversity offset, equivalent to at least our global operational footprint; third, we will require all of our operating units to participate in at least one biodiversity enhancement project, on site or in their local community, within the next five years; and fourth, we commit to delivering a biodiversity net gain of 10% during the construction of all new manufacturing facilities.

Risk and opportunities assessment

During late 2020, and extending into early 2021, we conducted a qualitative, high-level risk and opportunities assessment of five sustainability topics identified as most material to the Group (excluding cybersecurity, which is assessed through the existing

Group Risk Management process). Each risk was broken down into sub-risks, to facilitate a more granular assessment. We applied the criteria used in the Group's regular risk assessment process and received input from each of the Group's three businesses. As a result of the assessment, we identified additional mitigation activities that could be utilised to improve risk management and made a recommendation for further quantitative analysis where risks were identified as having a high likelihood of occurrence and the possibility of a relatively higher impact.

In line with the recommendations of the Task Force on Climate-related Financial Disclosure (TCFD), the risk and opportunities assessment was further supplemented by climate change scenario analysis. For more information, see page 79.

Net zero roadmap

Having made a commitment to achieve net zero greenhouse gas emissions before 2040, with the support of external consultants, Challenge Sustainability, we conducted a net zero readiness review and began to develop our Group-level net zero roadmap, which will continue throughout 2021. Further detail will be provided in the 2021 Annual Report. It is our intention to align with best-practice when developing our net zero roadmap, with a primary focus on reducing our energy consumption and carbon emissions to minimise the use of carbon offsets. While our net zero target specifically relates to our Scope 1 and 2 emissions, we have committed to report on and address value chain emissions, through the establishment of Scope 3 targets, once we have confidence in the accuracy of the data.

Reporting review

During 2020 we undertook a review of our corporate reporting on sustainability. We have enhanced our disclosure to ensure full alignment with the new Streamlined Energy and Carbon Reporting (SECR) requirements, disclosing UK greenhouse gas emissions, a UK greenhouse gas emissions intensity ratio and related methodology, for the first time (see page 79). In addition, we have enhanced our TCFD disclosure by reporting on our use of scenario analysis for analysing the risks and opportunities associated with climate change (see page 79). It is our intention to further develop our TCFD disclosure in our 2021 Annual Report.

We recognise that there is a need for better consistency in sustainability reporting standards globally and believe that corporate reporting of sustainability metrics should be aligned with business materiality, to ensure useful and transparent disclosure to users of Annual Reports. The Sustainability Accounting Standards Board (SASB) seeks to address these needs.

SASB designates Spirax-Sarco Engineering plc as being in the "Engineering and Construction Services" sector. During 2020 we reviewed SASB's reporting requirements for this and other related sectors and assessed them for materiality. We have disclosed, to the fullest extent possible, against the requirements of the Engineering and Construction Services Standard, in respect of 2020, which can be found on our website <https://www.spiraxsarcoengineering.com/investors/results-reports-and-presentations/year/2020>.

Focus for 2021






- Complete the strategy refresh, including target setting.
- Further develop the Group's net zero greenhouse gas emissions roadmap.
- Undertake Scope 3 carbon emissions assessment.
- Launch the refreshed strategy and commence implementation.

2020 Sustainability strategy overview

The content that follows relates to the Sustainability strategy and targets that were in place during 2020. Our refreshed Sustainability strategy and updated targets will be set out in our 2021 Annual Report.



Sustainability overview 2020

Sustainability area	Material sustainability topic	Objective	Target in place during 2020	Further reading
Our workplaces 	Health & Safety	To achieve Health and Safety (H&S) excellence through engagement, empowerment and fostering good behaviours while targeting zero accidents.	Zero accidents	Pages 70-71
	Employment practices	To promote diversity and equality through employment practices that are free from discrimination and in accordance with international human rights principles.	33% of women on our Board, as opportunities arise	Pages 72-73
	Ethical business practices	To act in accordance with our Values, upholding a zero tolerance approach to bribery and corruption.	Zero incidents of bribery and corruption	Page 73
	People development	To invest in developing the knowledge and skills of our people.	Increase the impact of our technical and leadership training offering	Page 74
Our supply chain 	End-to-end supply chain	To focus on continuous improvement in our supply chain with particular emphasis on sustainability.	97% of Phase 1, 2 and 3 suppliers and 90% of Phase 4 suppliers to have signed our Supplier Sustainability Code	Page 75
	Product responsibility	To incorporate sustainability factors into our product design process, including energy efficiency, emissions, serviceability, recyclability and the availability of compliant and ethically sourced materials.	Continuing compliance with all applicable EHS standards, while meeting customer expectations of performance and cost	Page 76
Our environment 	Water and waste	To limit the environmental impacts of our operations through reducing water use and minimising and managing effluent and waste.	To reduce waste intensity by 10% and water intensity by 5% over three years to 2021	Page 77
	Energy and carbon	To minimise the environmental impacts of our operations by managing energy consumption with the aim of reducing carbon emissions.	To reduce our energy intensity by 10% over three years to 2021, with an accompanying reduction in carbon emissions	Pages 78-80
Our customers 	Customers	To provide products and services that improve the sustainability of our customers' operations through helping them reduce their environmental impacts, improve plant efficiency and productivity and maintain product quality.	Enhance our reporting of customer sustainability benefits	Pages 81-83
Our communities 	Community engagement	To engage positively with the communities in which we operate and to offer financial support to approved charities.	All Group companies to participate in at least one community engagement activity annually	Pages 84-85

Sustainability Report *continued*



Our workplaces Health and Safety

Overview

Safety is one of our Company Values. The safety and wellbeing of our people is always our first consideration. Whether working on our own premises, on a customer's site, or working from home, we want our colleagues to be safe. We also extend the same standards to contractors or visitors to our sites.

We strive for excellence in Health and Safety (H&S) and have a target of zero accidents. While this is a challenging target, we believe that it is achievable. With the necessary controls in place and everyone understanding and acting on their individual and collective responsibilities to keep themselves and their colleagues safe, accidents are preventable.

Across the Group we utilise robust H&S management systems. All Group companies are required to operate to the highest safety standards. Our Group Chief Executive, Board of Directors and Executive management teams monitor H&S performance and progress, with H&S a standing agenda item at every Board meeting and every Group Executive Committee meeting. We also have an extensive network of H&S professionals across the Group leading and driving improvements in our H&S processes and performance.

2020 performance and actions

Throughout the year, protecting the health of our colleagues and their families from COVID-19 was a key priority. However, this did not distract us from implementing our ongoing plans for H&S process and performance improvements, with good progress made during the year despite the pandemic.

COVID-19

We responded quickly to the emerging threat in the first quarter of the year, first in China and then beyond as the pandemic took hold around the world.

During 2020, it was and continues to be essential that we support customers, many of whom are on the frontline fighting the pandemic. Other than a few short-duration localised shut-downs, in response to national pandemic restrictions, our manufacturing sites remained operational throughout the year. Sales and service engineers used digital technology to engage with customers if site visits were not permissible. Remaining operational required our workplaces to be COVID-secure and our engineers protected when visiting customer sites. In addition, with large numbers of office-based colleagues working from home, we took steps to support their health and wellbeing and ensured that all necessary precautions were put in place to keep our office environments safe for those who could not work from home or who chose to return to our workplaces when local or national restrictions allowed.

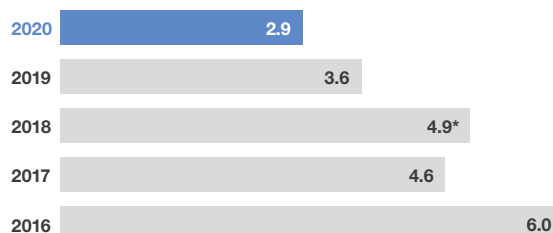
Across the Group we established minimum COVID-19 workplace standards that applied to all Group companies, regardless of whether the standards were higher than those imposed by national governments. The standards stipulated that COVID-19 risk assessments be completed at every site, to include all areas of our workplaces; a requirement for two metre social distancing, with all necessary steps taken to ensure that this was possible, such as one-way systems, staggered start, finish and break times, rotational/shift work, reorganisation of office spaces, or the installation of screens if social distancing was not possible; and COVID-19 signage across

sites. The minimum requirements also specified the types of personal protective equipment to be used by colleagues.

Hygiene and cleanliness requirements included the necessity for hand sanitiser to be available at all entrances/exits and at key positions throughout the site. A daily deep clean procedure was required at all sites, in addition to the normal cleaning routine, with cleaning of touchpoints, such as door handles and handrails, increased to at least twice daily. Visitors to our sites were kept to a minimum, but all visitors, contractors and sub-contractors were required to be temperature checked before being allowed on site, with many of our sites also requiring colleagues to be temperature checked. Before returning to our workplaces following a period of home working, colleagues were required to undergo COVID-19 training and understand the requirements for working on site.

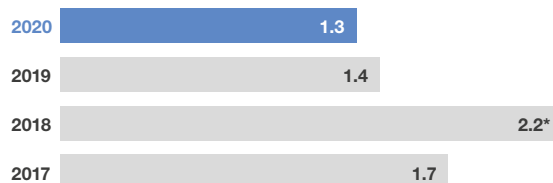
As a result of these and other localised measures, the COVID-19 infection rate in the workplace amongst our people was kept extremely low.

Over three-day lost time injury rate per 1,000 employees



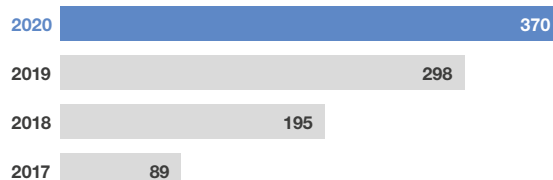
* 2018 rate increased due to the full-year effect of the Chromalox acquisition

One to three-day lost time injury rate per 1,000 employees

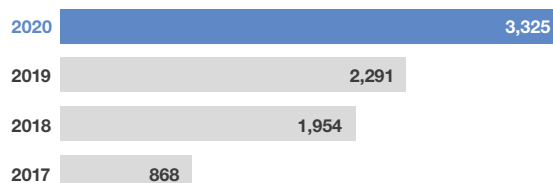


* 2018 rate increased due to the full-year effect of the Chromalox acquisition

Near misses per 1,000 employees



H&S concerns raised per 1,000 employees



Behavioural Based Safety (BBS)

We recently established a new Group standard BBS programme. Rolling out the programme and training colleagues in BBS was an important area of focus during 2020. Phase 1 Leadership training was rolled out to over 450 managers in Watson-Marlow during the year, having previously been rolled out across the Steam Specialties business in 2019. Within the Steam Specialties business, over 2,300 colleagues were trained in Phase 2 Personal Safety and over 1,350 in Phase 3 Team Safety.

Safety management

During 2020, we established a new EHS audit framework and trained EHS leaders within the Steam Specialties business.

We commenced aligning Thermocoax with Group H&S programmes. Detailed implementation plans have been created and regular meetings took place throughout the year to track implementation. Actions included, but were not limited to, investments in new machine guard solutions and working at height equipment.

During 2020, a new First Aid Policy was written and communicated across the Group. The Policy specifies a minimum number of trained first aiders within each Group company. As a result of the policy, we provided training to over 500 new first aiders and have mandated that new defibrillators be installed across all our sites.

Lagging indicators: lost time injury rate

During 2020, our over three-day lost time injury rate per 1,000 employees improved to 2.9 per 1,000 employees (2019: 3.6), a reduction from 28 injuries in 2019 to 23 in 2020. We also saw an improvement in our one to three-day lost time injury rate, which fell to 1.3 per 1,000 employees (2019: 1.4), a reduction from 11 injuries in 2019 to 10 in 2020. All lost-time accidents were thoroughly investigated and learnings shared across the Group. As in previous years, we had no fatalities.

Leading indicators

Reflecting the increasingly well-embedded safety culture, the number of safety concerns raised by employees increased to 3,325 per 1,000 employees (2019: 2,291). The number of near misses reported also increased to 370 per 1,000 employees (2019: 298). All safety concerns and near misses were assessed and corrective action taken to reduce the likelihood of an accident occurring in the future. 129,106 H&S training hours were delivered across the Group (2019: 134,341 training units), we increased the number of full-time qualified EHS professionals across the Group to 52 (2019: 48). We completed 7,586 Behavioural Based Safety inspections (2019: 4,406 EHS audits or inspections). 21 of our Group companies are certified to OSHAS 18001 and 43 are certified to ISO45001.

Notable achievements

Watson-Marlow MasoSine celebrated 21 years without a lost-time accident, Watson-Marlow Flexicon celebrated 2,000 days, Spirax Sarco Brazil and Spirax Sarco China sales celebrated 1,000 days without a lost-time accident, and Spirax Sarco's UK manufacturing site achieved a Royal Society for the Prevention of Accidents Gold award for the third year running.

Focus for 2021

- Complete the implementation of BBS Phase 2 Personal Safety and Phase 3 Team Safety across Steam Specialties.
- Complete the implementation of Phase 1 Leadership Safety within Watson-Marlow and launch Phase 2 Personal Safety.
- Commence the implementation of the BBS Phase 1 Leadership Safety within Electric Thermal Solutions.
- Launch an enhanced new Root Cause Analysis programme across the Group.



Safety during the pandemic

The following example of Spirax Sarco UK is reflective of the actions taken across our Group to protect our people while maintaining our critical service to customers.

On 5th February 2020, Spirax Sarco UK's Incident Management Team (IMT) convened and began enacting plans to prepare for a possible outbreak of COVID-19 in the UK. The IMT initiated a range of actions such as the installation of hand sanitiser dispensers, an assessment of equipment needed for home-working and guidance to colleagues if they or someone they had been in contact with became unwell. Throughout February and into March, personal protective equipment (PPE) was purchased and plans were further developed.

On 23rd March, office-based staff began working from home. Home-working risk assessments were conducted to ensure colleagues could work safely and to assess whether they needed any additional help or alternative working arrangements to support their mental or physical wellbeing. Ahead of the relaxation of the national lockdown and the re-opening of our offices, plans were put in place to make the office workplaces COVID-secure, with risk assessments completed, signage, one-way systems, the provision of PPE, temperature checking devices, protective screens, new office layouts and additional cleaning rotas put in place. Mandatory return-to-work training was planned and small numbers of office staff returned to work on a phased basis, with many choosing to continue to work from home.

From March, all non-essential customer site visits were cancelled or conducted virtually. Where site visits were essential, particularly on critical sites such as hospitals, sales and service engineers were permitted to attend, having first conducted a risk assessment, wearing PPE and practicing social distancing.

The company's manufacturing site remained operational with colleagues recognised as critical workers. The site was made COVID-secure with risk assessments completed, temperature screening, social distancing, an internal "track-and-trace" system implemented, advanced cleaning, limited room occupancy, one-way systems, split shifts, staggered break times, limited visitors and mandatory use of PPE all required.

The workplace infection rate has been extremely low, and we anticipate a similar way of working for the foreseeable future.

Sustainability Report *continued*



Our workplaces *continued* Our people

Overview

Our Values of Safety, Excellence, Customer Focus, Integrity, Collaboration and Respect are the guiding principles that underpin decision-making, guide our conduct, define our culture and inform our employment practices. Our HR policies and systems support us in protecting the rights of our people and ensure their fair and equitable treatment.

Workforce diversity

We believe that diversity of culture, gender, age, experience and expertise enhance our ability to operate effectively and ethically, while increasing the sustainability of our business. We are acutely aware that our business is more sustainable, and therefore better able to drive value for all our stakeholders, if we can draw on a wealth of diverse experience. We seek to increase diversity at all levels of the organisation, with a particular focus on gender diversity. Our Diversity and Inclusion Policy outlines, amongst other things, our commitment to provide equality, fairness and respect for all colleagues, regardless of background; to oppose all forms of unlawful discrimination; and to operate in accordance with the Equality Act 2010, avoiding discriminating on the basis of any protected characteristics.

Our recruitment policies ensure decisions are fair and made without bias and our remuneration policies are designed to recognise skills, experience and achievement.

2020 Performance and actions

Employee wellbeing

The safety and wellbeing of our people has always been of primary importance but took on a new level of focus during 2020 because of the pandemic. In April we expedited the launch of a global Employee Assistance Programme to benefit all staff and their dependants globally. With many of our office-based employees required to work from home during the pandemic we utilised our e-learning platform to offer new training modules to support employees with new ways of working.

In addition to the rigorous safety measures put in place to keep our workplaces COVID-secure, we also offered voluntary seasonal flu immunisations to all employees globally.

Employee engagement

Given the unprecedented circumstances presented by the COVID-19 pandemic we significantly increased the frequency of employee communications, establishing regular COVID-19 updates from our Group Chief Executive to all colleagues; daily, weekly or fortnightly communications – at different stages of the pandemic – at a business and local level; introduced new channels to allow colleagues to provide feedback on how the Group was responding to the crisis; and undertook a short survey to test sentiment and ensure we were doing everything possible to provide suitable support to our colleagues.

The special measures taken as a result of the pandemic did not detract from on-going action plans that resulted from our 2019 global employee survey, which continued to progress, demonstrating our continued commitment to acting on the feedback of our colleagues. A number of new initiatives have been developed as a result of survey feedback, including virtual quarterly town hall meetings, increased direct communication from senior leadership and the introduction of local employee recognition schemes.

The Board Employee Engagement Committee has matured, in its second year of operation, and completed a full agenda of virtual employee focus groups, achieving greater Board engagement with the workforce and enabling it to better act as the voice of colleagues to the Board.

Diversity

We remain committed to increasing gender diversity across the business. During 2020, we appointed and promoted a number of females to leadership roles. At year end, 27% of the Executive Committee and their Direct Reports were female, an increase from 20% last year. By March 2021 that figure rose to 31%. Following the appointment of Angela Archon and Olivia Qiu as Non-Executive Directors, 45% of our Board was female, and 27% of Board members were ethnically diverse at year end.

Gender diversity 2020*

Board of Directors	2020 Numbers	2020 %	2019 Numbers	2019 %
Male	6	55	7	70
Female	5	45	3	30
Total	11	100	10	100

Senior Managers	2020 Numbers	2020 %	2019 Numbers	2019 %
Male	489	80	493	80
Female	125	20	122	20
Total	614	100	615	100

Total Workforce	2020 Numbers	2020 %	2019 Numbers [†]	2019 %
Male	6,010	77	6,224	77
Female	1,836	23	1,852	23
Total	7,846	100	8,076	100

* At year end 2020 † Restated due to a reporting error

We continue to report our gender pay gap in the UK and starting salaries are regularly analysed by our regional HR teams, using an in-house modelling system, to ensure parity at the time of hire. Our Executive Mentoring Programme, designed to accelerate the development of high-potential women and strengthen the pipeline of female talent was expanded to include 14 additional females in 2020, bringing the total number participating in the programme to 33.

During 2020 we rolled-out mandatory Inclusive Leadership training to our senior leadership teams and Unconscious Bias e-learning to all colleagues globally. We also celebrated a number of events such as International Women's Day, International Women in Engineering Day and Black History Month to acknowledge the diversity of our organisation and the communities in which we operate. We have appointed a Head of Inclusion, Diversity & Wellbeing who will bring focus to our continued progress in this area and will look to increase diversity, in all its forms, across our organisation.

Focus for 2021

- Employee demographic data to be collected more rigorously to improve central understanding of our global population and our ability to meet their needs.
- Biennial global engagement survey to be distributed and action plans created and started.



Jennifer Forrester, Head of Employee Experience

Women's Network

Launched in 2020, our global Women's Career & Personal Development Network has approximately 400 members and offers opportunities for female talent to collaborate and offer peer-to-peer support. During the year, Network members benefited from quarterly training sessions, as well as the self-generated content created by the members of the Network.

In May, an external career coach hosted two live interactive webinars covering the challenges faced by females, advice on how to develop a growth mindset and strategies to overcome barriers to progression. In June, Group Chief Executive, Nicholas Anderson, shared his career journey, top-tips for being a successful leader and his aspirations for the Company, explaining why more females in senior leadership is essential for the sustainability of the business. In October we conducted virtual "on the sofa" chats with three of our Non-Executive Directors (NEDs). Caroline Johnstone, Trudy Schoolenberg and Jane Kingston offered insights into the role of a NED, shared their own career stories and answered participant questions on topics such as juggling work and parenting, leading teams in male dominated environments and how to achieve career progress. In December, an external leadership development consultant and executive coach facilitated a session on Achieving Life Balance and Professional Success.

Members of the Network shared:

"The Women's Career & Personal Development Network has been a great way to connect with and support other women in the business as well as to share insights and success stories." Leila Lodwick

"I was very happy that a network was set up for women. It helps me to keep believing that I am important as a woman in the male world." Annet den Hertog

"The Women's Network has helped me realise how much we really need likeminded people to inspire each other, learn from each other, give perspective and challenge us. And cheer us on!" Kim Walker

"The Women's Career and Personal Development Network was established to promote inclusivity by increasing awareness of the potential challenges our female talent may face. It has supported our female talent; offered an opportunity to build networks; and presented a collective voice." Jennifer Forrester



Our workplaces *continued* Ethical business practices

Overview

By operating in accordance with our Company Values and Group Policies we establish and maintain a culture of ethical behaviour throughout our global operations.

2020 Performance and actions

We require all 6,300 employees who have a Company email address to annually complete a suite of online training materials through the Spirax Sarco Academy, called Group Essentials. The training materials cover a number of important topics such as Anti-Bribery and Corruption (ABC), Our Values and Health & Safety at work. During 2020 we refreshed and added to these training materials.

ABC training

We regularly review the content of our ABC training materials to ensure it stays relevant, current and informative for colleagues. During 2020, we updated the content of the ABC refresher course and established a requirement for the Internal Audit function to assess completion as part of the audit process. By the end of 2020 nearly 5,700 colleagues had completed ABC training (2019: 5,300).

Corporate Criminal Offence training

During 2020, we developed and rolled out a mandatory course through the Group Essentials programme called "Corporate Criminal Offence – Failure to Prevent Facilitation of Tax Evasion". The course reviews key legislation, the penalties for non-compliance and how employees should take personal responsibility to help prevent the facilitation of tax evasion at Spirax-Sarco Engineering plc. The new course is available in 16 languages and was completed by 3,950 colleagues during 2020.

Standardised Terms & Conditions

During the first half of 2020, we updated and rolled out across the Group updated contract practices, including sales, purchasing and distributor contract templates, with additional ABC clauses, and provided training to over 1,000 colleagues. The standardisation of contracts will improve oversight of contractual practices across the Group, being overseen by the Internal Audit function and will reduce risk of breaches of ethical business practices.

Whistle-blowing

All colleagues globally have access to a local, independent, third-party whistle-blowing hotline, hosted by Safecall, through which they can confidentially raise concerns about potentially unethical behaviour in the business. During 2020, 14 calls were made to the Group's Safecall hotline, all of which were investigated by senior management, with follow-up action taken if necessary. Summaries of all calls and related actions were reviewed by the Audit Committee and the Board.

Focus for 2021

- Establish an enhanced controls initiative to raise awareness of the policies and processes that need to be followed by all Group companies and all Group employees.

Sustainability Report *continued*



Our workplaces *continued* People development

Overview

Developing our people is critical to our sustainability. Not only does it enable us to continually improve the sustainable impact of our products and services, but it is essential in ensuring that we continue to improve and evolve as an organisation. Despite the challenges posed by the pandemic during 2020, we continued to invest in training and development initiatives during the year.

2020 Performance and actions

Graduate development

During 2020 we focused on strengthening our successful Global Graduate Development Programme and made a number of improvements:

- we revised our recruitment and selection processes;
- we developed an online graduate learning curriculum;
- we introduced a consistent performance management approach; and
- we established a global graduate communication platform.

Our current Graduate Programme is made up of 32 graduates across 11 countries, of which over half are female. Together with 45 alumni of the programme, this constitutes a global, Group-wide network of 77 talented individuals in 15 countries across all three businesses.

Leadership development

While COVID-19 impacted the quantity and format of leadership development, it did not diminish the quality. Two senior managers attended external executive education programmes virtually, both females who were promoted during the year.

Our LEAP Leadership Development Programme held one programme this year. A group of 24 delegates from 10 countries, three continents and multiple time zones, gathered virtually for a week. In addition to lectures and interaction with senior executives, they authored and produced a book within 30 hours. In "Leading the Way When the Sky Falls", delegates share personal examples and learnings on leading during crisis.

Digital curricula were also developed for LEAP Alumni as well as for our Women's Network, with users completing over 1,000 learning modules during the year.

Sales Management capability

A development programme for Sales Managers was developed and launched during 2020. The programme is focused on enhancing the role of Sales Managers in driving Sales Excellence, and uses 360 feedback and behavioural based assessments to create a personalised development plan for each manager.

Focus for 2021

- Review and refine our Leadership Development offering.
- Develop our Early Career development approach for alumni of our Graduate Programme.
- Roll out our Sales Management Development programme.



Teeny Parwongphol, Regional General Manager Southeast Asia

Teeny Parwongphol joined the Company as the General Manager of Spirax Sarco Thailand in 2015 and since that time has delivered outstanding and sustainable business growth. In recognition of her success, in 2019, Teeny's role was expanded to General Manager of Thailand and South East Asia Developing Markets (Myanmar, Cambodia and Laos). During 2020, Teeny was promoted again and on 1st January 2021 she became Spirax Sarco's Regional General Manager for Southeast Asia.

Teeny is a participant in Spirax-Sarco Engineering's Executive Mentoring Programme, which was established to accelerate the Group's internal talent pipeline by encouraging high-performing women within the Company to progress and grow within the business.

Commenting on her career progression and her experience in the mentoring programme, Teeny said:

"I was nominated for the Executive Mentoring Programme by my bosses. The idea of the programme is to give women at senior manager level the chance to gain experience with someone at executive level and enjoy the opportunity to diversify. The company always promotes gender equality, offering both men and women the opportunity to enhance their skills and develop their leadership potential".

Teeny said she is glad to have been part of the programme because, in many companies, the opportunity to talk with people working at executive level can be rare. She also valued the advice offered by her mentor, stating:

"It was so beneficial to share my challenges and get the executive mentor's advice. His comments were short and sharp, direct and to the point, but with very clear explanation. I am now able to apply the advice I learned from my mentor to my current situation and to my new responsibilities. He really helped me to prepare and he clearly explained what I needed to consider for handling a new territory."

In addition to Executive Mentoring, Teeny says that she has benefited from other professional development opportunities offered by the Company. For example, in 2015 Teeny attended Spirax Sarco's "ASPIRE" leadership programme in Singapore and the Company's Advanced Management Program, Ashridge Executive Education in the UK in 2017.



Our supply chain

End-to-end supply chain

Overview

Throughout our operations, we seek to improve the sustainability of our end-to-end supply chain by focusing on sourcing materials ethically, manufacturing responsibly and distributing efficiently, with the aim of providing high levels of customer service, while managing our social and environmental impacts. We have 32 manufacturing sites globally and manufacture close to the point of sale to shorten lead times, produce to local specifications, reduce transportation of finished goods, provide local employment, improve customer service and strengthen our competitive advantage.

Supplier Sustainability Code

Our Supplier Sustainability Code (Code) is central to our commitment to ethical and sustainable sourcing. The Code outlines the expectations that we have for suppliers and enables us to embed sustainability into our purchasing processes. The requirements of the Code fall within four broad categories:

- **Ethics:** suppliers are required to comply with all applicable trade laws and regulations and commit to international ethical business conventions, including compliance with competition laws, the rejection of bribery and corruption, a commitment to trace the origin of materials, the maintenance of records to demonstrate compliance with regulations, and the use of anonymous grievance and whistle-blowing mechanisms.
- **Human Rights:** suppliers are expected to comply with international Human Rights conventions and, amongst other requirements, prohibit the use of child labour, eliminate discrimination in their employment practices, comply with laws regulating wages, working hours and working conditions, allow their colleagues freedom of association, and comply with the UK Modern Slavery Act and the US Dodd-Frank Act.
- **Health & Safety (H&S):** suppliers must operate a safe working environment, with a suitable H&S Policy and management system, and the products produced by suppliers must comply with all applicable environmental, health and safety regulations.
- **Environmental Sustainability:** suppliers should implement initiatives that contribute to the preservation of the environment and mitigate their impact on natural resources, complying with all legal environmental requirements and demonstrate continuous improvement in environmental performance.

2020 Performance and actions

Supplier Sustainability Code roll-out

Our targets for 2020 were for 97% of Phase 1 (direct suppliers of our Spirax Sarco and Watson-Marlow manufacturing companies), Phase 2 (direct suppliers of our Spirax Sarco and Watson-Marlow sales companies) and Phase 3 (direct suppliers of our recently acquired companies Hiter Controls, Aflex Hose, Gestra and Chromalox) suppliers to have signed the Supplier Sustainability Code, and for over 90% of Phase 4 (suppliers to Thermocoax) to have signed the Code.

Despite the disruption caused by the global pandemic, which required resources to be redeployed to manage the situation on both our own and our suppliers' sites, we achieved our Phase 1 to 3 target with 97% of suppliers having signed the Code. We fell slightly short of our Phase 4 target but made good progress with 86% of suppliers having signed the Code. Overall, 96% of Company suppliers have now signed the Code.

During 2021, we will continue to roll out the Code, with a focus on Phase 4 suppliers, and maintain our target of over 90% of Phase 4 suppliers to have signed the Code by the end of the year.

Suppliers exited

If suppliers are unwilling or unable to sign the Code, unless in the case of a serious breach of our standards, our preference is to work with them on a continuous improvement basis until they are in a position to sign the Code. However, if suppliers' standards fall short and they will not or do not make adequate progress to improve, we exit them. This is rarely for reasons of sustainability alone. Typically, we find that when suppliers score well on sustainability criteria they tend to be well run, well managed companies that are also good at quality and delivery, and vice versa. As a result, the decision to exit suppliers is usually for a combination of reasons, with quality, reliability and sustainability concerns together prompting the decision to exit them. During 2020, we exited 4 suppliers for the reasons outlined above.

Standardised terms

As an additional mechanism to ensure we are purchasing ethically, during 2020 we updated and implemented standard terms and conditions of purchase, and standard long-term supply agreements across the Group. The updated terms and agreements include a number of requirements concerning ethical operations, including provisions addressing a supplier's obligation to comply with the UK Modern Slavery Act.

Monitoring supplier sustainability

During 2020 we planned to review our method for monitoring supplier sustainability. A working group convened early in the year and was making good progress – identifying the need for a third-party supplier monitoring system and assessing 11 different providers – before the pandemic struck and team members needed to redirect their attention to managing the situation. Although the pandemic is not yet over, the situation has stabilised, compared with the uncertainty during much of 2020 and, as a result, it is our intention to reconvene the working group and make progress on this during 2021.

Modern Slavery Statement

Spirax-Sarco Engineering plc prides itself on setting high standards for sustainable and ethical business practices in its operations worldwide. Included in those high standards is a commitment to respecting and protecting the human rights of all individuals and combating all forms of modern slavery or human trafficking in all parts of our business organisation, including our supply chain. We are continuously developing and improving our business practices and policies in line with that commitment. We support a strong, collective stand to identify, prevent and raise awareness of modern slavery and human trafficking practices in all parts of the world.

Further reading

Read our Modern Slavery Statement in full or view our Supplier Sustainability Code on our website.

www.spiraxsarcoengineering.com/sustainability/supply-chain

Focus for 2021

- Review our method for monitoring supplier sustainability, and, if appropriate, identify a third party solution and agree an implementation plan.
- Achieve progress against our Phase 4 Supplier Sustainability Code roll-out target.

Sustainability Report *continued*



Our supply chain *continued* Product responsibility

Overview

To achieve our Company purpose of engineering a more efficient, safer and sustainable world, we design, manufacture and supply an industry-leading range of quality products that are reliable, safe to use, responsibly-produced and that can help our customers to reduce their environmental impacts.

Across five principal Research and Development (R&D) centres, in the UK (Spirax Sarco and Watson-Marlow), Germany (Gestra), the USA (Chromalox) and France (Thermocoax), we develop new products to meet our customers' changing needs, and enhance existing products. Extensive on-site analysis, test and validation capabilities, as well as the use of third-party certification, ensure that our customers can buy from us with confidence.

2020 Performance and actions

Life cycle assessment

As a result of the life cycle assessment undertaken by Watson-Marlow on the Qdos 30 pump, a cross-business working group was established to review R&D design practices and principles and facilitate the sharing of best practice across the Group.

Knowledge management framework

Within the Steam Specialties business, during 2020 the R&D department implemented a new knowledge management framework to ensure robust capture and utilisation of lessons learnt during new product innovation. The new framework was utilised throughout the second half of the year and will enhance the product development process going forward.

Customer documentation

The Steam Specialties business identified an opportunity to improve sustainability documentation on customer Technical Information documentation. A working group was established to review requirements and create a plan to improve this going forward.

Product development and eco-design

Across the Group we continued to develop new products that will help our customers to improve the sustainability of their processes, applying eco-design principles to reduce the environmental impacts of products throughout their life cycle. For example, during 2020 Watson-Marlow developed a new range of Maxthane peristaltic pumpheads. The Maxthane pumpheads not only have broad chemical resistance and comply with international regulations for use with all food types, but Maxthane is an eco-friendly, recyclable material. In addition, less raw material is used in the production of the pumphead as the nature of the material allows the production of thinner walled tubing, which ultimately reduces waste and delivers high-performance pumping with reduced environmental impact.

Focus for 2021

- Life cycle assessments completed on a range of small Watson-Marlow products, with the results fed back into the new product development process.
- More widespread adoption of life cycle thinking throughout new product development across the Group.



Watson-Marlow Qdos 30 life cycle assessment

During 2020, Watson-Marlow undertook a product life cycle assessment (LCA) of a Qdos 30 pump with a ReNu 30 santoprene pumphead, in collaboration with the University of Exeter Business School's "Exeter Centre for Circular Economy", to investigate the potential environmental impacts of the pump over a five-year lifetime. The LCA investigated a full range of environmental impacts of the product, and two additional replacement pumpheads, from the point of material extraction from the earth through transportation and manufacture, to use by a customer and subsequent end of life disposal.

The LCA identified the total carbon footprint of the product (298 kg of CO₂), its carbon footprint through different stages of its life cycle, the source of supply chain emissions, the individual product components with the highest carbon footprint, a range of other environmental impacts, such as eutrophication potential and acidification potential, the number of trees that would need to be planted to become carbon neutral across the product's life cycle (five), and a comparison with another similar competitor's pump (the carbon footprint of the Qdos pump during its use phase was less than half of the competitor's product).

The LCA identified a number of next steps, such as engaging with the supply chain, specifically the top five suppliers identified as having the largest contribution to the product's embodied carbon, to reduce emissions; identifying components where a reduction in environmental footprint is possible, without compromising on quality, performance, and cost; and reducing the environmental footprint of future products, using the knowledge gained from this assessment.

The LCA has already led to a number of initiatives driven by the findings. For example, the business is now developing a Life Cycle Management framework that will deploy life cycle thinking across New Product Development, Supply Chain and Business Intelligence as an enabler to drive innovation and more effective decision making. This will be developed through 2021 to be deployed in 2022 and, since completing the Qdos 30 LCA, the business has commenced LCA studies of a number of smaller products such as hoses and clamps.



Our environment

Water and waste

Overview

We aim to use water efficiently and responsibly across all our global operations by monitoring use, controlling leakage and acting to reduce total consumption. Through the products, solutions and services we provide to customers, we also help them to do the same.

We operate in compliance with waste regulations wherever we operate, segregating and storing waste safely and using certified waste vendors to handle and responsibly dispose of waste. Any hazardous waste, such as paint residues, chemical waste from cleaning and degreasing processes, electronic waste or printer toner cartridges are removed from our site by licensed contractors who responsibly recover or dispose of the waste. We proactively seek to reduce waste generation across our sites, utilising monitoring and management systems to ensure compliance with environmental regulations, such as the control of pollution and air emissions.

2020 Performance and actions

Water use

During 2020, our global operations used 217,364m³ of water (2019: 212,027m³), a 3% increase. The increase was largely due to the inclusion of Thermocoax's water use data for the first time, which added 1%, and increased accuracy of water metering at one of our largest manufacturing facilities resulting in a higher reported usage. These two additions, mask underlying reductions elsewhere in the Group.

On an intensity basis, water use increased by 5% compared with 2019, a 2% increase compared with 2018. Disappointingly, we are not currently on track to meet our three year 5% intensity reduction target by the end of 2021. However, water management will be an important focus of our refreshed Sustainability strategy and we anticipate improvements in water use efficiency in the coming years.

Total water use m³

2020	217,364
2019	212,027
2018	211,540*
2017	167,000

* The increase in 2018 reflects the inclusion of Chromalox and Gestra data for the first time

Water intensity m³ of water per £m of inflation adjusted sales at constant currency

2020	182.1
2019	173.6
2018	177.8
2017	185.4

Waste

In 2020, our global operations generated 5,343 tonnes of waste (2019: 5,389). Waste generation was down 1% despite the inclusion of Thermocoax's waste data. We also improved reporting of waste across a number of small sites in 2020, which increased reported waste data. Excluding Thermocoax, we saw a 5% reduction in waste generation in 2020. On an intensity basis, waste generation increased by 1% from 4.4 tonnes per million pounds of inflation adjusted sales in 2019 to 4.5 tonnes in 2020. With a 9% reduction on an intensity basis since 2018, we are on track to achieve our 10% three-year waste reduction target by the end of 2021.

We reduced the amount of waste sent to landfill in 2020 by increasing the volume of waste recycled or recovered. During 2020, globally 83% of our waste was recovered, recycled or used to generate electricity (2019: 79%).

Total waste generation tonnes

2020	5,343
2019	5,389
2018	5,843

Waste intensity tonnes of waste per £m of inflation adjusted sales at constant currency

2020	4.5
2019	4.4
2018	4.9

Management

During 2020, over 60 EHS (environment, health & safety) professionals from across the Group participated in a training session with a focus on waste management and resource efficiency.

Our sites have continued to focus on implementing improvements to reduce waste and manage water. For example, Spirax Sarco Argentina established a new facility on site to blend, distribute and recover coolant. By managing this on site, Spirax Sarco Argentina expects to recover approximately 600 litres of coolant and 400 to 500 litres of water for re-use each month and reduce the frequency of waste collection by 70% a year.

We are also seeking to reduce waste on our customer sites by improving our packaging. For example, during 2020 Spirax Sarco India selected an alternative packaging product with a high proportion of recycled plastics, which also has a takeback scheme by the supplier. The product will not only better protect and limit transit damage compared to the existing material, Styrofoam, but it is also more easily recyclable. During 2020, Watson-Marlow UK moved to pulp packaging (similar to cardboard egg cartons) when shipping pumps and pump-heads, replacing polystyrene packaging.

Focus for 2021

- As part of the Sustainability strategy refresh, review and update existing water and waste targets.
- Continue to implement locally-identified initiatives to reduce water use, such as improved monitoring and metering, water-efficient fixings and promoting behavioural change.

Sustainability Report *continued*



Our environment *continued* Energy and carbon

Overview

Climate change is a global challenge and an emerging risk to economies and businesses, people and societies, natural systems and biodiversity across the world. We have a role to play in limiting warming by improving our energy management and limiting carbon emissions, and by helping our customers to do the same.

2020 Performance and actions

Greenhouse gas (GHG) emissions performance

Our CO₂e 2020 emissions data have been audited by TÜV UK Ltd, which has provided limited assurance as follows:

"TÜV UK Ltd is acting as the independent verifier of the carbon footprint of Spirax-Sarco Engineering plc. Based on our checks and reviews, taking into consideration a materiality level of 5% and a limited level of assurance we have found no evidence suggesting that the calculated greenhouse gas emissions are materially misstated and, hence, they are not an unreasonable assertion of the greenhouse gas-related data and information. Further, no facts became evident to lead us to the assumption that the calculation was not carried out in accordance with the applied international norm for the quantification, monitoring and reporting of GHG emissions (GHG-Protocol).

Total Group emissions for the reporting period 1st January 2020 to 31st December 2020 (inclusive) are: 20,060 tCO₂e for Scope 1 and 18,178 tCO₂e for Scope 2.

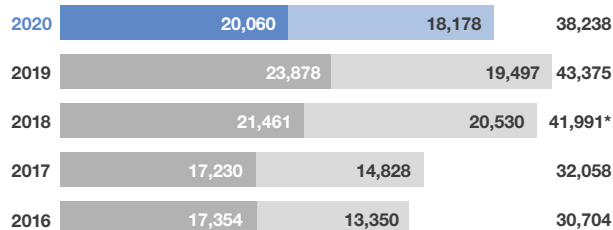
TÜV UK Ltd, London, February 2021"

Despite the first-time inclusion of Thermocoax's GHG emissions, which joined the Group in 2019, we saw a 12% reduction in emissions. The reduction was partly a result of energy management initiatives, but much of the reduction was a consequence of the impacts of the pandemic on our operations. Scope 1 emissions were 16% lower, largely due to reduced transport emissions as sales and service engineers carried out less site visits during the year, and lower use of fuel for process use and building heating as manufacturing output reduced and home working increased. Scope 2 emissions declined largely as a result of lower electricity use on Company sites due to an increase in homeworking and lower manufacturing output, although split shifts – to allow for social distancing – caused a small increase in electrical use in some locations.

At 32.0 tonnes per million pounds of inflation adjusted sales at constant currency, on an intensity basis our Group emissions fell by 10%, compared with the prior year, and were 28% lower than 2013, our benchmark year.

In 2020, 26% of our GHG emissions were generated in the UK; a total of 9,980 tonnes. Of this, 7,366 tonnes were Scope 1 and 2,614 tonnes were Scope 2 emissions. UK GHG emissions were 6% lower than the prior year, for the reasons outlined above. On an intensity basis, UK GHG emissions were 1% lower than the prior year, at 38.8 tonnes per million pounds of inflation adjusted UK sales at constant currency.

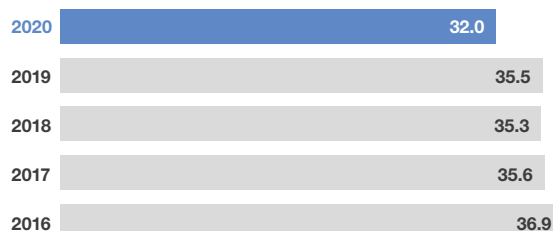
Group CO₂e emissions (Scope 1 and 2) tonnes



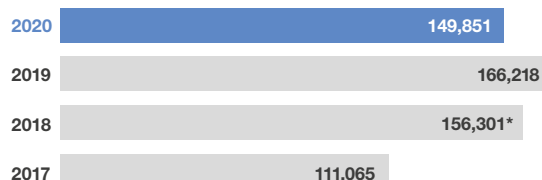
■ Scope 1 ■ Scope 2

* The increase was due to the acquisition of Gestra and Chromalox, whose emissions were included for the first time in 2018.

Group CO₂e intensity tonnes per £m of inflation adjusted sales at constant currency

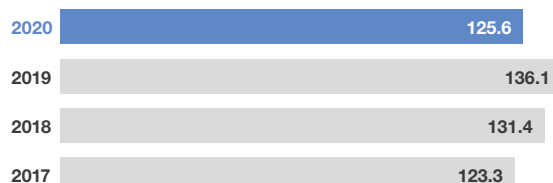


Group energy consumption MWh



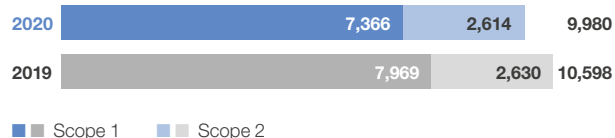
* The increase was due to the acquisition of Gestra and Chromalox, whose energy use was included for the first time in 2018.

Group energy intensity MWh per £m of inflation adjusted sales at constant currency



Methodology

We employ an "operational control" definition to outline our carbon footprint boundary. Included within that boundary are manufacturing facilities, administrative and sales offices where we have authority to implement our operating policies. For each of these entities we have measured and reported on our relevant Scope 1 and Scope 2 emissions. (Scope 1 refers to direct emissions from sources owned or controlled by the Company; Scope 2 refers to indirect emissions resulting from the purchase of energy generated off site, including electricity.) Excluded from our footprint boundary are emission sources from operating companies established or acquired during the year. We have used the GHG Protocol Corporate Accounting and Reporting Standard and emission factors from the UK Government's GHG Conversion Factors for Company Reporting 2019 and 2020, data from The International Energy Agency 2019 and 2020, ISO 140064-1, and regionally specific Environmental Reporting Guidelines to calculate our total CO₂e emissions figures.

UK CO₂e emissions (Scope 1 and 2) tonnes**UK CO₂e intensity** tonnes per £m of inflation adjusted sales, at constant currency from UK operations (including inter-company sales)**UK energy consumption** MWh**UK energy intensity** MWh per £m of inflation adjusted sales, at constant currency from UK operations (including inter-company sales)**Methodology**

We have used the GHG Protocol Corporate Accounting and Reporting Standard and emission factors from the UK Government's GHG Conversion Factors for Company Reporting 2019 and 2020, data from The International Energy Agency 2019 and 2020, ISO 140064-1 and regionally specific Environmental Reporting Guidelines to calculate our total CO₂e emissions figures.

Carbon emissions intensity is higher in the UK than for the Group as a whole for a number of reasons. For example, the Steam Specialties business' global R&D centre is based in the UK. The facility is relatively energy intensive but does not directly generate revenue to lower the associated emissions on an intensity basis. In addition, our UK manufacturing sites export a significant proportion of their output to our global sales companies, resulting in higher manufacturing output relative to revenue than in the Group as a whole.

Energy performance

At 149,851 MWh, total Group energy use fell by 10% in 2020, for the reasons outlined on the previous page, and by 8% on an intensity basis, to 125.6 MWh per million pounds of inflation adjusted sales at constant currency. Energy use in the UK accounted for 32% of the Group's total usage in 2020, at 48,421 MWh, and fell by 4% in 2020. On an intensity basis, UK energy use was broadly flat year-on-year, at 188.5 MWh per million pounds of inflation adjusted UK sales at constant currency.

Energy management

Progress was made in reducing energy use through energy management initiatives. For example, Spirax Sarco France saw natural gas use fall by 21%. While this was in part due to the impact of the pandemic, a significant reduction was achieved through a renewed focus on process steam control and scheduling.

Spirax Sarco Argentina delivered a 14% reduction in electricity largely as a result of an energy management programme that used real-time clamp metering, awareness training and new LED lighting.

Within the UK, energy management initiatives included the completion of a three-year upgrade to LED lighting across our Steam Specialties site in Cheltenham, which is expected to reduce energy consumption for lighting by 69%, saving over 160 MWh per year. On the same site, we installed an Oxygen Trim System, a type of combustion control, to the 10 Bar boiler. The system constantly monitors the oxygen content in the flue-gas, which provides a good indication of combustion efficiency, while the intelligent system compensates for changes in the ambient air pressure and temperature. Automated feedback to burner controls minimises excess combustion and optimises the air to fuel ratio, reducing energy use. This project is expected to have an 18 month payback and save 280 MWh of energy per year.

These energy management examples are reflective of a wide range of initiatives carried out across the Group in 2020.

Net zero greenhouse gas emissions

During 2020, we established a net zero greenhouse gas emissions target to be achieved before 2040. Extensive work was undertaken to develop our net zero roadmap during the year, which will continue into 2021. Further information will be shared in our 2021 Annual Report.

Climate change scenario analysis

Under the recommendations made by the Task Force on Climate-related Financial Disclosure (TCFD) companies are encouraged to use scenario analysis as a tool to understand the implications of climate change and to incorporate longer-term thinking about climate trends, risks and opportunities into corporate risk analysis and strategic planning.

During 2020, we appointed consultants, Challenge Sustainability, to advise on the development of our Sustainability strategy, including our work on scenario analysis. We conducted analysis on two scenarios, a 2°C or lower scenario, in which society acts to reduce GHG emissions and limit global warming in line with the Paris Agreement, and a 4°C scenario, in which corrective action is minimal and global temperatures continue to rise.

We reviewed the International Energy Agency's (IEA) "World Energy Outlook" and the Intergovernmental Panel on Climate Change's (IPCC) "Representative Concentration Pathway 8.5". We also used information gathered through internal and external interviews and the analysis of data and information compiled during the strategy development process.

The scenarios considered a range of transition and physical risks and assessed the opportunities arising (in particular) from the low-carbon transition scenario. The findings will be reviewed by our Group Executive Committee and our Group Risk Management Committee, and will be used to strengthen our risk management processes in relation to climate change. In future we will further evolve this analysis through additional, quantified, risk and opportunities analysis, at business-level and will incorporate relevant actions in our refreshed Sustainability strategy.

Focus for 2021

- Complete the development of our net zero greenhouse emissions roadmap.
- Establish short-term carbon emissions and energy reduction targets.
- Develop our Scope 3 emissions reporting.

Sustainability Report *continued*

Task Force on Climate-related Financial Disclosures (TCFD)

Governance

Describe the Board's oversight of climate-related risks and opportunities	<ul style="list-style-type: none"> Our Risk Management Committee, a principal committee of the Board, oversees the management of our climate-related risks and opportunities. During 2020, day-to-day management of the Group's climate change mitigation activities was overseen by the Group Sustainability Committee, and the Group Energy & Environment Manager, utilising the management structure outlined on page 66.
Describe management's role in assessing and managing climate related risks and opportunities	<ul style="list-style-type: none"> The Board has collective responsibility for managing climate-related risks and opportunities. In particular, Neil Daws, Executive Director, Maurizio Preziosa, Divisional Director Gestra, and Andy Robson, Group General Counsel and Company Secretary, had specific delegated responsibility for overseeing climate related risks, mitigation activities and performance in 2020.

Strategy

Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long-term	<ul style="list-style-type: none"> Short-term (0-5 years): customer carbon emission targets and increasing availability of green electricity could encourage a move towards electric heating solutions that have zero emissions at point of use. While an opportunity for the Electric Thermal Solutions business, some sales could be at risk in the Steam Specialties business for applications where steam or electric heating solutions are equally viable. Medium-term (5-10 years): growth in electric vehicles could cause a decline in the oil and gas industry, particularly refinery demand. Long-term (10+ years): large oil, coal and gas fired boilers could be replaced by banks of small electric generators reducing demand for boiler controls and boiler-house products. Increasing frequency of climate related extreme weather events.
Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning	<ul style="list-style-type: none"> In the short to medium-term, growing awareness of climate change and customer sustainability targets will continue to provide an impetus for business growth as we provide products, services and solutions that increase efficiency and reduce customers' energy use and carbon emissions. To mitigate the risks outlined above, we are developing a refreshed Sustainability strategy that will inform our business strategy and advance the development of products and services that help our customers to achieve their carbon reduction targets. Our broad geographical presence and global manufacturing footprint reduce the risk of disruption caused by an extreme weather event and we have appropriate insurance cover in place to mitigate the effects of such events. We direct our financial resources appropriately, for example investing in R&D and allocating capital to projects that increase our own energy efficiency and reduce our environmental impacts.
Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	<ul style="list-style-type: none"> Our Company purpose is to create sustainable value for all our stakeholders as we engineer a more efficient, safer and sustainable world, and our business strategy supports this, with all three of our businesses offering significant environmental benefits to customers. With customers in almost all industries worldwide and across 130 countries, our products are indispensable for the production of foods, beverages and medicines, the generation of power and the treatment of water and wastewater, and many other essential products. Furthermore, steam remains the world's most efficient heat transfer medium with multiple on-site applications. We thus have a highly resilient business and business strategy that will remain relevant across different climate-related scenarios. However, we are not complacent and recognise that we will need to continue to develop and adapt, ensuring that our product offering continues to evolve to meet customer needs now and in the future. During 2020, we undertook analysis of climate change scenarios, which will inform the development of our refreshed Sustainability strategy. We expect to conduct further scenario and risk analysis at a business level, going forward.

Risk management

Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management	<ul style="list-style-type: none"> In alternate years, the Group engages in either a top-down or a bottom-up risk review and feeds its results to the Risk Management Committee. This includes sustainability/climate-related risks. The Risk Management Committee assesses the climate-related risks identified to understand their severity, identify controls or mitigation required and monitors such risks on its risk register.
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Metrics and targets

Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process	<ul style="list-style-type: none"> We report various consumption and intensity metrics relating to energy, CO₂e, waste and water in our Sustainability Report, as well as customer carbon, energy and water avoided metrics. Please see pages 77 to 79 and 81.
Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	<ul style="list-style-type: none"> Streamlined Energy and Carbon Reporting (SECR) disclosures can be found on pages 78 to 79. Throughout 2021, we will use a third-party to help us develop our Scope 3 data, and it is our intention to report our Scope 3 emissions as soon as we have confidence in the accuracy of the data.
Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets	<ul style="list-style-type: none"> Our current three year target (2019-2021) is to reduce our energy and CO₂e emissions intensity by 10%. However, in 2020 we established a net zero greenhouse gas emissions target, to be achieved before 2040. Throughout 2021 we will develop a range of shorter-term targets, aligned to our net zero roadmap. Please see pages 78 to 79 for details of performance against our current targets.



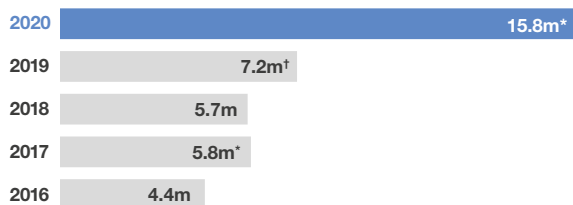
Our customers

Overview

In accordance with our Company purpose to engineer a more efficient, safer and sustainable world, we supply products, services and engineered solutions that deliver environmental benefits to our customers. We help our customer to lower their carbon emissions, use energy more efficiently, increase process efficiency, reduce waste and minimise their water consumption.

2020 Performance and actions

Tonnes of CO₂e emissions Steam Specialties customers saved as a result of purchasing our energy management products



* Expanded product range
† Gestra products added

Customer environmental benefits

During 2020, we worked with independent, specialist consultants Ricardo Energy & Environment to review, update and expand the scope of our customer sustainability reporting metrics, to better capture the environmental benefits a select range of our products deliver to Steam Specialties business customers. On the basis of the revised methodology, we estimate that our Steam Specialties customers will save 15.8 million tonnes of carbon emissions annually

as a result of products purchased in 2020, with total annual energy savings of 218 million GJ of energy annually and water savings of 78.6 million m³ each year.

The methodology used to determine customer energy, carbon and water savings has been independently assessed by Ricardo Energy & Environment. Since 2017 the carbon savings methodology has included a range of seven Steam Specialties product types, comprising Flash Vessels, Condensate Pumps, Steam Traps, Steam Meters, Bellow Sealed Valves, Smart Positioners and EasiHeat heat exchange packages. During 2020, the methodology was updated to expand the range of products, adding five new products types, namely Electrical and Pneumatic Controls, Pressure Regulation Controls, Safety Valves, Steam Separators and Component Insulation.

Only products that deliver savings that can be quantified with reasonable accuracy are included in the methodology. Other products may generate savings when used as part of an engineered solution and engineered solutions that utilise products included in the methodology may generate savings greater than the sum of the component parts; however, as such savings are not easily quantifiable they are excluded from the methodology. In 2020, the 12 product ranges included in the methodology accounted for 42% of Steam Specialties revenue. However, we ascribe savings to only a proportion of the products sold, which accounted for 18% of Steam Specialties revenue in 2020.

The revised methodology also applied updated regional emission factors, rather than global averages, and included a review of steam system operational data. As a result, the breadth and accuracy of the emissions savings calculation has been further enhanced. In addition, the methodology has been expanded to include customer water savings, for the first time.


Focus for 2021

- Initiate a project to extend the scope of customer sustainability benefit metrics to also encompass benefits to Watson-Marlow and Electric Thermal Solutions business customers.
- Align reporting of customer sustainability benefits with the UN Sustainable Development goals.

Customer environment benefits

Annual customer CO₂, energy and water savings from Steam Specialties products sold in 2020:

To put these savings into context, that is the equivalent of:

 **15.8m**
tonnes of CO₂ per year


 **719m**
mature trees
absorbing CO₂


or  **7.7m**
cars taken off
the road


 **218.0m**
GJ per year of energy

 **4.0m**
fewer UK households
using energy

or  **605.6bn**
fewer kettles boiled

 **78.6m**
m³ per year of water

 **31,500**
fewer Olympic-sized
swimming pools
of water used

or  **558,000**
people not using
any water for a year

Steam Specialties



A plate heat exchanger installation delivering energy, carbon and water savings

Engineering a more sustainable world

Our Spirax Sarco team delivers energy, carbon and water savings in a can sterilisation application at a Nestlé factory in Peru.

The challenge

With sustainability goals to reduce water consumption across its operations and to substantially reduce emissions per tonne of product, Nestlé invited the Spirax Sarco team to identify improvement opportunities in its plant's steam and condensate system in Lima, Peru.

The solution

We completed an energy audit of the site, which identified opportunities to make significant improvements to a can sterilisation process that was consuming 18% of steam generated on the site. Our team designed and supplied an engineered solution to improve steam, condensate and energy management during the sterilisation process.

The solution covered three key areas.

First, instead of sending warm water, a by-product of the post-sterilisation cooling process, to a cooling tower to dissipate the heat, we recommended the installation of two heat exchangers, with accompanying control valves, flow meters and temperature sensors, to recover the thermal energy in the wastewater.

Second, the installation of valves enabled the condensate that was produced during the sterilisation process to be returned to the boiler, reducing the need to pre-heat the boiler feed water, reducing energy and water use.

Third, steam use was optimised, reducing consumption in the cooling process.

The result

The engineered solution reduced steam use by 7,908 tonnes (45%) a year; reduced water use by 17,286m³ (48%) a year; reduced energy use by 17,702GJ (45%) a year and reduced CO₂ emissions by 1,155 tonnes (43%) a year in the can sterilisation application.



7,908t
reduction in steam
use annually



1,155t
reduction in CO₂
emissions annually



17,702GJ
reduction in energy
use annually



17,286m³
reduction in water
use annually

Sustainability Report *continued*



Our communities Community engagement

Overview

Wherever we operate we seek to “Engineer better futures” for the people living in our local communities through colleague volunteering; in-kind donations of products, equipment, essential goods or the use of company facilities; and financial donations to registered charities. Our primary focus is education, particularly in the sciences and engineering, but we also seek to respond to local needs.

2020 Performance and actions

Group Charitable Fund donations

During 2020, we donated £265,800 to a variety of causes, making donations earlier in the year to help the charities meet their immediate needs during the pandemic. Donations included £15,000 to the Cheltenham Open Door charity that supports vulnerable, disadvantaged and lonely people in our local community; £30,000 to the National Star College, which provides specialist further education for young people with physical and learning disabilities; £25,000 to Engineers Without Borders UK, a charity that seeks to embed global responsibility into the heart of engineering; and £16,000 to Water Aid, which provides access to clean water, toilets and good hygiene.

Group Charitable Fund donations £'000

2020	265.8
2019	280.3
2018	263.0
2017	231.1
2016	180.1

Local community engagement activities

Pandemic restrictions made it difficult for our global teams to participate in volunteering activities during 2020. Despite this, 65% of our operating companies did manage to undertake community engagement activities. While short of our target it was a step up on 2019 and reflects a concerted effort by many colleagues around the world to identify and respond to local needs in challenging circumstances. During the year, 3,150 hours of working time were volunteered, £146,000 was donated to charitable causes and approximately £51,000 of in-kind donations were made and our colleagues donated approximately £27,000 of their own money to work-place organised fundraising activities.

Community Engagement Awards 2020

Each year we run our global Community Engagement Awards to raise awareness of, and recognise, the good work that is being done by our colleagues. 31 excellent entries were received in 2020. Three award winners each received £5,000 and three honorary award winners each received £2,500 to spend on community engagement activities in 2021.

Focus for 2021

- All Group companies to participate in at least one community engagement activity.
- Increase colleague volunteering hours (subject to pandemic restrictions).



Large company award

Chromalox Mexico

Colleagues from Chromalox Mexico participated in a wide range of community engagement activities, despite the pandemic. Just some of the activities undertaken include delivering food plates to relatives waiting outside hospital for patient updates; donating food, clothes, diapers, face masks and antibacterial gel to low income families, and face masks and antibacterial gel to first responders; donating medicine to the Red Cross; donating toys to children with cancer; donating blood; donating gifts and food to an education and rehabilitation centre; and building a chapel with donated wooden pallets.



Steam Specialties honorary award winner

Spirax Sarco France

Colleagues from Spirax Sarco France participated in a range of activities before and during the pandemic, including litter picking and cleaning the area around the company's premises; collecting food donations at a local supermarket on behalf of the Red Cross; collecting old medicines, books, spectacles and used batteries, as well as donating or recycling them; donating face masks to a local hospital; and donating protective gowns to a hospital for elderly people.



Small company award **Watson-Marlow UAE**

Despite having just five people, Watson-Marlow UAE took part in a notable number of activities and colleagues individually ran the Dubai marathon; taught virtual Mathematics, Physics and Chemistry lessons during lockdown; climbed the height of the world's tallest building using steps at home; supported Dubai police by cycling with police officers to ensure people were abiding by lockdown curfews; distributed water and butter milk packs to construction workers working in the intense summer heat; and donated AED 6,000 to a charity building a school for Rohingya Refugees in Bangladesh.



Group Chief Executive's choice award

Spirax Sarco Asia Pacific Managers

Before the pandemic, a team of 10 Spirax Sarco senior managers from across the Asia Pacific region, spent three days building toilet and washroom facilities for the Banhuaykieang School in Chiang Mai, Thailand. The team partnered with non-governmental organisation "Habitat for Humanity". Thanks to the hard work of the team, the young children attending the school now have access to safe and hygienic toilets and washing facilities, which are essential for reducing the risk of illness and the spread of disease.



Electric Thermal Solutions honorary award winner **Thermocoax France**

Thermocoax France, which joined the Group in 2019, organised a blood donation event at the company's premises. During the event 86 colleagues donated blood, which could save up to 250 lives. In response to the pandemic, the company donated protective overshoes, gloves, hair nets and disposable gowns to medical offices nearby in Normandy, and the company also recycled a range of obsolete components to raise €5,000, which was donated to a local social welfare charity.



Watson-Marlow honorary award winner **Watson-Marlow Germany**

Watson-Marlow Germany donated €500 for materials to produce fabric face masks, which colleagues sewed and donated to elderly and vulnerable people. A team of colleagues watered young trees that were planted near the office and planted a wildflower meadow in a local orchard to support biodiversity. In addition, the company established a bicycling challenge, donating €1 for every 1km cycled by staff to a local animal shelter. This raised €1,000 for charity and supported the health and wellbeing of colleagues.



Sustainability Report *continued*

Non-Financial Information Statement 2020

This Annual Report contains the information required to comply with the Companies, Partnerships and Groups (and Non-Financial Reporting) Regulations 2016, as contained in sections 414CA and 414CB of the Companies Act 2006. The table below provides key references to information that, taken together, comprises the Non-Financial Information Statement for 2020.*

Reporting requirement	Group Policies that guide our approach	Information and risk management, with page references
Environmental matters	<ul style="list-style-type: none"> Group Environmental, Health, Safety, Energy and Sustainability Policy Group Management Code Supplier Sustainability Code 	Sustainability Report, pages 66 to 86 Principal risks, pages 61 and 115 Our business model, pages 20 to 23 Section 172 Statement, pages 94 to 95 Company purpose, inside front cover
Employees	<ul style="list-style-type: none"> Group Diversity and Inclusion Policy Group Management Code Group Human Rights Policy Group Environmental, Health, Safety, Energy and Sustainability Policy 	Sustainability Report, pages 70 to 74 Our business model, pages 20 to 23 Principal risks, pages 61, 64 and 115 to 116 Employee Engagement Committee Report, pages 96 to 98 Section 172 Statement, pages 94 to 95 Company purpose, pages 88 to 98
Social matters	<ul style="list-style-type: none"> Group Human Rights Policy Group Charitable Donations Policy Group Employee Volunteering Policy Supplier Sustainability Code 	Sustainability Report, pages 75 and 84 to 85 Our business model, pages 20 to 23 Strategic Review, page 35 Section 172 Statement, pages 94 to 95 Company purpose, inside front cover
Respect for human rights	<ul style="list-style-type: none"> Group Human Rights Policy Group Sanctions, Embargoes and Restrictions Policy Supplier Sustainability Code 	Sustainability Report, page 75 Principal risks, page 64
Anti-corruption and anti-bribery matters	<ul style="list-style-type: none"> Group Anti-Bribery and Corruption Policy Group Gifts, Entertainment and Hospitality Policy Group Competition Law Compliance Policy Group Sanctions, Embargoes and Restrictions Policy Group Whistle-Blowing Policy Supplier Sustainability Code 	Sustainability Report, pages 73 and 75 Principal risks, page 64 Risk Management Committee Report, pages 60 to 65
Description of the business model		Our business model, pages 20 to 23
Description of the principal risks in relation to the above matters, including business relationships, products and services likely to affect those areas of risk, and how the company manages the risks		Risk management and principal risks, pages 60 to 65 Risk Management Committee Report, pages 114 to 117 Sustainability risk assessment, page 68 Climate change risk, page 80
Non-financial key performance indicators		Sustainability Report, pages 66 to 86 Key Performance Indicators, pages 36 to 37

* The policies listed above can be found on our website: www.spiraxsarcoengineering.com/our-approach/corporate-governance/governance-documents. Compliance with our policies is monitored through the implementation of our Sustainability strategy, through our internal audit function and, locally, by our General Managers.

The use by Spirax-Sarco Engineering plc of any MSCI ESG Research LLC or its affiliates (MSCI) data, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement, recommendation, or promotion of Spirax-Sarco Engineering plc by MSCI. MSCI services and data are the property of MSCI or its information providers and are provided "as-is" and without warranty. MSCI names and logos are trademarks or service marks of MSCI.



Spirax-Sarco Engineering plc has been independently assessed according to the FTSE4Good criteria, and has satisfied the requirements to become a constituent of the FTSE4Good Index Series.



MSCI ESG Research provides MSCI ESG Ratings on global public and a few private companies on a scale of AAA (leader) to CCC (laggard), according to exposure to industry-specific ESG risks and the ability to manage those risks relative to peers.

Governance Report

Our approach to governance

Governance helps us to ensure our shareholders receive a good return on their investment; lead our Company through these difficult times; behave with integrity; treat our customers, colleagues, suppliers and local communities properly; and respect the environment.

In the Governance Report we describe the responsibilities of the Board and its Committees, the key activities during 2020 and the focus for 2021.

We have summarised some of the key words from the UK Corporate Governance Code's (Code) Principles A-E in the graphic below and provided cross-references for further reading. This is our own interpretation and serves to direct our readers to narrative that explains how we have applied some of the Principles. In addition, we report on relevant provisions later within the scope of the Governance Report. With many relevant examples already covered in the Strategic Report, our aim is to reduce repetition and demonstrate the integrated spirit of the Code.

In relation to Code Provision 1, which deals with the Company generating value over the long term in the context of future risks and opportunities, sustainability is addressed in our Sustainability Report, on pages 66 to 86, and Risk Management Committee Report, on pages 114 to 117.

The ways in which we have aligned governance to strategy to ensure compliance with some of the key elements of the Code and our leadership on these matters are highlighted below.

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Leading an effective and entrepreneurial Board for long-term, sustainable success

Company purpose

See inside front cover

Strategy

See pages 26-35

Effective controls and framework

See pages 60-65 and 107-117

Sustainable thinking

See pages 19, 27, 35, 66-86 and 94-95

Workforce practices

See pages 29, 70-74 and 96-98

Culture and Values

See pages 1, 20-21, 73 and 89

Business model

See pages 20-23

Resource/capital allocation

See pages 54-57

Stakeholder engagement

See pages 93-95

1. Board leadership and Company purpose

Chair's introduction



During 2020, we focused on handling COVID-19, our culture, strategic risks and opportunities, including Brexit and climate change. We also strengthened diversity and inclusion through our succession planning for the Board."

Jamie Pike
Chair

Board changes

Kevin Boyd, Chief Financial Officer and Executive Director, retired from the Company at the end of September 2020. The Board thanks Kevin for his contribution to the Group's growth and prosperity.

Nimesh Patel joined the Company in July 2020 and, following completion of the interim financial reporting process and an orderly handover of duties, succeeded Kevin Boyd as Chief Financial Officer and Executive Director in September 2020. Nimesh was previously Chief Financial Officer of the De Beers Group, which is majority owned by Anglo American plc. He has over 22 years of experience in senior finance roles.

In December 2020, Angela Archon and Olivia Qiu joined the Board as Independent Non-Executive Directors.

Angela has strong strategic and operational experience, combined with her ability to drive transformational change and focus on customer support. She represented IBM for eight years as Board Liaison for The National Action Council for Minorities in Engineering and is currently a Board Director of Switch, CommonSpirit Health, and the National Association of Corporate Directors – Texas TriCities Chapter. Angela is an American citizen.

Olivia has digital transformation and innovation skills as well as strong international business experience. She has held a range of executive positions with large global organisations including Chief Executive Officer and Board Director of Alcatel-Lucent Shanghai Bell. She is currently Chief Innovation Officer with Signify (formerly Philips Lighting). Olivia is a Chinese and French national.

These appointments, and that of Richard Gillingwater (refer to top of next column and RNS of 9th March 2021), are part of the succession planning undertaken by the Nomination Committee to recruit Non-Executive Directors with the skills and experience required to support the implementation of our strategy for growth.

Neil Daws, Managing Director, Steam Specialties and Executive Director, retired on 31st December 2020 after over 42 years of service. The Board acknowledges, with much gratitude, the significant contribution to the Group's growth and prosperity made by Steam Specialties under Neil's leadership in many diverse and important roles.

Board biographies at year end can be found on pages 90 to 91. Current Board biographies can be found on our website, www.spiraxsarcoengineering.com.

On 9th March 2021, we announced the appointment of Richard Gillingwater as an Independent Non-Executive Director, with immediate effect, and as Senior Independent Director, with effect from 1st August 2021, succeeding the current Senior Independent Director, Trudy Schoolenberg, who steps down from the Board after completing nine years as a Director. Richard's strong investment, financial and non-executive experience, combined with his many years working with international businesses, will greatly assist the development of the Group.

A FTSE 100 company

The financial performance of the Group has been impressive, despite the pandemic. We have successfully integrated and driven performance improvement in our acquisitions. We are pleased to have consolidated our presence in the FTSE 100 for a second year.

Good governance

Recent Board changes have provided the opportunity to reaffirm our individual and collective responsibilities as a Board, realise our diversity and inclusion objectives and strengthen our understanding of what good governance means to us and why it is important.

In 2020, we accelerated and significantly increased our approach to sustainability (see Sustainability Report on pages 66 to 86).

In respect of section 172(1) of the Companies Act 2006 (as amended by the Companies (Miscellaneous Reporting) Regulations 2018), the Directors have prepared a statement describing how they have had regard to the matters set out in section 172(1), when performing their duty to promote the success of the Company (see pages 94 to 95). The Board ensures that the Company practices good business ethics by reviewing control mechanisms, such as the Anti-Bribery and Corruption procedure and whistle-blowing cases, in close association with the Audit Committee.

Key Board activities 2020

During 2020, we focused on handling COVID-19, our culture, strategic risks and opportunities, including Brexit and climate change. We have made good progress on diversity and inclusion, demonstrating a structural change.

We invested in new manufacturing sites for Watson-Marlow in the USA, BioPure in the UK, and for the Steam Specialties business in Italy. We also continue to invest in Electric Thermal Solutions' Thermocoax business by way of a consolidated site in Normandy.

Assessing and monitoring culture

Our culture is one of the main reasons for our measured progress and success. As we grow it is vital that we retain such a strong culture. We ensure our culture and Company Values are aligned with our strategy.

The creation and work of the Employee Engagement Committee has achieved greater Board engagement with the workforce, enabling the Board to gauge and monitor our culture and to ensure it is both embedded and retained in our Company.

Electric Thermal Solutions

We reviewed our plans for improvements within Chromalox and our strategy for combining Chromalox and Thermocoax under Dominique Mallet's leadership as one business – Electric Thermal Solutions. We implemented a project to restore profitability to the Chromalox France manufacturing business refocusing the factory as the centre of design, project management and assembly of complex non-standard electric thermal heating systems including medium voltage solutions.

Brexit

We reported in the 2019 Annual Report on our preparatory actions for Brexit. The transition period ended on 31st December 2020. The EU and the UK Government have agreed to enter into a Trade and Cooperation Agreement and we welcome zero tariffs/zero quotas on all goods traded between the UK and the EU. We are now ready to deal with customs controls and VAT for our goods traded between the EU and the UK. Our products are of the highest quality and we will ensure they meet all EU and UK product regulations.

We and our supply chains are poised to take advantage of opportunities that are presented by the new trading relationship.

Diversity

As a Group we are committed to diversity in its broader sense and to achieving a minimum target of 33% female representation on the Board, as well as the Group Executive and their direct reports. We ensure this target is taken into account in our succession planning and recruitment. At the time of publication, we have 45% female representation on our Board and 31% across the Group Executive and their direct reports.

In December 2020, Darren Towers joined the Group as Head of Inclusion, Diversity and Wellbeing to assist us in progressing this agenda in 2021. Darren was previously at Stonewall, Europe's largest LGBT charity, where he led a number of areas including workplace partnerships (with organisations including the premier league, UK police service and national government) and empowerment programmes (focused on leadership, allyship and role models). Darren has already met the Board and presented at the February 2021 Board meeting.

We also attach importance to ensuring that our people can progress to the highest levels in their business careers regardless of their socio-economic background, race or sexual orientation. We accepted Sir John Parker's recommendation that our Board should have at least one ethnically diverse Director by 2021 and, at the time of publication, we have three such Directors that represent 27% of our Board.

Our Group Diversity and Inclusion Policy is available on our website, www.spiraxsarcoengineering.com.

Statement by the Directors on compliance with the Code

The Code applied to the Group for the financial year ended 31st December 2020. The Board considers that it has complied in full with the provisions of the Code, other than provision 38 in respect of Executive Directors' pension contributions where, in line with the 2020 Remuneration Policy, incumbent Executive Directors' maximum pensions are to be the current blended average in the market in which the Executive Director is based by 31st December 2022 (see pages 121 and 131), reducing to the new Executive Director level of 10% by 2023.

We detail our compliance, on a Code provision-by-provision basis, in the Corporate Governance section on our website, www.spiraxsarcoengineering.com.

Fair, balanced and understandable

In accordance with the Code, the Directors confirm that they consider the Annual Report, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's financial position, performance, business model and strategy.

Outcome of 2020

We consider that our performance has been exceptional in 2020: our financial performance saw profits at 96% of those in 2019 in the face of the COVID-19 headwind while at the same time we invested significantly in the manufacturing footprint of Watson-Marlow in the USA and the UK, strengthened our Group sustainability function and improved our health and safety performance across all three businesses.

Focus for 2021

- Sustainability and climate change.
- Business digital strategies.
- Watson-Marlow expansion.

I look forward to meeting our shareholders at our forthcoming AGM.

Jamie Pike
Chair

Further reading

All governance-related policies and procedures are available to view and download: www.spiraxsarcoengineering.com

1. Board leadership and Company purpose *continued*

Board of Directors

At year end 2020



N EE
Jamie Pike MBA, MA, MIMechE

Chair

Appointed to the Board

May 2014

Areas of experience

Engineering, international, senior management, M&A, strategy

Background

Jamie Pike joined Burmah Castrol in 1991 and was Chief Executive of Burmah Castrol Chemicals before leading the Foseco buy-out in 2001 and its subsequent flotation in 2005. Prior to joining Burmah, he was a partner at Bain & Company. Jamie was educated at Oxford, holds an MBA from INSEAD and is a Member of the Institute of Mechanical Engineers.



RK
Nicholas Anderson BSc Eng., MBA

Group Chief Executive

Appointed to the Board

March 2012. Appointed Chief Operating Officer in August 2013 and Group Chief Executive in January 2014

Areas of experience

Engineering, international, senior management, M&A, operational, strategy, sales and marketing, industrial

Background

Before joining the Group in 2011 as Director EMEA, Nicholas Anderson was Vice-President of John Crane Asia Pacific (part of Smiths Group plc), based in Singapore, and President of John Crane Latin America, based in the USA. Previously, Nicholas held senior positions with Alcoa Aluminio in Argentina and Brazil, starting his career with the Foseco Minsep Group plc in Brazil.

External appointments

Non-Executive Director of BAE Systems plc.



RK
Nimesh Patel BSc

Chief Financial Officer

Appointed to the Board

September 2020

Areas of experience

International, senior management, M&A, finance and accounting, industrial, pensions, tax and treasury

Background

Before joining the Group in 2020, Nimesh Patel was Chief Financial Officer of the De Beers Group. Prior to that he was Group Head of Corporate Finance at Anglo American plc, leading a team based in London and Johannesburg. Previously, Nimesh spent 14 years in investment banking at both JP Morgan and as a Managing Director at UBS.

External appointments

Trustee of the charity ReachOut.



A EE N R
Angela Archon MSc, BSc

Independent Non-Executive Director

Appointed to the Board

December 2020

Areas of experience

Engineering, operational, strategy

Background

Angela Archon held various senior executive positions while employed by IBM Corporation, including Vice President Transformation and Chief Operating Officer of the Watson Health Division. Angela represented IBM for eight years as Board Liaison for The National Action Council for Minorities in Engineering. She is a member of Tau Beta Pi, the Engineering Honour Society, and earned a Professional Engineer's license.

External appointments

Board Director of Switch, CommonSpirit Health and the National Association of Corporate Directors – Texas TriCities Chapter.



A EE N R
Peter France

Independent Non-Executive Director

Appointed to the Board

March 2018

Areas of experience

Engineering, international, senior management, M&A, operational, strategy, sales and marketing, industrial, manufacturing

Background

Peter France was Chief Executive Officer of Rotork plc from 2008 to 2017. He also gained wide experience in a number of key roles at Rotork plc from 1989 to 2008 including acting as Chief Operating Officer and Director of Rotork South East Asia based in Singapore.

Peter is a Chartered Director of the Institute of Directors.

External appointments

Chief Executive Officer of ASCO Group Limited.



A EE N R
Caroline Johnstone BA, CA

Independent Non-Executive Director

Appointed to the Board

March 2019

Areas of experience

International, M&A, finance, people

Background

Caroline Johnstone has 40 years' experience working with large global organisations on mergers and acquisitions, culture change and cost optimisation. She was a partner in PricewaterhouseCoopers (PwC) and sat on the UK Assurance Board as people partner. Caroline is a member of the Institute of Chartered Accountants of Scotland.

External appointments

Chair of Synthomer plc, Non-Executive Director and Audit Committee Chair of Shepherd Group Ltd, a private company which owns Portakabin Limited, and sits on the Governing Board of the University of Manchester.



A Audit Committee
N Nomination Committee
EE Employee Engagement Committee

R Remuneration Committee
RK Risk Management Committee
 ■ Denotes Committee Chair

Flag denotes country of citizenship

Further reading

Read about our Board diversity, composition, succession and evaluation.

See pages 92, 99, 103-105



Neil Daws CEng, FIMechE

Managing Director, Steam Specialties

Appointed to the Board

June 2003

Areas of experience

Engineering, senior management, operational sales and marketing, product development, manufacturing

Background

Neil Daws joined the Group in 1978 and held positions in production and design engineering prior to being named as UK Supply Director. Following this, Neil has held responsibility for Asia Pacific, Latin America, the Group's Supply operations, including the Group's health, safety and environmental matters and, more recently, EMEA.



Trudy Schoolenberg PhD

Independent Non-Executive Director & Senior Independent Director

Appointed to the Board

August 2012

Areas of experience

Engineering, international, senior management, operational, strategy, product development, innovation, oil and petrochemical

Background

Trudy Schoolenberg has served as Vice-President of Global Research & Development at Wärtsilä Oy, held senior management positions with Royal Dutch Shell plc, was Head of Strategy for Shell Chemicals and served as Director of Integrated Supply Chain and Research, Development and Innovation, Decorative Paints Division of AkzoNobel.

External appointments

Non-Executive Director of COVA.
 Non-Executive Director and Senior Independent Director of Accsys Technologies plc, and Director of the Supervisory Board of Avantium N.V.



Andy Robson LLB Law Barrister

Group General Counsel and Company Secretary

Appointed as Group General Counsel and Company Secretary

June 2012

Areas of experience

International law, corporate governance, international business development including M&A, business restructuring, information technology, contract negotiation

Background

Before joining the Group in 2012, Andy Robson was General Counsel and Company Secretary of RM plc, a role he held for 14 years. Prior to this, Andy was European General Counsel with Cendant Corporation headquartered in Baltimore, USA.



Jane Kingston BA

Independent Non-Executive Director

Appointed to the Board

September 2016

Areas of experience

Engineering, international, senior management, operational, people, remuneration

Background

From 2006 until her retirement in December 2015, Jane Kingston served as Group Human Resources Director for Compass Group PLC. Prior to this, she served as Group Human Resources Director for BPB plc. Jane has worked in a variety of sectors, including roles with Blue Circle Industries plc, Enodis plc and Coats Viyella plc and has significant international experience.

External appointments

Non-Executive Director and Remuneration Committee Chair of Inchcape plc.



Olivia Qiu PhD, BSc

Independent Non-Executive Director

Appointed to the Board

December 2020

Areas of experience

Engineering, international, digital transformation, innovation

Background

Olivia Qiu has held a range of executive positions with large global organisations including Chief Executive Officer and Board Director of Alcatel-Lucent Shanghai Bell. Olivia was previously a Non-Executive Director of Renault Group and Saint Gobain.

External appointments

Chief Innovation Officer with Signify (formerly Philips Lighting).



Kevin Thompson BSc, FCA

Independent Non-Executive Director

Appointed to the Board

May 2019

Areas of experience

Engineering, international, senior management, M&A, strategy, finance, pensions, tax and treasury

Background

Kevin Thompson was Group Finance Director of Halma plc from 1998 to 2018, having joined Halma as Group Financial Controller in 1987. Kevin qualified as a Chartered Accountant with PricewaterhouseCoopers (PwC) and is a Fellow of the Institute of Chartered Accountants in England and Wales.

External appointments

Member of the Financial Reporting Lab Steering Group and Trustee of the Great Ormond Street Hospital Children's Charity.

As previously announced:

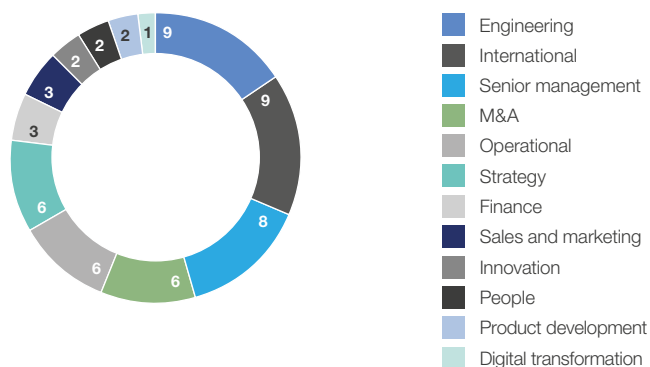
- Neil Daws retired on 31st December 2020; and
- Richard Gillingwater was appointed as an Independent Non-Executive Director with effect from 9th March 2021.

1. Board leadership and Company purpose *continued*

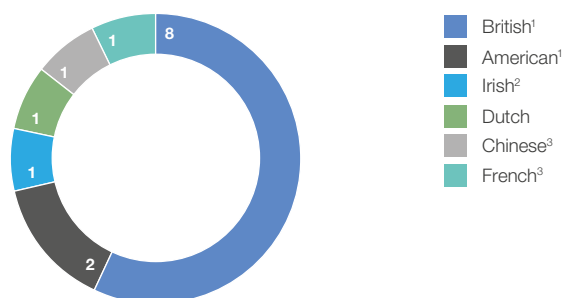
Leadership and tone

Board overview

Core expertise



Nationality

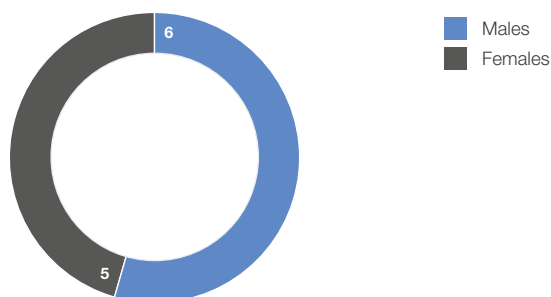


¹ N.J. Anderson holds dual British and American citizenship.

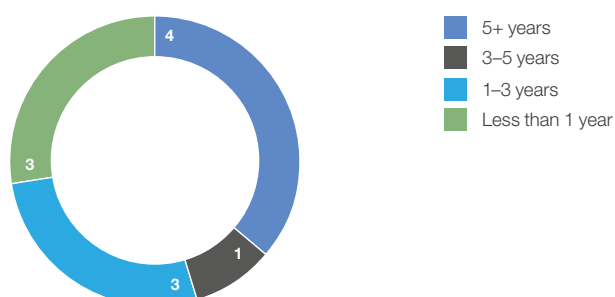
² J. Pike holds dual British and Irish citizenship.

³ O. Qiu holds dual Chinese and French citizenship.

Gender



Length of service



* At year end 2020.

Board composition

As illustrated in the Board biographies on pages 90 to 91 and the Board overview diagrams (at year end 2020) on the left, we are pleased to have exceeded:

- Sir John Parker's recommendation that our Board should have at least one ethnically diverse Director by 2021 – with effect from 1st December 2020 we have three such Directors that represent 27% of our Board; and
- our minimum target of 33% female representation on our Board – with effect from 1st December 2020 we have 45% female representation on our Board.

Board dynamics

We are undertaking an external Board review in 2021 with the objective of making sure we use the skills and expertise of the Board and the Group Executive Committee in the best way. We want to be ready for the next move forward we make with our businesses. We want to ensure we harness the talent that has transformed the Group and make sure we create the right conditions for this talent to thrive.

Board dynamics, which will be externally facilitated by Egon Zehnder, will also look at the most efficient structure of the Board Committees and the inter-relationship with the Group Executive Committee.

Long-term sustainable success

The Board is focused on long-term corporate and strategic plans. It engaged in a review and assessment of medium-term plans for all three businesses and, in addition, reviewed our corporate strategy.

Leading by example

The Board relies on the Group Executive Committee to run the business. The Board holds this team accountable against targets and standards. The Board ensures that we have strong and effective leadership in place to execute the strategic plan. In this regard we appointed new Managing Directors for Watson-Marlow (Andrew Mines) and Steam Specialties (Maurizio Preziosa) following the retirement of long-serving leaders.

Effective and entrepreneurial

The Non-Executive Directors provide effective challenge and review, bringing wide experience, specific expertise and a fresh objective perspective to major decisions.

The emphasis is on growth and on an entrepreneurial approach with a strong governance culture. To ensure that the Board remains effective, in 2018 we engaged Independent Audit Ltd to carry out an external Board effectiveness evaluation and followed up their recommendations by way of our internal evaluation in 2020. The process and actions of this evaluation are detailed on page 105.

Engaging with our stakeholders

Our commitment to shareholder engagement













In addition to the five key stakeholder groups detailed on pages 94 to 95, the Board recognises our shareholders as an important stakeholder group. We maintain an active dialogue with our principal investors, institutional shareholder advisers and the investment community.

During 2020, we undertook the calendar of events as shown below, most of which took place virtually due to the COVID-19 pandemic.

By providing regular forums for meeting and communicating with shareholders, their advisers and the investment community, we ensure that we understand the views and opinions of our investors and are kept informed of any concerns that may arise. We are also able to give updates on our results and developments within our businesses.

We communicate using a variety of forums including regulatory news announcements, interviews, investor and analyst calls/emails, one-to-one meetings, roadshows, site tours and investor conferences. During 2020, Nicholas Anderson, Group Chief Executive, and Kevin Boyd/Nimesh Patel, Chief Financial Officer, held virtual shareholder roadshows across a number of key countries in Europe, Asia and North America.

Shareholder engagement calendar 2020

 Jan <ul style="list-style-type: none"> • Institutional meetings, London and Cheltenham • Investor and analyst calls/emails 	 Feb <ul style="list-style-type: none"> • Shareholder roadshow, Madrid • Investor and analyst calls/emails 	 Mar <ul style="list-style-type: none"> • Preliminary Results announcement, analyst meeting and shareholder roadshow, London • Berenberg UK Corporate and BofA Global Industrials conferences (both virtual) • Institutional meetings, Cheltenham • Investor and analyst calls 	 Apr <ul style="list-style-type: none"> • Investor and analyst calls/emails
 May <ul style="list-style-type: none"> • AGM and trading update • Jefferies Structural Winners (virtual) • Investor and analyst calls 	 Jun <ul style="list-style-type: none"> • JP Morgan European Capital Goods CEO conference (virtual) • Investor and analyst calls and “fireside chats” 	 Jul <ul style="list-style-type: none"> • Shareholder roadshow (virtual), USA • Investor and analyst calls 	 Aug <ul style="list-style-type: none"> • Half Year Results announcement • Investor and analyst calls
 Sep <ul style="list-style-type: none"> • Shareholder roadshow, Asia (virtual) • Morgan Stanley Industrial CEOs Unplugged (virtual) • Investor and analyst calls and “fireside chats” 	 Oct <ul style="list-style-type: none"> • Shareholder roadshows (virtual), Europe, Canada and USA • Jefferies UK Industrials • Investor and analyst calls 	 Nov <ul style="list-style-type: none"> • Trading update • Shareholder roadshow (virtual), Nordics • Baird industrial conference (virtual) • Investor and analyst calls 	 Dec <ul style="list-style-type: none"> • Goldman Sachs industrial conference (virtual) • Investor and analyst calls and “fireside chats”

1. Board leadership and Company purpose *continued*

Engaging with our stakeholders *continued*

Section 172 Statement

Engaging with our stakeholders and acting in a way that promotes the long-term success of the Company, while taking into account the impacts of our business decisions on our stakeholders, is central to our strategic thinking and our statutory duty in accordance with Section 172(1) of the Companies Act 2006 (s.172). The content on pages 94 to 95 constitutes our s.172 Statement, as required under the Companies (Miscellaneous Reporting) Regulations 2018.

The Board of Directors of Spirax-Sarco Engineering plc consider, both individually and together, that they have acted in the way that they consider, in good faith, would be most likely to promote the success of the Company for the benefit of its members as a whole, having regard to the stakeholders and matters set out in s.172 (a) to (f) of the Companies Act in the decisions taken during the year. In particular, as outlined in a Board assurance statement that accompanied our business plan for the period 2020 to 2025, and approved by the Board, our plan is designed to have a long-term beneficial impact on the Company and its stakeholders, and contribute to the Company's continued success in delivering reduced carbon emissions and increased efficiency, safety and sustainability for our customers. Our plan is focused on our customers, as exemplified by our customer-focused business strategy, but also takes into account other stakeholders, such as our people not least through the Employee Engagement Committee, and the effective management of our supply chain, with the aim of delivering value to shareholders.

As a Board of Directors, our intention is to behave responsibly and ethically at all times, in line with our Values, and to ensure that our management teams operate the business in a responsible manner and to the highest standards of business conduct and good governance, which is particularly important as we address the safety of our customers and colleagues as a result of COVID-19. As we act in a way that reflects our Values, we will contribute to the long-term success of the Company and continue to nurture our reputation as a responsible, successful Company that delivers stakeholder value, as outlined in our Company purpose.

We improved our focus on our s.172 duty during 2020. By way of example, in assessing our new manufacturing sites for Watson-Marlow (BioPure in the UK and Watson Marlow Inc. in the USA) and the expansion of our UK Sales and Group offices with Northcroft House in Cheltenham, we adopted a process to ensure that all new investments will benefit our shareholders, customers, colleagues, the environment and the communities where we work. In the business presentations the Board scrutinised environmental impact and looked at compliance with our Sustainability Strategy and biodiversity net gain targets. These sites will also be included in our community engagement projects in the future.

Our impacts on, and engagement with, five key stakeholders groups are systematically considered within the implementation of our Group Sustainability strategy, which is overseen by the Group Chief Executive and supported by the Board of Directors. The stakeholder groups are: our colleagues, our customers, our suppliers, our communities and our environment. How and why we engage with these stakeholders is summarised on pages 94 to 95. Additional information on how we engage with colleagues can be found in our Employee Engagement Committee Report on pages 96 to 98.

In addition, as a Board of Directors, we recognise our shareholders as an important stakeholder group and treat them fairly and equally, so they too may benefit from the successful delivery of our plan and the value we create. For more detail on how we engaged with our shareholders in 2020, see page 93.

Embedding long-term thinking and action

Our colleagues



Why it's important

Our people are our greatest asset and our success relies on the application of their knowledge and skills. We aim to be a responsible employer in our approach to pay and benefits, and the health, safety and wellbeing of our colleagues is always a primary consideration. We demonstrated this importance through our improved health and safety performance across our businesses in 2020 and our rigorous approach to protecting our colleagues and our customers with regard to COVID-19.

How we are engaging

- We communicate with colleagues through a variety of channels including meetings, conferences, videos, email and written communications.
- Through our global colleague survey we listen to the views of our colleagues. Survey results are analysed collectively, by business, by company and, where numbers are sufficient, by department, with focus groups established and plans to address those areas our colleagues tell us we could do better.
- Our Employee Engagement Committee ensures that the views and interests of colleagues are considered at Board level.

[Read more on pages 70-74 and 96-98](#)

Our customers



Why it's important

We generate value for our stakeholders as we help the end users of our products to improve the efficiency, safety and sustainability of their operations. Meeting the needs of customers now and developing our offering so that we can continue to meet their needs into the future, requires a closeness to, and engagement with, customers.

How we are engaging

- Our direct sales business model is the key avenue for customer engagement, allowing us to deeply understand their needs and requirements.
- Regular "Voice of the customer" surveys provide valuable feedback from customers who tell us what we are doing well and how we can improve.
- Customer requirements are always taken into consideration during new product development, with customer needs driving the design and development of products.

 [Read more on pages 20-23 and 81](#)

Our communities



Why it's important

As a financially successful business, we are well-placed to "give something back" to our communities. We strive to be a force for good wherever we operate. While education, particularly in the sciences and engineering, is our priority focus, to maximise our positive impact we always seek to identify and respond to local needs.

How we are engaging

- We respond to requests for much needed charitable funding, making financial donations to a wide range of local, national and international charitable causes.
- Our colleagues are encouraged to volunteer their time and skills, during working hours, to support a range of worthwhile causes in their local community.
- We work with schools, colleges and universities to raise aspirations, increase awareness of engineering and develop the talent of young engineers.

 [Read more on pages 84-85](#)

Our environment



Why it's important

We live in a resource-constrained world where human impacts on the environment are increasingly being recognised as harmful not only to the natural world but also to the long-term sustainability of financial systems and societies. Not only is managing our environmental impacts the right thing to do, it also helps us to manage and mitigate risk.

How we are engaging

- We actively engage with customers to identify and implement engineered solutions to reduce their energy use, carbon emissions, water and waste.
- We educate our colleagues and take steps to reduce our own environmental impacts.
- We report transparently on our environmental performance and engage with international reporting frameworks such as the Carbon Disclosure Project.

 [Read more on pages 77-81](#)

Our suppliers



Why it's important

Our purchasing decisions not only impact our suppliers, but their stakeholders too. We expect our suppliers to operate ethically, taking due consideration for the safety and wellbeing of their workers while minimising their environmental impacts. By setting high standards for our suppliers, we reduce operating and reputational risk and promote the long-term success of the Company.

How we are engaging

- We purchase from suppliers who adhere to our Supplier Sustainability Code.
- We undertake supplier audits to oversee compliance with our standards.
- We work with suppliers on a continuous improvement basis to raise standards.
- We train colleagues on business ethics and encourage the use of the whistle-blowing hotline to raise concerns about anything in our end-to-end supply chain.
- We pay our suppliers for properly completed work on 60 day terms in the UK and follow customary good pay practices in other countries.

 [Read more on pages 34, 73 and 75-76](#)

1. Board leadership and Company purpose *continued*

Employee Engagement Committee Report



We regularly pose the question “what would our colleagues think” whenever we are making important decisions.”

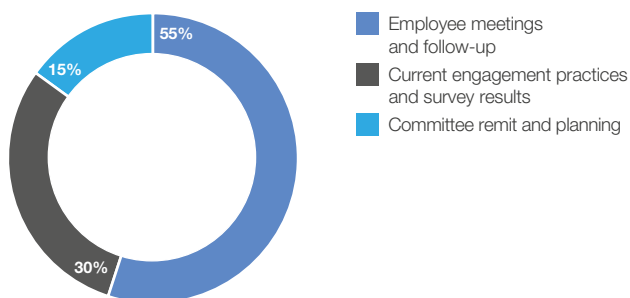
Caroline Johnstone
Chair of Employee Engagement Committee

Members

Our Employee Engagement Committee comprises:

	No. of meetings attended/ total no. of meetings held	Attendance %
Caroline Johnstone (Chair)	✓ ✓ ✓	100%
Jamie Pike	✓ ✓ ✓	100%
Trudy Schoolenberg	✓ ✓ ✓	100%
Jane Kingston	✓ ✓ ✓	100%
Kevin Thompson	✓ ✓ ✓	100%
Peter France	✓ ✓ ✓	100%
Angela Archon	First meeting post-appointment – Feb 2021	
Olivia Qiu	First meeting post-appointment – Feb 2021	

How the Committee spent its time



Our approach to engagement with the Group's workforce

Our workforce is essentially anyone who works in the business, whether full or part-time, home or office-based, including those on temporary or fixed-term contracts.

In 2019, the Board reviewed existing employee engagement mechanisms and the appropriate approach to comply with Provision 5 of the UK Corporate Governance Code. We established a new Board Committee to focus on matters of workforce engagement and I was appointed Chair of the Committee because of my previous people leadership roles in PwC and other businesses.

The Board considered other options and concluded that an Employee Engagement Committee was best suited for a business with almost 7,900 colleagues, working in 133 operating units, which vary significantly in size and nature, from large manufacturing operations to very small sales units, across 69 countries.

Our remit

The principal remit of the Committee is to ensure that the voice of the workforce is considered in all aspects of the Board's thinking. We regularly pose the question “what would our colleagues think” whenever we are making important decisions.

Committee meetings and operation

The Committee comprises our independent Non-Executive Directors. Nicholas Anderson, Group Chief Executive, is invited to attend meetings where appropriate, which enables us to reflect and discuss feedback from colleagues with the Executive. Amanda Janulis, Group Corporate Counsel, acts as secretary to the Committee.

During 2020, the Committee worked with Amanda Janulis, Jim Devine, Group Human Resources Director, and Jenni Forrester, Head of Employee Experience, in delivering the Committee remit, developing various colleague support and engagement initiatives and preparing for the 2021 employee survey. Amanda, Jim and Jenni have been instrumental in suggesting other opportunities for the Board to hear colleagues' views and I thank them for their support.

Key Employee Engagement Committee activities 2020



- Terms of Reference
- 2020 schedule of events
- Annual report – Employee Engagement Committee Report
- Update on actions arising from 2019 focus group meetings
- Employee engagement survey
- Feedback from focus group meetings (UK Supply and UK Steam Business Development)
- Steam Specialties employee engagement update



- Feedback from focus group meetings (China - Steam Specialties, Watson-Marlow and Chromalox)
- Learnings from COVID-19
- Women's Network launch summary
- Female mentoring programme
- Employee assistance programme
- FRC Lab report
- FTSE 100 – summary of other approaches



- Watson-Marlow employee engagement update
- Feedback from focus group meeting (Watson-Marlow UK)
- 2021 priorities agreed
- Employee value proposition update
- “Coffee talk” project

Chair's review of 2020 – key areas of focus

Colleague focus groups

We now have a clear programme and agenda for meeting groups of colleagues across the Group, without management present:

- We have an agreed range of topics on which we seek colleagues' views, including living up to our Values, and we also allow colleagues to steer the discussions so they can be sure we are listening. Some of our colleague groups come with a list of topics to discuss, others feel more comfortable being prompted on topics.

- We ensure that all comments are non-attributable and that themes and issues arising are shared. We seek feedback and agree actions with local and regional management.
- Following each focus group, the key themes are summarised and the Committee Chair has a formal debrief with local and/or regional management. If required, the Committee will relay any key or immediate matters to management.
- At the subsequent Committee meeting, the key themes covered by each focus group are discussed by the Committee members and with the Group Chief Executive.
- A summary of local/regional management responses and action progress is provided at subsequent Committee meetings.
- Any key matters are referred to in Board discussions and the Board reflects on colleague views when making its decisions.

In last year's Committee report, we indicated we would be considering the use of digital technology to enable focus groups across the business. Little did we realise that this would become the norm in 2020 rather than the exception. We held two in-person meetings in Cheltenham, UK in February 2020 but, as COVID-19 restrictions developed, we decided to maintain our programme and move some of the meetings online.

In general, it has worked well and everyone who joined the calls had a chance to speak and share their views. We anticipate that we will have a mix of virtual and in-person meetings going forward, and this will allow us to hold more sessions with colleagues than would be possible otherwise.

The focus groups held in 2020 covered different business units, activities and geographies. Each focus group provided different themes, which we discussed and agreed:

- Colleagues were very positive and appreciative of the approach to COVID-19 across the Group and attendees shared examples of Company support and the care for colleagues generally. Examples were provided such as in China where many colleagues work away from the family home and really appreciated that working was shared equally across the workforce.
- Many colleagues emphasised their pride in being part of the Group and appreciated the security this provided them and their families.
- Our Values are very well embedded across the focus groups we spoke with – all colleagues recognised their safety as the Group's top priority and many provided other good examples of the business living up to our Values and how much our Values mean to them.
- We were able to raise suggestions for improvement:
 - While communications have been more frequent in 2020 and very well received, COVID-19 prevented our manufacturing colleagues meeting in the usual way and, given that they do not routinely work on email, it presented a challenge. In 2021, we will consider using digital tools to increase our internal communications capability.

1. Board leadership and Company purpose *continued*

Employee Engagement Committee Report *continued*

- More sharing across the Group; for instance, some colleagues in sales felt they could benefit from knowing more about the manufacturing operations.
- An operations supervisor commented on the arrangements for machine maintenance and felt we could be more efficient in reducing machine down-time. Management are working on a plan for this in 2021.
- In one focus group, some of our manufacturing operators welcomed the opportunity and asked for reassurance that their views would be heard and that the Committee would discuss those views with management. Employee engagement activities are being adapted by management and we will review progress in due course.

Following up on employee engagement survey actions

Alongside Committee meetings, we have sought ways in which to understand colleague views and how management is addressing related issues. At each Board meeting, there is one or more business presentation which will, amongst other things, specifically address key areas of the employee engagement, the engagement survey, actions taken and progress made. The Board, therefore, has the opportunity to hear colleague views and gain assurance that colleague views are taken seriously and addressed positively.

Board site visits and colleague interaction

We are aiming to visit one or more sites in 2021, as restrictions around the pandemic recede. The Board visit will not only include a site tour but also an opportunity for the Committee to meet a range of colleagues, without management present, and hear their views.

Employee engagement activities

The Committee has worked closely with Human Resources and they have shared the range of employment support and engagement activities implemented and progressed in 2020. The Committee receives an update on this work at each meeting and has the opportunity to challenge and reflect on the impact and relevance to the colleague feedback.

In October 2020, the three female members of the Board participated in sessions with the Women's Network to share their career experience and to connect with this group. Over 80 members of the Women's Network attended these voluntary sessions.

A survey to assess colleague sentiment on the actions put in place to ensure colleague safety during the pandemic was undertaken. 98% of staff surveyed reported being satisfied with the steps taken to safeguard their health and wellbeing while they were in the workplace or considering a return.

I look forward to meeting and am always happy to answer any questions from shareholders.

Caroline Johnstone

Chair of Employee Engagement Committee

Committee focus for 2021

- **Focus groups:** the Committee has planned a series of focus group meetings in 2021. During 2020 we were keen to have an in-person focus group with colleagues at Aflex Hose, based in Huddersfield, UK, where we have recently consolidated four sites into a new state-of-the-art manufacturing site. This will be scheduled in 2021.
We will also hold focus groups by special interest group in 2021. We plan to have feedback from the Women's Network (see the Sustainability Report on page 73) and graduates across the business.
- **Board interaction:** as well as the Board visit to Aflex Hose, members of the Board will also attend the annual global graduate conference and the International Women in Engineering Day celebrations, which are scheduled to be held in 2021.
- **"Coffee talks" with colleagues:** part of the Committee's remit has been exploring new ways of interacting with colleagues, in a less formal setting. The Group started an initiative to connect colleagues across the business and implemented "coffee talks" for colleagues to voluntarily connect with another randomly selected colleague. Committee members have asked to participate in this excellent initiative providing further insight to colleagues' views across the Group.
- **Employee survey:** the Group will roll out its biennial employee survey in 2021 and the Committee will focus on key themes and the actions arising.

2. Division of responsibilities

The Chair

Independence

Jamie Pike has been a member of our Board since May 2014. Having served over six years on the Board, we consider him to have retained his independent status.

Responsibility

Jamie's responsibilities are outlined in the table on page 100. In his tenure to date we consider him to have upheld the responsibility of the Chair as described in the Principle of the Code, such as his independence, ability to work well with others and leadership skills.

At the time of publication of this Annual Report, Jamie has no other FTSE directorships.

A balanced Board

During 2020, in compliance with the Code, the number of Non-Executive Directors was always more than the number of Executive Directors (excluding the Chair). At the time of publication, our Board comprises two Executive and eight Non-Executive Directors (excluding the Chair). This ensures that no one person or group of individuals dominates the Board's decision-making. All of our Non-Executive Directors are considered independent.

Performance

The Chair confirms that, following a formal performance evaluation, each Director's performance continues to be effective and each Director demonstrates commitment to the role.

Senior Independent Director

Dr Trudy Schoolenberg was appointed as Senior Independent Director in May 2019. With expertise in engineering, product development and having significant executive and non-executive experience over many years, the Board is satisfied that Trudy has the necessary qualities and experience for this role.

The Senior Independent Director carried out an interview with all Directors to facilitate the appraisal of the Chair as part of our Board and Committee annual internal evaluation process.

Trudy will step down from the Board at the end of July after completing the maximum nine years allowed by the Code. On behalf of our shareholders the Board acknowledges with gratitude Trudy Schoolenberg's significant contribution to the Group's growth and prosperity over the last nine years. As Senior Independent Director, Trudy has been crucial in guiding the business through significant changes and challenges whilst maintaining the highest governance standards.

Richard Gillingwater, who I am delighted to say joined the Board on 9th March 2021, will take over from Trudy as our Senior Independent Director. Richard has strong investment, financial and non-executive experience, combined with international business experience. Richard brings competencies that will greatly assist the development of the Group.

Non-Executive Directors

Our Non-Executive Directors provide independent challenge and review, bringing wide experience, specific expertise and a fresh objective perspective. The Board is confident that the Non-Executive Directors have sufficient time to meet their Board responsibilities.

External appointments held by our Non-Executive Directors and full-time Executive Directors are set out on pages 90 to 91 and a summary is provided in the table below.

External listed company appointments

Only external positions of listed companies or equivalents in other jurisdictions are counted in accordance with the provisions of the guidelines published by ISS and other proxy advisers.

At year end	No. of other Non-Executive roles	No. of other Executive roles
Independent Non-Executive Directors		
Jamie Pike (Chair)	–	–
Trudy Schoolenberg	2	–
Jane Kingston	1	–
Kevin Thompson	–	–
Caroline Johnstone	1	–
Peter France	–	1
Angela Archon	1	–
Olivia Qiu	–	–
Full-time Executive Directors		
Nicholas Anderson	1	–
Nimesh Patel	–	–
Neil Daws¹	–	–

¹ N.H. Daws retired from the Board on 31st December 2020.

Non-Executive Director meetings

As per best practice, our Non-Executive Directors met with the auditor and Korn Ferry, independent remuneration consultants, separately from our Executive Directors. The Employee Engagement Committee meets with groups of colleagues separately from management.

Division of responsibilities

An overview of the division of responsibilities, as set out in the Code, is provided in the table on page 100 and we comply with all Principles and provisions.

The responsibilities of the Chair, Group Chief Executive, Senior Independent Director, Board and Committees are set out in writing and agreed by the Board. A clear division is made between the leadership of the Board and Executive leadership.

Group General Counsel and Company Secretary and Assistant Secretaries

The Group General Counsel and Company Secretary, and the Assistant Secretaries, support the Chair and the Committee Chairs in making sure members are equipped for informed decision-making and that they appropriately allocate their time to subjects. All Directors have access to the advice of the Group General Counsel, who is responsible for advising the Board on all governance matters. Both the appointment and removal of the Group General Counsel is a matter for the whole Board.

2. Division of responsibilities *continued*

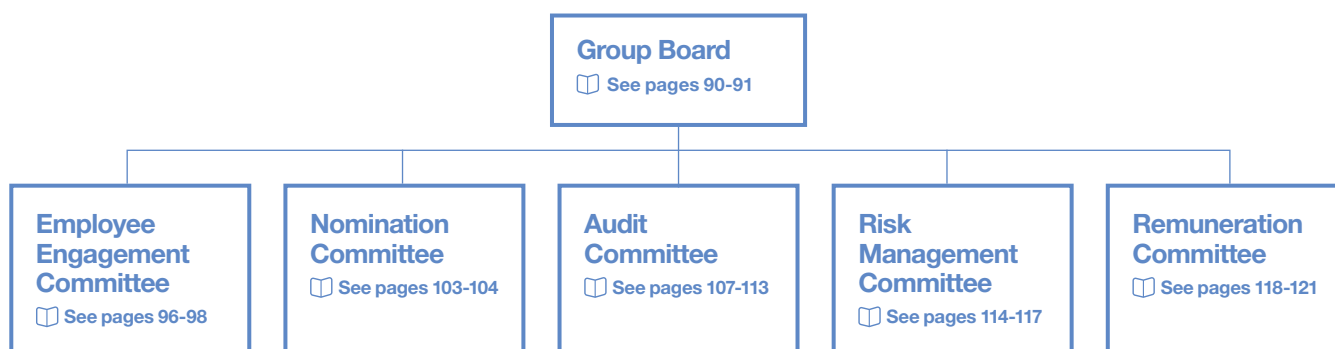
Division of responsibilities (based on Code Principles F–I)

Chair	<ul style="list-style-type: none"> Leads the Board Responsible for overall effectiveness in directing the Company Demonstrates objective judgement Promotes a culture of openness and debate Facilitates constructive Board relations Facilitates effective contribution of all Non-Executive Directors Ensures Directors receive accurate, timely information Holds meetings with Non-Executive Directors, without Executive Directors present
Board (key matters)	<ul style="list-style-type: none"> The approval of corporate and strategic business plans The approval of the annual and interim results Trading updates Integrated risk management framework Major acquisitions/disposals Major capital expenditure Director appointments Material litigation Governance structure Matters reserved to the Board under the Group Delegated Authorities Policy
Senior Independent Director	<ul style="list-style-type: none"> Provides a sounding board to the Chair Serves as an intermediary for the other Directors and shareholders Leads an annual meeting of Non-Executive Directors to appraise the Chair's performance
Non-Executive Directors	<ul style="list-style-type: none"> Provide constructive challenge, strategic guidance and offer specialist advice Hold a prime role in appointing and removing Executive Directors Scrutinise and hold to account the performance of management and individual Executive Directors against agreed performance objectives Responsible for employee engagement
Group General Counsel and Company Secretary	<ul style="list-style-type: none"> Advises the Board on all governance matters Supports the Board to ensure that it has the policies, processes, information, time and resources it needs for the Board to function effectively and efficiently Advises the Board on important legal and regulatory matters

Executive leadership

There is a clear division of responsibilities between the leadership of the Board and our Executive leadership. Our Group Chief Executive's roles and responsibilities include: management of the Group's short, medium and long-term performance; stewardship of capital, technical and human resources; corporate and business strategy; internal risk management controls; and organisational structure.

Governance structure



Further reading Board Committees overview

The Terms of Reference for all Board Committees are set out in detail on the Group's website. These terms are subject to regular review.

www.spiraxsarcoengineering.com

The Board of Directors

The Board relies on Executive management to run the business and monitor management activities, and holds them accountable against targets and standards. The Board also approves long-term corporate and strategic plans after a full review and assessment of market and technology trends, business drivers and risks. Having a senior management team that is capable of executing the strategic plans is a key focus for the Board.

The formal schedule of matters reserved for the Board's decision is available on the Group's website, www.spiraxsarcoengineering.com. The Board also has a Group Delegated Authorities Policy that sets out clearly the primary responsibilities, controls and authorisation limits on matters affecting the Group's business.

Board meetings

The Board meets as often as is necessary to discharge its duties. In 2020, the Board met ten times. All Directors are expected to attend all Board meetings and relevant Committee meetings unless prevented by prior commitments, illness or a conflict of interest. Directors unable to attend specific Board or Committee meetings are sent the relevant papers and asked to provide comments in advance of the meeting to the Chair of the Board or Committee.

In addition, all Board and Committee members receive the minutes of meetings as a matter of course.

Board attendance 2020*

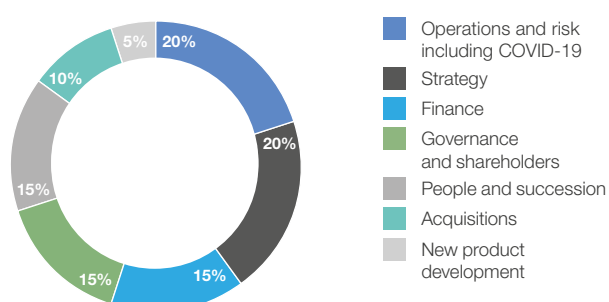
	Board meetings	Attendance
J. Pike	✓✓✓✓✓✓✓✓✓✓	100%
N.J. Anderson	✓✓✓✓✓✓✓✓✓✓	100%
N.H. Daws	✓✓✓✓✓✓✓✓✓✓	100%
N.B. Patel ¹	✓✓✓✓	100%
G.E. Schoolenberg	✓✓✓✓✓✓✓✓✓✓	100%
J.S. Kingston	✓✓✓✓✓✓✓✓✓✓	100%
K.J. Thompson	✓✓✓✓✓✓✓✓✓✓	100%
C.A. Johnstone	✓✓✓✓✓✓✓✓✓✓	100%
P. France	✓✓✓✓✓✓✓✓✓✓	100%
A. Archon ²	✓	100%
O. Qiu ²	✓	100%

* K.J. Boyd attended eight meetings prior to retiring on 30th September 2020.

¹ N.B. Patel was appointed to the Board on 11th September 2020.

² A. Archon and O. Qiu were appointed to the Board on 1st December 2020.

How the Board spent its time



Board activity 2020

The Board ensures good governance practices are embedded throughout the Group as they are an integral part of running a successful business. In the chart on the bottom left of the page, we have set out how the Board spent its time during 2020.

The Board agendas are carefully planned to ensure focus on the Group's strategic priorities and key monitoring activities, as well as reviews of significant issues. During 2020, the Board devoted considerable time to ensuring that the Group could progress with manufacturing footprint for Watson-Marlow in the USA and the UK (BioPure), strengthened our Group sustainability function and improved our health and safety performance across all three businesses while at the same time sustaining excellent financial performance. The Board also ensured that the Group had strong and adequate financial facilities including drawdown of the Private Placement Shelf Facility, a cash pooling arrangement with Bank Mendes Gans, a foreign exchange risk management policy and a revolving credit facility provided by Barclays Bank plc and HSBC plc. The Group was able to perform exceptionally well without using COVID-specific state aid in any of our markets, whether in the form of government loans or utilising furlough schemes. The Board was delighted to approve both the 2019 final dividend and the 2020 interim dividend payments to shareholders.

We also reviewed the implementation of our strategic plan and had an update on our corporate strategy in June.

We monitored the significant investment we are making in Aflex Hose, Yorkshire, where we have consolidated our four sites into a purpose-built facility that will streamline our processes and prepare us for the growth we anticipate in this business. This site has now been completed and, due to COVID-19, the Board visit was delayed until 2021. In addition, in accordance with our Section 172 obligations, the Board also scrutinised the investments in Watson-Marlow in the USA and the UK (BioPure), together with the investment in Northcroft House in Cheltenham, all three to address continued expansion of our businesses.

Health and safety and sustainability are of fundamental importance to the Group and they are both considered at the top of the agenda at each Board meeting and each Group Executive Committee meeting.

The Board also concentrated its attention on formulating a proactive Brexit strategy, looking at both the challenges and opportunities for the Group posed by the UK's exit from the EU.

The Board continued to engage with shareholders on governance, remuneration and trading during the period.

Board focus for 2021

- Continue to support the Group Executive Committee and the three businesses with their growth plans through the implementation of their medium-term plans. Key management presentations and discussions are planned in 2021 across all of our businesses, including Watson-Marlow expansion, business digital strategies and new product developments.
- Further consolidate our position through both organic and inorganic growth and continue to progress the Group in the face of COVID-19.
- Focus on sustainability and climate change.
- Board dynamics, as set out in detail on pages 92 and 105.

2. Division of responsibilities *continued*

Key Board activities in 2020, by meeting

Standing agenda items

- Health and safety and sustainability updates are the first two operational matters addressed by the Board at each meeting
- The Group Chief Executive and the Chief Financial Officer report on monthly, quarterly, bi-annual and annual trading, as appropriate
- Updates by Committee Chairs, where relevant, on Committee meetings held prior to each Board meeting
- The Group General Counsel and Company Secretary regularly updates the Board on all material legal matters and on our compliance programmes
- Company share performance and shareholder/analyst feedback is discussed at most Board meetings



- Draft Annual Report
- COVID-19 update
- Group litigation
- Chromalox European operations
- Business review – Gestra
- Management presentations – Thermocoax and Watson-Marlow Supply Chain
- Cybersecurity update
- Deloitte Academy governance update



- Approval of appointment of Chief Financial Officer
- COVID-19 update



- UK pension schemes
- Purchase of Northcroft House
- 2020 interim dividend
- Group litigation
- Group Sustainability strategy update
- Project OPAL update
- Business review – Watson-Marlow
- Management presentations – Watson-Marlow Northern Europe and Southern Latin America (Steam Specialties)



- Approval of budget
- 2021 Plan and Business presentations
- Internal Board effectiveness review
- Draft Annual Report and Circular to Shareholders
- Management presentation – sustainability
- Approval of appointment of Non-Executive Director (Angela Archon)



- Liquidity update
- 2019 final dividend



- Business review – Asia Pacific (Steam Specialties)
- Management presentation – Steam Business Development (Steam Specialties)



- COVID-19 update
- 2019 financial results
- 2019 final dividend
- Review and approval of Annual Report and Circular to Shareholders
- UK pension provision
- Business review – EMEA (Steam Specialties)
- Management presentation – MEAWE (Steam Specialties)
- Approval of revised Company purpose and Modern Slavery Statement
- Hampton-Alexander review



- Succession planning
- Business and corporate strategy
- Talent strategy
- Chromalox European operations



- Group Digital Strategy
- Chromalox US Navy Project
- Watson-Marlow US manufacturing site
- Management presentation – Americas (Steam Specialties)
- Cybersecurity and preparedness update
- Approval of Group Delegated Authorities
- Approval of appointment of Non-Executive Director (Olivia Qiu)

3. Composition, succession and evaluation

Nomination Committee Report



We now have greater diversity on our Board, across the Group and in our Executive succession planning. We have 45% female representation on our Board and 27% of Directors are ethnically diverse.”

Jamie Pike
Chair

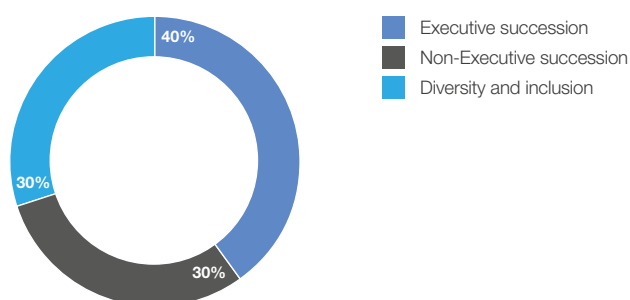
Members

Our Nomination Committee comprises:

	No. of meetings attended/ total no. of meetings held	Attendance
Jamie Pike (Chair)	✓ ✓ ✓ ✓ ✓ ✓	100%
Trudy Schoolenberg	✓ ✓ ✓ ✓ ✓ ✓	100%
Jane Kingston	✓ ✓ ✓ ✓ ✓ ✓	100%
Kevin Thompson	✓ ✓ ✓ ✓ ✓ ✓	100%
Caroline Johnstone	✓ ✓ ✓ ✓ ✓ ✓	100%
Peter France	✓ ✓ ✓ ✓ ✓ ✓	100%
Angela Archon¹	✓	100%
Olivia Qiu¹	✓	100%

¹ A. Archon and O. Qiu appointed on 1st December 2020.

How the Committee spent its time



Committee role and responsibilities

The main role of the Nomination Committee is to recommend changes to the Board and consider succession planning for the future. The Committee:

- makes appropriate recommendations to the Board for the appointment, re-appointment or replacement of Directors;
- reviews the structure and composition of the Board with regard to the overall balance of skills, knowledge and experience against current and perceived future requirements of the Group;
- recommends any proposed changes to the Board; and
- considers succession planning arrangements for the Directors and, more generally, senior executives.

Meetings

The Nomination Committee met six times in the year to address the following matters:

- Executive Director succession planning;
- Non-Executive Director and Senior Independent Director succession planning; and
- Managing Director, Steam Specialties succession.

The Group Chief Executive and Chief Financial Officer were invited to meetings where appropriate.

Key Nomination Committee activities 2020



- Executive Director succession planning
- Recommendation of appointment of Chief Financial Officer



- Managing Director, Steam Specialties succession
- Non-Executive Director succession planning
- Recommendation of appointment of Non-Executive Director (Olivia Qiu)



- Non-Executive Director succession planning



- Non-Executive Director/Senior Independent Director succession planning
- Ratification of recommendation of appointment of Non-Executive Director (Angela Archon)

3. Composition, succession and evaluation *continued*

Nomination Committee Report *continued*

Chair's review

Board changes

In July 2020, we welcomed Nimesh Patel to the Group and, following completion of the interim financial reporting process and an orderly handover of duties, Nimesh succeeded Kevin Boyd as Chief Financial Officer and Executive Director in September 2020.

We are delighted that Angela Archon and Olivia Qiu joined the Board as Independent Non-Executive Directors effective 1st December 2020.

Details of their respective skills and experience are set out on pages 90 to 91.

MWM Consulting (for Nimesh Patel) and Egon Zehnder and Russell Reynolds (for Angela Archon, Olivia Qiu and Richard Gillingwater, see below) were appointed in relation to the specification, search and evaluation of these appointments and were instructed to include candidates that advanced both our gender and ethnic representation. It is our policy to consider overall Board balance and diversity when appointing any new Director. MWM Consulting, Egon Zehnder and Russell Reynolds are independent search and recruitment agencies.

On 31st December 2020, Neil Daws retired from the Board.

As previously announced, Richard Gillingwater was appointed as an Independent Non-Executive Director with effect from 9th March 2021 and as Senior Independent Director with effect from 1st August 2021, when Trudy Schoolenberg steps down from the Board.

Diversity and Inclusion Policy

We believe that the Board's perspective and approach is greatly enhanced by gender, age and cultural diversity and it is our policy to consider overall Board balance and diversity when appointing new Directors. As shown on page 72, we have made progress with our diversity and inclusion agenda, which is particularly relevant given the broad international reach of the Group.

Diversity and inclusion are key elements in our Group strategic sustainability project where we undertook the following initiatives:

- Appointed Darren Towers, previously from Stonewall, as Head of Inclusion, Diversity and Wellbeing to assist us in progressing this agenda in 2021;
- Training on unconscious bias and micro-incivilities delivered by leading inclusion specialist, Professor Binna Kandola, for the wider executive team and senior management teams;
- Mandatory unconscious bias online training for all colleagues in multiple languages, which was completed by approximately 1,000 of our colleagues within two months of becoming available;
- Succession planning and talent development activities designed to ensure we continue to have a strong, diverse bench strength for the management and operation of our businesses, including a female executive mentoring programme and in-house leadership courses;
- A Global two-year Graduate Programme offering the ability to hire the best graduates from all over the world who are often globally mobile and strive for leadership positions;
- Sponsorship and promotion of multiple science, technology, engineering and mathematics (STEM) initiatives amongst schools in the communities in which we operate;
- Further internal and external communications on our commitment to Diversity and Inclusion, such as an additional page on our careers website, on-going support of global events such as International Women's Day and International Women in Engineering

Day, and educational communications campaigns on the importance of diversity and the challenges faced by minority groups; and

- On-going commitment to undertaking a UK equal pay audit across all our UK business units.

Gender reporting

By the end of 2020, Board gender diversity changed with six males and five females.

During 2020, we participated in the FTSE Women Leaders (Hampton-Alexander) Review.

Hampton-Alexander Review for 2020, published on 24th February 2021:

- We are one of the top four improvers for board gender diversity in the FTSE 100;
- Our Board gender diversity of 50% places us joint third in the FTSE 100; and
- Across the FTSE 350, we outperform our sector (Industrial Engineering) average for women on boards (sector average 39.5% vs our 50%) and average for combined Executive team and direct reports (average 21.6% against our 27.3%). The combined Executive/direct reports figure places us second in the sector from the FTSE 350.

Since 2015, we have enhanced our focus and expanded our activities regarding succession planning and talent development at the executive levels of the Group so that we continue to have a strong, diverse bench strength for the management and operation of our businesses. Practical achievements in this field include the development and implementation of a successful executive female mentoring programme and the internal promotion and external recruitment of 18 women for higher executive positions. In addition, we have achieved 58% female representation when recruiting for our two-year Global Graduate Programme. We recognise that further actions need to be taken and will continue to increase the representation of women in our Company.

As a Group we are committed to gender diversity and we made good progress in 2020 exceeding our minimum target of 33% female representation on the Board. We will work to progress the same target that also applies to the Group Executive Committee and their direct reports. We ensure that this target is taken into account in our succession planning and recruitment.

More detailed figures on gender diversity can be found on page 72 in our Sustainability Report.

Committee focus for 2021

In 2021, we will focus on succession planning at Executive levels of the Group and promoting talent across the Group so that we continue to have a strong and diverse bench strength for the management and operation of our businesses, with particular focus on diversity at senior executive levels.

Jamie Pike

Chair of Nomination Committee

Further reading

Our Diversity and Inclusion Policy can be found on our website.

www.spiraxsarcoengineering.com

Board evaluation

Board evaluation process

In 2018, we commissioned an independently-facilitated Board effectiveness review conducted by Independent Audit. (Independent Audit provides no other services to the Group and is independent.) Our aim was to capture open and constructive feedback from Board members which would:

- provide insight into our effectiveness;
- point to actions for improving our performance; and
- establish a benchmark for measuring future progress.

The review was carried out in accordance with the guidance in the Code.

In 2020, as in 2019, we followed up on the recommendations of Independent Audit and the Board carried out an internal evaluation of the performance of the Board and the Board Committees, in accordance with the provisions of the Code. The Chair circulated a comprehensive questionnaire to members of the Board covering all issues related to the effective running of the Board and the functioning of the Committees. The responses were consolidated and anonymised and common themes identified in order for the Board to determine key actions and next steps for improving Board and Committee effectiveness and performance.

Evaluation cycle – three year

2018 External (complete)

2019 Internal (complete)

2020 Internal (complete)

Board dynamics
external evaluation 2021

The 2020 internal effectiveness review supported the overall conclusion of the 2018 external evaluation that the expertise and experience of the Board provided guidance and support on important decisions. In particular, it was noted that the Board is well-balanced across skill sets and backgrounds, and has a good dynamic with open discussion and the ability to table challenging points of view.

The main recommendations, following the review, are:

- Review of risk management; and
- Identifying priority areas for 2021.

Outcome and agreed focus for 2021

- Strategy progression including a digital strategy for each business.
- Sustainability and climate change.
- Board dynamics aimed at ensuring the best use of our Board (refer to page 92).
- Taking the lessons of COVID-19 into business as usual, including colleague wellbeing.
- Risk management reviewed by Board in early 2021. Strategic risks scheduled for discussion in June 2021.



We have a strong business model that has performed in the toughest of times.”

Nimesh Patel
Chief Financial Officer



Nimesh Patel's early reflections

I joined the Group in the midst of a year which presented us with multiple challenges and was immediately impressed by the way in which our people across the world came together to respond. I felt the path we charted together really embodied our values; we maintained our focus on safety, worked collaboratively and harnessed new technology and ways of working, all to respond swiftly to the needs of our customers, many of which are on the frontline fighting the global pandemic. We've also continued to engage in supporting our local communities at a time when it has never been more important to help others.

In my first few months I sought to meet as many of my colleagues as possible, albeit virtually. I have spent a good proportion of my time with the Executive team, including the Managing Directors of the three businesses, the global finance team, the Board and many of our teams in our international operating companies. I look forward to being able to meet them in person, as well as visiting our manufacturing and sales operations, when circumstances allow.

I have been struck by the resilience of our business model and the essential role our products and solutions fulfil in our customers' critical industrial processes. Alongside developing my understanding of our business model and strategy, I also focused on building a community of our global finance professionals and have started a dialogue around shaping the role that finance should play in helping to deliver our strategy.

Our balance sheet is strong and we've demonstrated the resilience of our cash generation. I am now looking forward to supporting our continued growth as we harness the opportunities afforded to us through helping our customers to improve their safety, sustainability and efficiency, underpinned by our investments in our manufacturing footprint and developing new digital tools.

3. Composition, succession and evaluation *continued*



My time with the Group saw a period of unprecedented growth with sales and profits doubling.”

Kevin Boyd

Chief Financial Officer

(Retired 30th September 2020)



Kevin Boyd's reflections

When I took over from my predecessor, David Meredith, I remember him saying that although the word “unique” was much overused, he believed that Spirax-Sarco Engineering was a truly unique Company. Having spent a fantastic four and a half years with the Company, I can only agree with him.

My time with the Group saw a period of unprecedented growth with sales and profits doubling and the market capitalisation more than trebling, catapulting us into the FTSE 100 in 2019.

As the size of the business increased and we welcomed many more colleagues into the business, I was delighted that we were able to maintain the unique culture David spoke about which was evidenced by the resilience with which the Group tackled the COVID-19 pandemic.

I was pleased that we were able to secure Nimesh Patel as my successor and have been very impressed with how quickly he was able to get up to speed, despite joining in the midst of the pandemic.

I wish Nimesh, Nick and all my colleagues at Spirax-Sarco Engineering all the very best for the future.



This unique business model has delivered strong returns for all our stakeholders.”

Neil Daws

Managing Director, Steam Specialties

(Retired 31st December 2020)



Neil Daws' reflections

42 years with the same company is perhaps unusual in the modern era. However, the constant profitable growth and an ever-evolving business strategy fuelled my continuous personal development in a Company that has its colleagues at the core of its success.

I joined in 1978 as an engineering apprentice, which offered a comprehensive grounding on what makes our Group a success. At that time our business was predominantly UK and European based with some strength in Latin America. I witnessed, and was later very involved in, strong geographic expansion into Asia and the USA, the major acquisitions of Watson-Marlow, Gestra and Electric Thermal Solutions, all of which added significant value to the Group.

During my career I held positions in R&D, Supply Chain, Marketing and Sales, culminating proudly in leading Steam Specialties as Managing Director. I also had the pleasure of completing over 17 years on the Board, which provided challenge and made me proud in equal measure.

The significant success achieved is due to a special combination of the highest quality colleagues, brand, strategy, and solutions that are totally focused on serving our customers through long term added value partnerships. This unique business model has delivered strong returns for all our stakeholders and will, I'm sure, continue to do so.

I would like to express my sincere thanks and appreciation for the support received from around the Group, the Board and the many stakeholders I have met. I wish the Group continued success and I know that Steam Specialties will be in safe hands with Maurizio Preziosa as Managing Director.

4. Audit, risk and internal control

Audit Committee Report



During 2020, the key areas of focus for the Committee included monitoring the financial resilience of the Group and the impact of, and the response of the Group to, the COVID-19 pandemic.”

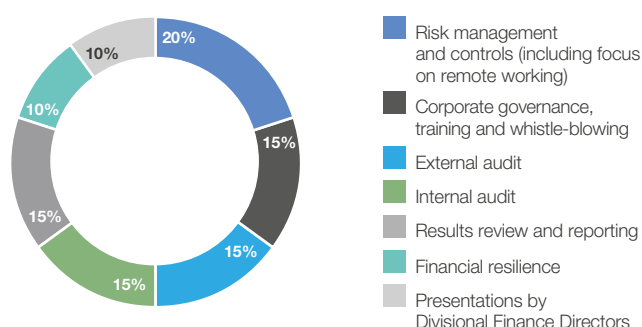
Kevin Thompson
Chair of Audit Committee

Members

Our Audit Committee comprises:

	No. of meetings attended/ total no. of meetings held	Attendance
Kevin Thompson (Chair)	✓ ✓ ✓ ✓	100%
Trudy Schoolenberg	✓ ✓ ✓ ✓	100%
Jane Kingston	✓ ✓ ✓ ✓	100%
Caroline Johnstone	✓ ✓ ✓ ✓	100%
Peter France	✓ ✓ ✓ ✓	100%
Angela Archon	First meeting post-appointment – Mar 2021	
Olivia Qiu	First meeting post-appointment – Mar 2021	

How the Committee spent its time



Committee role and responsibilities

The overall purpose of the Audit Committee is one of oversight and monitoring of the entire financial reporting and control process, to ensure the integrity of the Group's Financial Statements and assurance over them. The Committee fulfils this remit by undertaking the following roles and responsibilities:

- monitoring the integrity of the Financial Statements of the Company and any formal announcements relating to the Company's financial performance, and reviewing significant financial reporting judgements contained in them;

- providing advice (where requested by the Board) on whether the Annual Report, taken as a whole, is fair, balanced and understandable, and provides the information necessary for shareholders to assess the Company's financial position, performance, business model and strategy;
- in conjunction with the Risk Management Committee and the Board, reviewing the Company's internal financial controls and internal control and risk management systems;
- monitoring and reviewing the effectiveness of the Company's internal audit function and making recommendations to the Board;
- conducting the tender process and making recommendations to the Board about the appointment, re-appointment and removal of the external auditor, and approving the remuneration and terms of engagement of the external auditor;
- reviewing and monitoring the external auditor's independence and objectivity;
- reviewing the effectiveness of the external audit process, taking into consideration relevant UK professional and regulatory requirements;
- developing and implementing policy on the engagement of the external auditor to supply non-audit services, ensuring there is prior approval of non-audit services, considering the impact this may have on independence, taking into account the relevant regulations and ethical guidance in this regard, and reporting to the Board on any improvement or action required; and
- reporting to the Board on how it has discharged its responsibilities.

Meetings

The Committee met four times during 2020. Relevant members of the Group's senior management, including the Group Chief Executive (in his capacity as Group Chief Executive and not as a member of the Committee), Head of Internal Audit, Chief Financial Officer and Group Financial Controller, were also in attendance at these meetings. Implementing one of the outcomes of the 2019 Audit Committee self-assessment, 2020 saw the Group's Divisional Finance Directors being invited to attend and present to the Committee (further detail on page 109).

During 2020, the Committee received reports from external and internal auditors on the major findings of their work and the progress of management follow-up by way of management reports. As a safeguard, the Committee holds separate meetings with the external and internal auditors without management present to discuss their respective areas and any issues arising from their audits.

4. Audit, risk and internal control *continued*

Audit Committee Report *continued*

Key Audit Committee activities 2020



- Reviewed the Annual Report including:
 - Key judgements
 - Going Concern basis and financial resilience
 - Viability Statement
 - That it is fair, balanced and understandable
 - Report of the auditor
- Reviewed internal financial controls
- Reviewed integration of Thermocoax



- Reviewed the half-year results
- Reviewed the auditor interim report
- On-going review of risk and control areas such as cybersecurity, remote working and whistle-blowing
- Consideration of Audit Committee performance
- Agreed updates to the Internal Audit Charter for 2020



- Update on accounting, reporting and half-year review
- COVID-19 impact and risk assessment
- On-going review of the Steam Specialties Core Systems upgrade and the Standard Contract Terms projects
- Divisional Finance Director update (Watson-Marlow)



- External audit planning (including review and approval of audit scope and fees)
- Reviewed effectiveness of internal audit process and plan for 2021
- Approved amendments to the Terms of Reference
- Financial Controls framework review
- Divisional Finance Director update (Electric Thermal Solutions)

All new Committee members undertake an induction programme and continue to further their knowledge via on-going training, such as attendance at technical seminars and receipt of regular topical updates from Deloitte.

A more detailed summary of the qualifications, skills and experience of each Committee member can be found on pages 90 to 91.

Chair's review of 2020

As Chair of the Audit Committee, I am pleased to present the Committee's report for the year ended 31st December 2020. While the Committee's overall aim and core duties remained the same during 2020, the COVID-19 pandemic that quickly spread across the globe early last year resulted in changes to the working practices of the Committee and also led to an increased focus on internal controls systems and risk management practices. Remote working became an established practice for the Committee and, crucially, the Internal Audit team, who adapted well and continued to undertake the majority of their originally scheduled audits. Similarly the External Audit team worked remotely and, together with Internal Audit, maintained the high standards to which the Committee has become accustomed.

The Committee welcomed Angela Archon and Olivia Qiu in December 2020 (upon their appointment to the Board as Non-Executive Directors) and we took the opportunity to share their induction materials with all Committee members. The Committee was also pleased to welcome Nimesh Patel, who joined the Group as its new Chief Financial Officer effective September 2020.

In terms of Committee meetings, in 2019 the Committee agreed that more time should be devoted to Committee business and 2020 saw an additional meeting added to the agenda (in May). In addition to ensuring that the Committee members receive adequate training as well as exposure to senior finance executives, the additional meeting enabled further review and implementation of increasing governance and reporting requirements. This additional meeting also proved timely, as it meant the Committee was in a position to monitor the impact of, and assess the Group's response to, the COVID-19 pandemic fairly soon after the outbreak occurred. In particular, the Committee focused on the controls environment in light of the rapid change in working practices for the majority of the Group's colleagues across the globe.

With an external performance assessment of the Committee scheduled for 2021, the Committee used the opportunity in 2020 to undertake a self-assessment of its performance. The responses and comments from members were positive and showed the Committee is progressing well.

The Committee has a high level of confidence in, and a good understanding of, the Group's risk management process undertaken by the Risk Management Committee. The Committee felt this could be enhanced by additional Board risk management discussions, including a review of the current process, risk appetite and emerging risks. This is scheduled for the first half of 2021.

Committee competence and governance

The Audit Committee operates under Terms of Reference, which were subject to minor updates in October 2020, with a more substantive review scheduled for 2021. The Terms of Reference set out the membership and experience requirements of the Committee and can be found on the Group's website, www.spiraxsarcoengineering.com.

The Committee is considered by the Board to possess an appropriate level of independence (it is comprised solely of Non-Executive Directors) and experience. The Board is satisfied that Kevin Thompson (Chair) and Caroline Johnstone have recent, extensive and relevant financial experience and the required competence in accounting. All members of the Committee have a depth of financial and commercial experience in various industries, as well as the industrial engineering sector in which the Group operates.

During 2020 the key areas of focus for the Committee, in addition to its on-going core responsibilities of monitoring the integrity of the Group's Financial Statements and the effectiveness of its controls, were:

- monitoring the financial resilience of the Group;
- monitoring the impact of, and the response of the Group to, the COVID-19 pandemic (in particular, reviewing the Group's risk management and internal control systems);
- enhancing internal audit with increased attention to use of analytics, KPI reporting and closure of action items;
- increasing Committee exposure to senior finance executives and training;
- ensuring the internal control environment remains fit for purpose; and
- the on-going review of 2020 improvement areas (including the Steam Specialties Core Systems upgrade project, the Standard Contract Terms project and cybersecurity).

The following matters considered by the Committee were of particular note:

The COVID-19 pandemic

The COVID-19 pandemic has been an unprecedented challenge faced by all businesses, changing the way people live and work. Significant decisions and adjustments have had to be made by organisations, often quickly and frequently. It is during such times that the systems, controls and processes of a company are tested. Accordingly, in addition to the planned 2020 focus areas, the Committee paid particular attention on the topics most likely to be impacted by the pandemic, including fraud and other risk assessment and internal control, key judgements (as it is harder to forecast with certainty) and any accounting implications.

From the beginning of the pandemic, the Group Executive Committee assumed direct responsibility for crisis management and ensured there was clear direction and communication to sub-management teams. The Group Executive Committee provided regular updates to the Committee and Board.

The Committee and Board reviewed the Group's stress testing with management in light of the pandemic. The Committee is satisfied that this is appropriate in supporting the Group as a going concern.

The Committee also received regular updates on the steps taken by management to further strengthen the Group's liquidity for the likely duration of the crisis and recovery period beyond. The Committee is satisfied that the increased liquidity risk because of the impact of COVID-19 has been reduced by these measures.

The findings of the control reviews undertaken by each of the three businesses indicated that management are of the view that the control environment has not been detrimentally impacted by the COVID-19 crisis. This self-assessment view was corroborated by the Internal Audit team who reported that whilst there has been a minor deterioration in controls in certain areas as a result of COVID-19 (with management addressing such areas), none were material.

The Committee will continue to monitor the Group's internal controls and the Group's response to risks posed by the pandemic throughout 2021.

Divisional Finance Director presentations

Implementing its own proposal for improvement, following a self-assessment exercise in 2019, the Committee invited the Divisional Finance Directors to each attend a Committee meeting over an annual cycle and directly update the Committee about priorities, activities and topics relevant to their particular business (for example, the integration of Thermocoax into the Group was covered by Electric Thermal Solutions). These presentations were well received and the opportunity to discuss topics directly was appreciated by both the Committee and Divisional Finance Directors. This process will continue in 2021.

Standing agenda items

Cybersecurity

The Committee continued to receive updates on the implementation and maintenance of cybersecurity systems and the work undertaken to improve the Group's cybersecurity capabilities. The Group is continuing to consider lessons learnt from external third party high-profile cybersecurity cases.

Steam Specialties Core Systems upgrade

The Committee continued to monitor this project (which commenced in 2019) to implement a new integrated IT system which would incorporate ERP (Enterprise Resource Planning), CRM (Customer Relationship Management), CPQ (Configure, Price, Quote) and BI (Business Intelligence) modules. Despite challenges raised by COVID-19, the project continued to progress well in 2020 with a number of important milestones achieved (see page 43 for further information).

Standard Contract Terms project

One of the areas identified by the Committee for improvement in 2019 was the Group's standard contracting processes and a new process was established and rolled out to all Group companies in 2020. The project includes the processes and procedures that all Group sales and purchasing teams are to follow to ensure that no Group business is exposed to unacceptable contractual risks. Accompanying the new contracting procedures was the provision of new template documents for use by all Group companies. The Committee will continue to monitor the adoption, and impact, of these new mandatory practices throughout 2021.

Taxation

The Group Taxation Strategy was reviewed in December 2020 and can be found on the Group's website, www.spiraxsarcoengineering.com (under Governance documents). The Taxation Strategy sets out the Group's approach to tax risk management and governance, tax planning and relationship with the relevant tax authorities.

The Group is subject to the UK HMRC Senior Accounting Officer review and in June 2020 a clean certificate was issued by the Senior Accounting Officer for the year ended 31st December 2019.

Review of effectiveness of internal controls

In its review of the Group's internal controls, the Committee considers the effectiveness of all material controls, including financial, operational and compliance controls and risk management systems.

4. Audit, risk and internal control *continued*

Audit Committee Report *continued*

The Committee receives regular updates from management throughout the year and an annual management paper on the effectiveness of the Group's internal controls to support its own review. As noted under "The COVID-19 pandemic" above, the Committee paid particular attention during the early stages of 2020 to the effectiveness of controls, in light of the shift to a largely remote working environment for colleagues who would usually be office-based.

Oversight of the effectiveness of risk management procedures and the operation of controls is undertaken by the Group Executive Committee and Risk Management Committee, and further detail on these processes can be found on page 116.

The Group recognises the importance of the internal control environment and continues to evaluate it, implementing enhancements as required. In this context the Committee welcomes the review by the Chief Financial Officer and his team of the Group's control framework in 2021. This "financial controls journey" has the aim of further improving the controls environment and setting out clear expectations for each Group company, backed up with new policies and procedures and supported by training to colleagues. The Committee will continue to monitor its progress during 2021.

Sources of assurance

In fulfilling its responsibility of reviewing the effectiveness of the Group's control systems, the Committee relies on a number of sources of assurance. These include external audit, internal audit and regular management updates, including those from the Divisional Finance Directors.

In addition, there are a number of measures in place at local, divisional and Group level that provide assurance that risks are being managed in line with the Group appetite for risk. The key measures include: a strong corporate culture of doing the right thing, supported by the strong "tone at the top"; oversight of financial performance and operations by the Group Executive Committee and leadership teams; detailed processes and procedures applied across a number of areas, assisted by on-site reviews by central and divisional functions of Group Company compliance; and a dedicated internal audit function, which performs regular audits of all Group Companies, and manages an annual self-assessment process.

Going concern, Viability Statement and financial resilience

The Committee reviewed the 2020 Going concern and Viability Statements and were satisfied that these represented accurate assessments of the Company's position at the date of the Statements. For further detail on the Going Concern and Viability Statements, and for additional information on the resilience of the Group, please refer to pages 56 and 57.

Whistle-blowing

The Group's Safecall facility, a confidential colleague whistle-blowing hotline, continued to be utilised across the Group. The Committee received updates on the use of Safecall at its meetings and noted that, on the whole, this hotline continued to be used for its intended purpose by colleagues. The Committee assessed management's responses to the reported cases (of which there were 14 in 2020) and considered them to be appropriate and satisfactory.

Section 172 disclosures

The Committee is cognizant of the Board and management's on-going attention to their duties under section 172 of the Companies Act 2006 and, in particular, their consideration of the matters to which the Board and management should have regard when performing their duty to promote the success of the Company when making decisions. The Committee considers such factors in carrying out its own responsibilities.

Detection and prevention of fraud

Instances of fraudulent activity within the Group are extremely rare and there are control systems in place intended to detect and prevent such activity. A breach of the Group Management Code was identified by our Internal Audit team in 2020 and prompt action was taken by the divisional management team with lessons learned shared across the Group. There was no material financial loss. The Board, who is responsible for safeguarding the assets of the Company and for taking steps for the detection and prevention of fraud and other irregularities, will continue to identify ways to improve Group systems. Working with management, the Committee will look to build on the fraud risk assessment and reporting processes during 2021, starting with the output from management's fraud risk workshop in February 2021.

Significant issues

The Committee is responsible for assessing whether suitable accounting policies have been adopted and whether management has made appropriate judgements and estimates. During 2020, the Committee considered and addressed the following significant issues in relation to the Group's Financial Statements and disclosures. The Committee received regular reports from management on these significant issues. The reports were discussed at the Committee meetings where the half year and year end reporting was considered giving Committee members the opportunity to directly question and discuss the reports with management. The Committee also received a detailed report on these issues from Deloitte. Significant issues were considered in the context of COVID-19 impacts and the manner in which the Group's internal controls applied in the remote working environment. Disclosure in financial reporting was also considered including the re-classification on the Consolidated Statement of Financial Position. The Committee was able to reach satisfactory conclusions.

(i) Revenue recognition

In view of the profile of revenue and profit recognition in the final quarter of the year (a period when, in some Group companies, a higher proportion of the annual external revenue is recognised compared to the rest of the year), the need to focus on any new significant contracts and revenue cut-off for certain businesses was highlighted to ensure the appropriate recognition of revenue for the year ended 31st December 2020.

How this was addressed

The Committee received regular updates from management on new significant contracts throughout the year and monitored the adequacy of the control environment for revenue recognition. In particular, the Committee reviewed adherence to the Group's policy to recognise revenue when performance obligations have been fulfilled which, in the majority of cases, is at time of dispatch or delivery. Taking the evidence together, the Committee was able to conclude that revenue recognition was appropriate during 2020 and at the year end.

(ii) Pensions

The Group operates five main defined benefit pension schemes (three in the UK, one in Germany and one in the US). During 2020, the Group closed the main UK schemes and a smaller Canadian scheme to future accrual in June and September respectively. There are judgements and estimates made in selecting appropriate assumptions in valuing the Group's defined benefit pension obligations, including discount rates, mortality and inflation (see note 23 on pages 195 and 198). These variables can have a material impact in calculating the quantum of the defined benefit pension liability.

How this was addressed

The Committee considered reports by the Group, including those from independent external specialists and, in particular, it considered the accounting and disclosures in those reports relating to the Group's closure to future accrual of the main UK schemes. Management's selection of assumptions was challenged and key assumptions were examined against external benchmarks. Based on this review (including reports from the external auditor) and consideration of the valuation methods applied, the Committee is comfortable that the key assumptions and accounting treatment are reasonable and appropriate.

(iii) Management override of controls

Internal controls are the safeguards put in place by the Group to protect its financial resources from fraud and abuse by colleagues. Management is responsible for ensuring the internal controls are followed across the Group. As such, intervention by management in the handling of financial information and making decisions contrary to the internal control policy is a significant, if unlikely, risk. With the increase in remote working in 2020, there are additional potential risks.

How this was addressed

The Committee discussed with management, and with Divisional Finance Directors in their regular Committee presentations, the mitigation of control risks, in particular in the remote working environment. The Committee also noted the high quality of response by management to any deviations from Group policies. Regular cycles of internal and external audits by independent parties have been put in place to review financial information. The audits are objective reviews on compliance with the Group's accounting policies. The Group also continues to provide additional resource to its internal audit function having appointed its fourth dedicated internal auditor in 2020 and invested in the increased use of data analytics.

Management has commenced a programme to further review the internal financial control environment and the Committee receives regular updates on progress. The Committee remains satisfied with the Group's monitoring of the effectiveness of the internal control systems.

(iv) Acquisitions and goodwill

There is a high level of judgement surrounding the valuation of goodwill and intangibles and the risk of impairment in respect of major acquisitions such as the Electric Thermal Solutions business.

How this was addressed

The Committee received detailed reports from management outlining their review of potential impairments and the basis for key assumptions.

The Committee focused on the key assumptions around valuation of goodwill for the Electric Thermal Solutions cash-generating unit and, in particular, sales and earnings before interest and tax (EBIT) growth and EBIT margin forecasts as well as cash generation assumptions. Discount rates used and sensitivities on reasonable possible changes to key assumptions were examined and challenged.

The Committee concluded it was comfortable that key assumptions were reasonable and resulted in value in use exceeding carrying values with no impairment required, including when sensitivities were applied.

(v) Financial resilience

The ability of the Group to fund its business in the short, medium and long term is critical to the success of its business model. Liquidity, financial capacity and compliance with bank terms and covenants are key elements.

How this was addressed

Whilst not considered a significant concern within the Group's Financial Statements, during 2020 (against the backdrop of the COVID-19 pandemic) the Committee was focused on monitoring the Group's financial resilience and the steps taken by the Group to strengthen its liquidity. The Committee was kept updated by management of their actions in this regard, including the Group's focus on improving working capital and the completion of a planned refinancing programme in May 2020, which further strengthened the Group's balance sheet. The Committee noted that the Group operated throughout 2020 very comfortably within its banking covenants. Further detail of the Group's financial resilience can be found on page 56 to 57.

Critical judgements and key sources of estimation uncertainty in the Financial Statements

After reviewing the presentations and reports from management and consulting with the auditor, the Committee is satisfied that the Financial Statements appropriately address the critical judgements and key sources of estimation uncertainty, both in respect of the amounts reported and the disclosures. The Committee is also satisfied that the significant assumptions used for determining the value of assets and liabilities have been appropriately scrutinised, challenged and are sufficiently robust (including those within the significant issues noted on pages 110 to 111). The Committee discussed the significant issues with Deloitte during the external audit planning process and at the finalisation of the year-end audit, and is satisfied that the Committee's conclusions are in line with those drawn by the auditor in relation to these issues.

The Committee reviewed the 2020 Going concern and Viability Statements (see pages 56 to 57 for further detail) and was satisfied that these represented accurate assessments of the Company's position at the date of the Statements.

External audit process

This is the seventh financial year in which the Annual Report and Financial Statements have been audited by Deloitte LLP, following their appointment as the Company's external auditor from 20th May 2014.

4. Audit, risk and internal control *continued*

Audit Committee Report *continued*

This appointment is subject to on-going monitoring and will run for a maximum of 10 years before being tendered. One of the primary responsibilities of the Committee is to assess the robustness of the external audit process and make recommendations to the Board in relation to the appointment, re-appointment or removal of the external auditor.

The Committee took a number of factors into account when evaluating the effectiveness of the external audit including:

- the content of the Financial Reporting Council's (FRC) 2019/2020 Audit Quality Inspection Report covering its conclusions of a review of a selection of Deloitte audits, together with Deloitte's response and actions;
- evidence gathered first-hand by the Committee about the performance of the auditor, in particular (i) the quality and scope of the planning of the audit which is provided and presented to the Committee early in the audit cycle (in October 2020 for the 2020 audit) with clear initial judgements on materiality; and (ii) presentations from the audit partner and his team at each of the Committee meetings, in which they clearly and efficiently highlight key matters arising and any areas on which they have challenged management; and
- feedback from all audited Group companies, the Group Finance team, management and Directors on the audit process and the quality and experience of the audit partners engaged in the audit by way of completion of a post-audit questionnaire (such feedback indicating that overall Deloitte performed all audits well). There is a follow-up process in place to resolve all issues raised.

Based on this evidence, the Committee was able to conclude positively on the external audit quality and the performance of Deloitte. The Independent Auditor's Report on pages 154 to 161 contains a summary of their audit approach.

Andrew Bond continued as audit partner for a second year. Andrew took over the position in 2019, in line with the requirements to rotate the audit partner at least every five years.

The Group has complied with the provisions of the Competition and Market Authority (CMA) Order, issued by the CMA in September 2014, for "The Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities)".

Audit fees and auditor re-appointment

During 2020, the Committee reviewed and approved the proposed audit fees and terms of engagement for the 2020 audit and recommended to the Board that it proposes to shareholders that Deloitte LLP be re-appointed as the Group's external auditor for 2021 at the AGM to be held on 12th May 2021.

Safeguarding independence and objectivity

The Committee recognises that the independence of the external auditor is an essential part of the audit framework and has adopted a policy for determining whether it is appropriate to engage the Group's auditor for non-audit services. This policy has been updated in 2021 in line with the current FRC's Ethical Standard and its definitions of permitted and prohibited services. The policy states that any expenditure with the Group's auditor on non-audit fees should not exceed 70% of the average audit fees charged in the last three-year period. Further, where the fees for any individual engagement in relation to the non-audit services are in excess of £100,000, pre-approval is required from the Committee.

A cumulative annual cap of £300,000 is set in respect of non-audit services provided by the auditor, above which all individual engagements must be pre-approved by the Committee. In addition to the Group's policy, the auditor runs its own independence and compliance checks, prior to accepting any engagement, to ensure that all non-audit work is compliant with the FRC's Ethical Standard in force and that there is no conflict of interest. The Auditor Engagement Policy can be found on the Group's website, www.spiraxsarcoengineering.com (under Governance documents).

During the year, the Group spent £0.1 million on non-audit services provided by Deloitte LLP, which included work undertaken on the interim review. These non-audit fees equate to 5% of the average of Group audit fees charged over the past three years. Further details can be found in Note 7 on page 181. No significant non-audit services were provided by Deloitte LLP.

Auditor payments 2020 £m



Internal audit

Throughout 2020, the Committee assessed the effectiveness of the internal audit process, following the significant progress made over the past three years. In addition to reviewing and approving the internal audit charter, the Committee reviewed the schedule of planned internal audits undertaken in 2020 and assessed the robustness of the control framework that is in place to track and monitor progress in remedying any identified deficiencies. This review ensures that the Committee is able to give assurances that the Group has an effective and integrated risk management framework, in addition to the oversight provided by the Risk Management Committee. The Committee also has oversight of the internal audit budget and resources available and it has satisfied itself that the Internal Audit function has the appropriate level of resources and funds available to undertake its role. The function has a good level of expertise and an active skills development programme with a continued focus on building analytics skills.

Indeed, during 2020, the Internal Audit team was strengthened by the appointment of another senior internal auditor and together they performed a total of 31 internal audits, with the majority conducted remotely. On the whole, the companies audited had an effective control environment. Where issues were found, remediation actions were agreed that are tracked to completion and validated before being closed. To the extent that any internal audit action items become overdue, the Divisional Finance Directors are notified to assist with ensuring they are closed as soon as possible. The Committee noted that with the increased internal audit resource and coverage, more action items were generated. However, the Committee also noted that throughout 2020 management devoted significant resource to their resolution, with Divisional Finance Directors now also monitoring progress and supporting prompt resolution by their teams. The Committee receives regular reports on closure rates and will continue to monitor outstanding actions.

In 2020 an Internal Audit quality assurance review was carried out by the Committee in line with the Institute of Internal Auditors standards. Further improvements from 2019 have been achieved. A high level of compliance was recorded. The main areas for improvement being formalisation of information sharing with other assurance providers and more complete evaluation of risk management processes (scheduled for 2021).

A more formal external quality assessment of the Internal Audit function is scheduled for 2021 (noting such a review is required every five years).

Ensuring a fair, balanced and understandable Annual Report

During 2020, the Committee considered many components of business performance in order to ensure it has a full understanding of the operations of the Group. Key matters considered by the Committee include:

- determining the position adopted in judgement and estimate areas for pensions;
- risk areas set out in the Risk Management Committee Report;
- receipt of regular strategy reports from the Group Chief Executive and operational reports from the Divisional Directors;
- reviews of the budget and operational plan; and
- consideration of judgements and estimates.

Through these processes and its monitoring of the effectiveness of controls, internal audit and risk management, the Committee is able to maintain a good understanding of business performance, key areas of judgement and decision-making processes within the Group.

One of the most important governance requirements of the Committee is for the Annual Report to be fair, balanced and understandable. The co-ordination and review of the Group-wide input into the Annual Report is a significant exercise performed within an exacting time frame, which runs alongside the formal audit process undertaken by the external auditor.

The Directors acknowledge their responsibility for preparing the 2020 Annual Report. In accordance with the Code, the Directors confirm that they consider the Annual Report, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's financial position, performance, business model and strategy. An overview of the processes involved to achieve this are set out in the following table.

Audit Committee oversight of the Annual Report

- Assessed the consistency of the risks and judgements.
- Reviewed the Board minutes to ensure issues of significance were given prominence.
- Arrived at a position where initially the Committee and then the Board were satisfied with the overall fairness, balance and clarity of the Annual Report.

Specific actions taken to achieve this included:

- comprehensive guidance for contributors at operational level;
- verification process dealing with the factual content of the reports;
- consideration of the appropriateness of alternative performance measures;
- comprehensive reviews undertaken at different levels in the Group that aim to ensure consistency and overall balance; and
- comprehensive review by the senior management team.

Committee focus for 2021

In addition to on-going monitoring of risks, internal audit reviews and the quality of the Financial Statements, reporting and governance, the focus of the Committee for 2021 will include:

- monitoring and supporting the Group's assessment of its financial and fraud risks and the continued strengthening of its internal controls environment;
- reviewing sources of assurance and development of an Audit and Assurance policy;
- ensuring compliance with an expected increase in governance requirements;
- continuing to monitor the quality of internal audits and external audits, particularly those that have to be conducted remotely as a result of the pandemic; and
- assessing the Group's non-financial information reporting (including information covered by The Task Force on Climate-related Financial Disclosures).

I will be attending the Company's AGM in May 2021 and will be happy to answer any questions on this report or the activities of the Committee.

Kevin Thompson
Chair of Audit Committee

Further reading

See pages 56-57

Our Going Concern Statement.

See pages 56-57

Our Viability Statement.

See page 57

4. Audit, risk and internal control *continued*

Risk Management Committee Report



We reassessed our risks and mitigation strategies in light of the COVID-19 pandemic.”

Nicholas Anderson
Chair of Risk Management Committee

Members

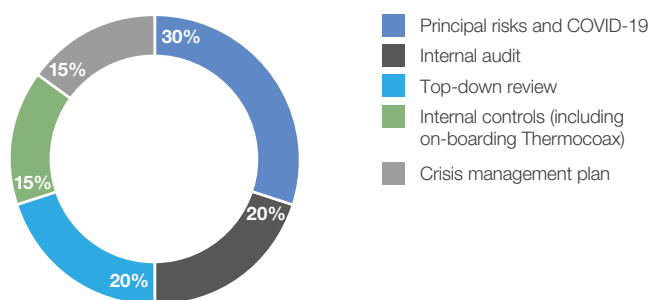
Our Risk Management Committee comprises:

	No. of meetings attended*/ total no. of meetings held	Attendance %
Nicholas Anderson (Chair)	✓ ✓ ✓ ✓ ✓	100%
Neil Daws	✓ ✓ ✓ ✓ ✓	100%
Jim Devine	✓ ✓ ✓ ✓ ✓	100%
Dan Harvey	✓ ✓ ✓ ✓ ✓	100%
Dominique Mallet	✓ ✓ ✓ ✓ ✓	100%
Andrew Mines	✓ ✓ ✓ ✓ ✓	100%
Nimesh Patel¹	✓ ✓ ✓	100%
Andy Robson	✓ ✓ ✓ ✓ ✓	100%

* K.J. Boyd attended three meetings prior to his retirement on 30th September 2020.

¹ N. Patel appointed to the Committee 27th July 2020.

How the Committee spent its time



Committee role and responsibilities

The Committee oversees the management and control of significant risks affecting the Group. The Committee ensures that the Group has risk management policies and procedures, including those covering project governance, sanctions and embargoes, crisis management, human rights, business continuity and business management.

The Committee's responsibilities include:

- using top-down and bottom-up reviews, understanding the risks facing the Group, including all workforce-related risks;
- determining our appetite for risk;
- monitoring any emerging risks on the horizon;
- accepting and managing within the businesses those risks which our colleagues have the skills and expertise to understand and leverage; and
- identifying appropriate risk mitigation techniques and countermeasures.

Meetings

The Committee met five times in 2020. A summary of the Committee's activities throughout the year is set out on page 115.

Key Risk Management Committee activities



- Risk appetite rating validated two risks: (1) Inability to identify and respond to changes in customer needs and (2) Solution Specification Failure



- Risks identified to be reassessed in light of COVID-19
- Benchmarking of principal risks against eight peer organisations and consideration of any suggestions in light of review



- Consideration of responses to the top-down review
- New Terms of Reference adopted
- Updated and approved risk register, based on top-down review and exceptional changes arising from the impact of COVID-19



- Discussion of results of risk scoring and changes in year-on-year trend



- Final approval of principal risks and risk register
- Validation of risk appetite scores of principal risks

Chair's review of 2020

Summary of key focus areas 2020

In keeping with the goals set for the year, in 2020 the Committee closely monitored the COVID-19 pandemic and revised the risk register accordingly in line with its impact. In addition to that process, the Committee executed its plans for Brexit, including any adjustments to provide for the revised framework under the Free Trade Agreement signed between the UK and the EU at the end of 2020.

The Committee completed its biennial top-down review of risks, and updated the Group risk register accordingly. The Committee also continued to monitor the impact of climate change and elevated the risk in its risk register.

Anti-Bribery and Corruption (ABC)

The Group has continued to reinforce the message of zero tolerance for bribery and corruption within its businesses.

In 2019, new ABC training was hosted by the Spirax Sarco Academy as part of the Group Essentials training module. By the end of 2020, the new training was available in 16 key languages and almost 5,700 colleagues (including Directors) worldwide have undertaken the ABC training. The Group also uses an independent, third-party whistle-blowing hotline to enable colleagues to anonymously report any suspected unethical, illegal or otherwise concerning conduct.

Additionally, in line with our Gifts, Entertainment and Hospitality Policy, we maintain an online gift register, where colleagues record gifts so as to ensure our conduct is in keeping with our highest ethical expectations and within the law.

Further updates on whistle-blowing and ABC can be found in our Sustainability Report on page 73.

Modern Slavery Statement

The Group has updated its Modern Slavery Statement to reflect the Group's Values and the interplay between those Values and our commitment to the mission behind the UK Modern Slavery Act. The updated Statement also tracks our progress in incorporating our new acquisitions into our Global Excellence in Supply Chain Initiative. The 2021 Statement can be found on the Group's website, www.spiraxsarcoengineering.com, under Sustainability (Our supply chain).

Identifying emerging and principal risks

We have a robust risk management process in place through which we identify, evaluate and manage the principal risks and emerging risks that could impact the Group's performance.

During 2020, we reviewed the Group's exposure to risk using a top down approach. Following this process, the Committee reviewed and confirmed the robustness of the countermeasures that Group companies have in place to mitigate the principal risks in the Group risk register. Our principal risks and the results of the 2020 review are set out in the Strategic Report on pages 62 to 65. Our approach to emerging risks is further described on page 61.

Climate risk

As climate-related risks continue to evolve, we are regularly assessing and monitoring the same with the aim of mitigating their impact where possible. We also recognise the importance of considering climate risks and opportunities in our business decisions and acknowledge that adopting the recommendations of the Task-Force on Climate-related Financial Disclosures (TCFD) is an important step in supporting the transition to a low-carbon economy. Our disclosures, set out on pages 78 to 80, demonstrate how we are managing our climate impact and how our business is evolving in response to the risks and opportunities arising.

Willis Towers Watson annually assess the impact of climate change on our Group companies using Global Peril Diagnostic and Property Quantified Results.

Going forward, climate risk will be managed holistically by the Committee with regular updates to the Group Executive Committee and the Board. We will also progress further with the implementation of the TCFD recommendations, including alignment of our short, medium and long-term outlook on climate risk with our Group's broader risk time horizons.

4. Audit, risk and internal control *continued*

Risk Management Committee Report *continued*

COVID-19

The onset of the COVID-19 pandemic at the end of 2019 was an event that few businesses could have foreseen. The Committee determined that the COVID-19 pandemic was not a risk in itself but was rather of a magnitude where it affected many of the risks on our Risk Register and that it would be more meaningful for the Risk Register to be comprehensively revised to take account of the COVID-19 pandemic.

Accordingly, the COVID-19 pandemic triggered a closer review of our approach to risk assessment. For instance, it emphasised the importance of having localised countermeasures and robust decision-making processes. It also initiated a deeper review of our impact assessment and mitigation plans for a number of key risks. Additionally, the COVID-19 pandemic highlighted the need to focus on colleague safety and wellbeing to ensure we have a capable and productive long-term workforce. This included considerations such as remote working and cybersecurity.

Monitoring effectiveness:

(i) Risk management systems

The Committee is responsible for reporting to the Board the risks facing the Group and the countermeasures related to those risks. To fulfil that responsibility, the Committee oversees the Group's risk management processes and procedures, with reliance on the Audit Committee for oversight of the Group companies.

Further, the Committee is charged with the on-going monitoring of sufficient and effective mitigation plans for relevant risks at each Group operating company and business group.

Each operating company is required to undertake a formal review, at least once a year, of the risks which impact, or have the potential to impact, its business. This includes all risk related to that company's workforce. The reviews are consolidated into Group-wide risk reports which are maintained and reviewed by the Committee on a regular basis. Additionally, the risk management processes are monitored on an on-going basis via internal and external audits of Group companies. Senior managers have full accountability of the risk management within their businesses.

The governance structure provides three lines of defence in the Group's risk management, as illustrated below.

Three lines of defence

First line of defence

- The business is responsible for the identification, control and management of its own risks.

Second line of defence

- The Risk Management Committee, with the Audit Committee, ensures that the risk and compliance framework is effective so as to facilitate the monitoring of risk management with on-going challenge and review of the risk profile in the business.

Third line of defence

- Internal audits provide independent testing and verification of compliance with policies and procedures and monitoring of follow-up actions where required.

(ii) Internal control systems

The Group employs a specific on-going review process for identifying and managing risks faced by the Group. The process includes assessment of the effectiveness of all material controls, including financial, operational and compliance controls, as well as risk management systems.

The review confirms that proper accounting records have been maintained, that financial information used within the business is reliable and that the preparation of the Consolidated and Company Financial Statements and the financial reporting process comply with all relevant regulatory reporting requirements.

Every year, via a self-certification questionnaire backed up by rigorous internal audit reviews, compliance with the policies, procedures and minimum requirements for an effective system of internal controls is undertaken. The Committee uses this information, as well as information from the top-down and bottom-up risk review processes, to have meaningful and on-going oversight of risks across the business.

While internal controls are not an absolute assurance against material misstatement or loss, the Board believes the regular cycle of review paired with internal monitoring provides a commercially sound approach to protect the Group from the risks that are a necessary part of its operations. As required by the UK Listing Authority, throughout the year and up to the date of the publication of the Annual Report, the Group has complied with the Code provisions on internal controls.

(iii) Internal audit

The Group's standard policy regarding internal auditing is that each operating company is audited once every five years (most more frequently). Operating companies located in higher risk territories are audited more frequently, and businesses acquired by the Group are subject to internal audit within six months of acquisition.

The internal audit system is a crucial part of the risk management process. The internal audits are conducted by our internal audit team led by Dan Harvey, Head of Internal Audit, who has over 20 years of professional experience.

Audit reports are made to the Audit Committee and the Board as a whole. The Committee has ensured compliance with centrally documented control procedures on such matters as capital expenditure, information and technology security, and legal and regulatory compliance.

(iv) Fraud risk assessment

A fraud risk assessment will be completed by the Head of Internal Audit during the first half of 2021 and any areas for improvement identified in the Group's fraud countermeasures will be remediated during the latter part of the year.

As a first stage, a fraud risk workshop was held in February 2021 with the Chief Financial Officer, Group General Counsel, Audit Committee Chair and senior managers from across the divisions and Group functions in attendance. This identified the six key fraud risk areas that will be considered as part of the exercise.

Risk Appetite Statement

Risk is an inherent part of business and, in order to achieve our business aims, we must accept certain risks. We seek to implement a balanced approach to risk, ensuring that our resources are protected while still pursuing opportunities to accelerate and deliver growth.

The decision to take opportunity-based risks should, to the greatest extent possible, be deliberate and calculated.

We aim to confirm that the level of risk is commensurate with the strategic and economic benefits the risk might bring; we evaluate our ability to control the risk or mitigate its effects, should that risk materialise; and we always assess the potential ethical considerations arising from knowingly accepting some level of risk.

An informed and well-considered process is crucial to any decision to accept risk. The Committee has undertaken a thorough evaluation process to determine an appropriate risk appetite rating for each principal risk. These are set out in detail on pages 62 to 65.

In summary, the Group has a very low appetite for risks that could lead to violations of health, safety and environmental legislation, breaches of legal and regulatory requirements and climate change that affects its operations.

In contrast, the Group has a high risk appetite in relation to economic and political instability; with decades of experience in successfully managing operations in volatile markets, we have the control procedures in place to handle the challenges that come with those risks and we appreciate that without taking risks in new, albeit sometimes unstable, territories we would miss out on valuable opportunities for growth.

As an organisation we are risk aware, but not risk averse. We continually monitor and assess the risks facing the Group and evaluate our ability to control them and mitigate their effects. Focusing on our strategic objectives, we evaluate our risk appetite and decisions to accept risk in a way that will ensure the on-going financial health of the Group.

Viability Statement

In accordance with provision 31 of the UK Corporate Governance Code 2018, the Board has assessed the viability of the Group, taking into account the Group's current financial position, business strategy, the Board's risk appetite and the potential impacts of the Group's principal risks. We set out the eight principal risks we have identified, along with our mitigation measures, in our Risk Management report.

Based on this assessment, the Board confirms that it has a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due over the three-year period to 31st December 2023.

The Viability Statement is set out in full on page 57 of the Financial review.

Committee focus for 2021

- Bottom-up risk review and annual review of risk register.
- Board review of risk management process.
- Continue to closely monitor COVID-19, taking action to mitigate its effects, particularly the impact on workforce.
- Closely monitor the impact of Brexit.
- Assess emerging risks, including climate change, with focus on risk appetite in light of digital strategies and geographic expansion.
- Reflect on accelerated sustainability implementation and whether this impacts positively on our risks and risk management.

Nicholas Anderson

Chair of Risk Management Committee

Further reading

[Risk management and principal risks](#)

 [See pages 60-65](#)

5. Remuneration

Remuneration Committee Report



The Committee, together with the Board, would like to thank all of our colleagues who have demonstrated personal commitment, courage and resilience throughout this extraordinary year.”

Jane Kingston
Chair of Remuneration Committee

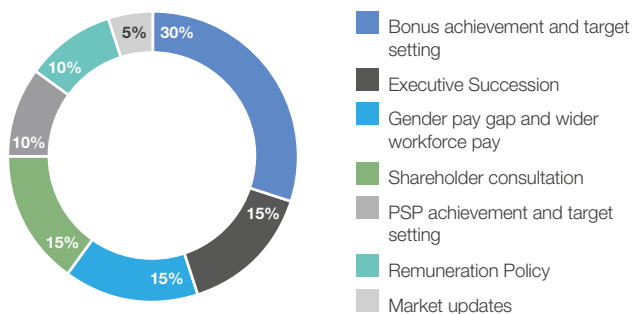
Members

Our Remuneration Committee comprises:

	No. of meetings attended/ total no. of meetings held	Attendance %
Jane Kingston (Chair)	✓ ✓ ✓ ✓ ✓	100%
Trudy Schoolenberg	✓ ✓ ✓ ✓ ✓	100%
Kevin Thompson	✓ ✓ ✓ ✓ ✓	100%
Caroline Johnstone	✓ ✓ ✓ ✓ ✓	100%
Peter France	✓ ✓ ✓ ✓ ✓	100%
Angela Archon¹	✓	100%
Olivia Qiu¹	✓	100%

¹ A. Archon and O. Qiu appointed on 1st December 2020.

How the Committee spent its time



Committee role and responsibilities

The Committee determines the philosophy, principles and policy of Executive and senior manager remuneration having regard to the latest legislation, corporate governance, best practices and the FCA Listing Rules. The Committee takes account of workforce remuneration and related policies and the alignment of incentives and rewards with culture. The Committee's role has expanded under the UK Corporate Governance Code. The Committee now reviews remuneration policy and practices that apply to the Group Chief Executive, Executive Directors, the Group Executive Committee and senior managers. The main role of the Committee is to determine Executive remuneration policies, how they are applied and set targets for the short and long-term incentive schemes. It also monitors compliance with the presiding Remuneration Policy.

Key Remuneration Committee activities 2020



- Shareholder consultation update
- 2020 Remuneration Policy
- Statement of Committee Chair
- Annual Report on Remuneration 2019
- Annual bonus – 2019 outcome and 2020 targets
- LTIP – 2017 outcome and 2020 targets
- New Chief Financial Officer's compensation



- New Managing Director, Steam Specialties' compensation
- Retiring Managing Director, Steam Specialties' arrangements
- Executive remuneration landscape update
- Group Chief Executive pay ratio reporting
- Pay and benefits landscape
- Forecast performance against AIP and LTIP
- 2020 Remuneration recommendations for Executive Directors and Group Executive Committee



- Retiring Chief Financial Officer's arrangements

Statement by Committee Chair

Dear shareholder,

On behalf of the Board, I am pleased to present the Directors' Report on Remuneration for the year ended 31st December 2020. During 2020, the Committee focused on the Remuneration Policy renewal and the change of our Chief Financial Officer, together with managing and mitigating the impact of COVID-19 across all of our markets. This Report has been prepared in accordance with Provisions 40 and 41 of the Code.

As highlighted earlier in the Annual Report, COVID-19 first made an impact on our business in China and many of our Asian markets early in Q1, affecting both supply from China and orders in general. This scenario followed in Europe from Q2 and the Americas thereafter. Due to the dedication of our colleagues and innovation in digital communication, our operations swiftly adapted and all of our businesses continued to operate at near to expected capacity. The financial performance of the Group has been impressive, narrowly missing the sales and profit targets that were set pre-COVID-19 for 2020.

Throughout 2020, our primary concern has been to ensure the health, safety and wellbeing of our people, who adapted to new ways of working in the field, created COVID-19 safe supply environments and continued to serve our customers around the world. The Committee, together with the Board, would like to thank all of our colleagues who have demonstrated personal commitment, courage and resilience throughout this extraordinary year.

2020 Remuneration Policy

In the early part of 2020, the Committee focused on the renewal of our Remuneration Policy (Policy) and I would like to thank shareholders for their advice and support. Our 2020 Policy received 96% votes in favour and ensured we met or exceeded important governance standards, as we promised our shareholders we would in 2019. These changes included in-post and post-termination shareholding requirements, bonus deferral and addressed both new and incumbent Directors' pension arrangements.

The Annual Report on Remuneration 2020 explains in detail how we implemented the Policy, what actions were taken by the Committee as a result of the pandemic and sets out the performance criteria for 2021. The key points are also set out below.

Impact of COVID-19 on remuneration

While our business has been impacted by the effects of the global pandemic, we are fortunate to have a more robust and resilient business.

The Group was able to perform exceptionally well without using state aid in any of our markets, whether in the form of government loans or utilising furlough schemes. The Board was delighted to approve both the 2019 final and 2020 interim dividend payments to shareholders.

Throughout 2020, the Committee continually monitored remuneration and employment decisions taken across the Group. We considered all decisions on Executive Director and senior management pay during 2020 in this context and assessed the impact of our decisions on our stakeholders, including shareholders and the wider communities where we operate.

The Committee was mindful that remuneration decisions could contribute to wider cost saving initiatives and thus help mitigate the impact of COVID-19 upon our business. As a result, the following actions were taken:

- Effective 1st April 2020, voluntary salary reductions were implemented of up to 20% across all businesses. Over 100 senior managers and executives, including the Board, participated for a six-month period. Due to a strong business recovery, we were able to shorten this period to four months and, in December 2020, reimbursed the contributions to those who had agreed to the voluntary salary reduction. We would like to thank our people for the high level of contribution they made in such a challenging year.
- We concentrated on colleague wellbeing by encouraging remote close teamwork and implemented an Employee Assistance Programme, which provided support and counselling.
- Defined benefit schemes were closed to future accruals in the UK, Germany, Canada and Brazil. In some markets, we improved and equalised the overall level of retirement benefit implementing enhanced pension schemes in Aflex Hose in the UK and for all those at lower salary thresholds in Brazil.

2020 performance-based rewards

I have already mentioned that despite the extreme volatility and complexities faced in 2020, the Group's performance was very resilient, outperforming our markets and many of our industrial peers. Group revenues declined by 4%, operating profit by 4% and organic sales declined by 3%. However, due to determined efforts to reduce short-term costs and preserve cash, our adjusted trading margin of 22.7% was only 10 bps lower than that achieved in 2019 and was up 40 bps on an organic basis.

The Committee carefully considered the impact of COVID-19 on our colleagues and all other stakeholders together with the strong business results. We determined that payments to senior managers and Executive Directors, under both our short and long-term incentive plans, were appropriate in this context. We did not adjust our pre-COVID-19 targets. These outcomes are fully detailed in the pages that follow with the highlights noted overleaf.

Annual Incentive Plan (AIP)

Operating profit targets set in January 2020 were only achieved by the Watson-Marlow business and not at Group level nor by the Steam Specialties or Electric Thermal Solutions businesses. Therefore, for Executives and most senior managers there is no pay-out for this element (accounting for between 60% and 70% of the opportunity).

5. Remuneration *continued*

Remuneration Committee Report *continued*

The Group's cash generation target (20% of the opportunity) was met with a 100% pay-out. In the early months of 2020, as COVID-19 began to impact our business in China and Asia, the Committee decided to widen the cash measure to include capex in addition to working capital. All strategic capex was ring-fenced and so we were challenging our businesses to reassess how essential it was to invest in less important projects. The change in definition was designed to not make the targets easier to achieve. The Committee specifically reserved the ability and subsequently gave careful consideration to ensuring that savings were not at the expense of strategic capex or paying our suppliers. We were satisfied that not only were our strategic projects fully protected, but the list was expanded by including new investments such as the Watson-Marlow manufacturing site in the USA and the purchase of Northcroft House in Cheltenham. This wider definition of the cash measure will apply for 2021 and beyond and enable the tighter control of marginal capex projects to take place.

Finally, despite the pandemic and due to excellent leadership, strong progress has been made versus personal strategic objectives, with all objectives fully realised.

Performance Share Plan (PSP) January 2018 – December 2020

Like many businesses, the performance measures for the PSP were negatively impacted by the detrimental effects of COVID-19. However, during the three-year performance period ending 31st December 2020, earnings per share grew by 28.2%. The Group also delivered a total shareholder return (TSR) of 108.1% over this period (as determined under our PSP), placing us first in the ranking of our TSR comparator group and thus qualifying participants for full vesting of this element of the 2018 PSP.

The Group's resilient performance has delivered results in line with external expectations and many of our challenging internal goals. The Committee is especially pleased that strong and ambitious progress has been made on the Group's key strategic projects for future growth. The Committee also noted that none of the targets for our PSP awards have been altered.

Resulting performance outcomes

Our Remuneration Policy is designed to ensure that a percentage of Executive Director pay is based on the achievement of demanding performance targets and is therefore at risk. Maximum pay-out under the AIP and PSP is only possible as a result of significant strong out-performance of demanding goals. The Committee has made a robust and full assessment of both financial and non-financial measures and carefully considered the impact of COVID-19. Arising from this, payments under the AIP to Executive Directors range from 30.0% to 45.0% of salary and I am pleased to confirm 73.9% vesting of the 2018 PSP award.

The Committee is satisfied that the total remuneration received by Executive Directors for 2020 appropriately reflects the Company's performance over the year, is in line with the Policy and is consistent with the approach taken for other colleagues.

It is also satisfied that the approach to setting remuneration underpins the effective and proper management of risk by rewarding fairly for sustainable profit growth and long-term return for shareholders.

The Committee considers that the remuneration paid to Executive Directors in 2020 (given as a single figure for each Director on page 123) reflects progress made during an extraordinary year, as well as over the past three years.

Plans and targets for 2021

The Committee agreed that the current arrangements for both the AIP and LTIP remain appropriate for 2021. Measures, weightings and ranges are unchanged. AIP measures will continue to be operating profit (70%), cash generation (20%) and personal strategic objectives (10%). The AIP targets and achievement will be published retrospectively. Details of the 2021 LTIP measures and targets, which are unchanged, are provided on page 129.

Chief Financial Officer appointment

Nimesh Patel joined the Company on 27th July 2020 on a base salary of £480,000, a pension contribution of 10% of salary (in line with Policy and at the same level as all new UK colleagues) and incentives and benefits consistent with the Remuneration Policy (maximum annual bonus opportunity of 125% of base salary, 2020 PSP award of 175% of salary). Nimesh received both share and PSP awards designed to compensate him for remuneration forfeited with his previous employer. These include a share award on joining, which will lapse should he be a bad leaver within two years of appointment, together with PSP awards vesting in the period 2021 to 2023 with approved performance conditions. His salary is higher than his predecessor's salary reflecting the external market place from which we recruited. However, in comparison with the incentive amounts forfeited at his previous employer, these replacement awards are not higher in value, vest no earlier and have a higher proportion subject to performance testing. Further details are found on page 131.

Executive Director retirements in 2020

Kevin Boyd retired on 30th September 2020. Remuneration details of his replacement, Nimesh Patel, are set out above.

Neil Daws, Managing Director, Steam Specialties, retired on 31st December 2020. Neil's replacement, Maurizio Preziosa, will not serve as an Executive Director.

Both Kevin and Neil will be entitled (under the AIP rules) to receive any bonus payments due (prorated to service where appropriate) for 2020. They will be entitled to receive in flight shares that vest under the 2018, 2019 and 2020 PSP awards, prorated for service in accordance with PSP rules. In addition, the two-year post-termination shareholding requirements of the 2020 Remuneration Policy will apply.

2021 salary review

The Committee considered salary review arrangements planned across the Group for implementation with effect from 1st January 2021. The proposed country norm for the UK is 2%, which was the level of increase applied to the base salaries of the Group Chief Executive and Chief Financial Officer. The Committee considered a review was appropriate in the light of 2020 business performance.

Wider workforce environment and workforce engagement

In relation to actively engaging with our workforce and compliance with Code provisions 40 and 41, each year prior to making decisions on Executive pay, the Committee considers the wider pay and benefits landscape across our markets including pay reviews, benefits and bonus arrangements. During this most challenging year, we continually monitored remuneration decisions taken across the Group. As trading performance remained strong in Q3 and Q4, the senior leadership team were very aware of the impact of salary sacrifice measures implemented at lower levels in some businesses within the Group. Colleagues were able to raise issues at the regular all employee virtual town hall meetings that were held throughout the year. As a Board we were pleased to endorse the proposal in December to reverse salary reductions volunteered in March at all levels and in all markets across the Group. This also applied to the Executive Directors and the Group Executive Committee.

We welcome feedback from employees in one-to-one performance reviews, Works Council meetings in countries where they operate as a collective voice, engagement surveys, through line manager dialogue and up through the HR function to the Group Executive Committee and Remuneration Committee in our open culture.

Whether our colleagues are shareholders or not, they have access to this Annual Report (with its clear explanations of the alignment of Executive Director remuneration to business strategy and wider workforce pay policy) and our corporate website, and their views are welcomed. As an international business we operate across countries with very different cultures, some more comfortable with dialogue on remuneration and some with greater expectations. Our Executive remuneration arrangements were largely unchanged for 2020 and so a lower level of dialogue is to be expected. In the run up to the next Directors' Remuneration Policy review we expect the level of two-way engagement to increase.

We are proactively continuing the development of our Group-wide engagement and inclusivity framework including via the Employee Engagement Committee. We hope through these channels to hear more from colleagues around the world on all aspects of our business including Executive, and broader aspects of, remuneration, and will report on progress as this develops.

Shareholder consultation

On behalf of the Committee, I had the opportunity to speak with a number of our key shareholders whose advice has been reflected in the 2020 Policy. We consulted extensively with shareholders during the formulation of the 2020 Remuneration Policy and their input guided the Committee's decisions on phased pension payment reductions for serving Executive Directors. We also confirmed the implementation of commitments made in 2018 and 2019 when we carried out a wide-ranging review of Executive Director remuneration (in-post and post-termination shareholding requirements, bonus deferral, and addressed both new and incumbent Directors' pension arrangements recovery provisions and PSP vesting).

Executive pensions

A plan to achieve pension equity across the Group was accelerated in 2020. This included the closure of the UK final salary scheme during the year. The Committee is reviewing the impact of this decision on the blended workforce average in the UK and remains committed that serving Executive Directors will achieve this rate by the close of 2022, and the maximum rate for Executive Directors will now be the new joiners rate of 10% by the end of 2023 at the latest.

Looking forward

2020 has been challenging for the business. The Executive Directors, our Group Executive Committee, along with all of our colleagues across the world have worked tirelessly to ensure that the business remains strong and that we and our customers have been able to stay safe throughout. The Committee is committed to ensuring the remuneration arrangements continue to support the efforts of the workforce and the objectives of the strategy, whilst aligning pay with strong performance.

Environmental, Social and Governance (ESG)

In 2020, the Group made a strong commitment to its ESG agenda by focusing on sustainability as a key strategic theme (see pages 27 and 35) and appointing a Group Head of Sustainability, who reports to the Group Chief Executive.

We are on a journey and, as our plans and measures evolve, the Committee will decide on how best to reflect this important strategic theme in remuneration arrangements.

Committee focus for 2021

- How to reflect Sustainability/ESG initiatives in remuneration arrangements.
- How to develop further employee engagement on remuneration issues.
- Executive Remuneration Philosophy.

Jane Kingston

Chair of Remuneration Committee

9th March 2021

5. Remuneration *continued*

Remuneration at a glance 2020

How we performed

Remuneration key performance indicator	2020 actual	2020 threshold	2020 target	2020 maximum	Remuneration measure
Group operating profit (£m)	274.9	278.8	293.5	308.1	Annual Incentive Plan
Group cash generation (£m)	275.8	231.1	243.2	255.4	Annual Incentive Plan
2018-2020 EPS (%)	28.2	18.4	N/A	41.8	Performance Share Plan
2018-2020 relative TSR (percentile TSR)	1st	50th	N/A	25th	Performance Share Plan

Executive Directors' remuneration and shareholdings

The Executive team has consistently delivered upper quartile performance for shareholders and this is reflected in the results of both the annual bonus and LTIP. The Committee is pleased with the work of the Executive team and is confident that this vesting outcome is reflective of the value delivered to the business.

Executive Director	Single total remuneration figure (£000)				Shareholding policy vs actual shareholding (% of salary)			
N.J. Anderson Group Chief Executive	2020	<div><div>779</div><div>271</div><div>1,167</div></div>			£2,220	2020	<div><div>300</div><div>830</div></div>	
	2019	<div><div>757</div><div>725</div><div>1,304</div></div>			£2,788	2019	<div><div>300</div><div>545</div></div>	
N.B. Patel ¹ Chief Financial Officer from 11th September 2020	2020	<div><div>317</div><div>75</div><div>975</div></div>			£1,367	2020	<div><div>200</div></div>	
	2019	N/A			N/A	2019	N/A	
K.J. Boyd ² Chief Financial Officer from 10th September 2020	2020	<div><div>354</div><div>88</div><div>1,149</div></div>			£1,594	2020	<div><div>200</div><div>317</div></div>	
	2019	<div><div>492</div><div>322</div><div>708</div></div>			£1,438	2019	<div><div>200</div><div>204</div></div>	
N.H. Daws ³ Managing Director, Steam Specialties	2020	<div><div>495</div><div>114</div><div>574</div></div>			£1,186	2020	<div><div>200</div><div>1,265</div></div>	
	2019	<div><div>481</div><div>348</div><div>642</div></div>			£1,473	2019	<div><div>200</div><div>926</div></div>	
		<div>Fixed</div>	<div>Annual Bonus</div>	<div>LTIP</div>		<div>Shareholding policy</div>	<div>Actual shareholding</div>	

■ Fixed

■ Annual Bonus

■ LTIP

■ Shareholding policy

■ Actual shareholding

¹ N.B. Patel joined the Company on 27th July 2020.

² K.J. Boyd retired on 30th September 2020.

³ N.H. Daws retired on 31st December 2020.

Overview of the Executive Directors' Remuneration Policy

Base salary	Benefits	Pension	Annual bonus award	Performance Share Plan (PSP)
To enable the Group to attract, retain and motivate high-performing Executive Directors of the calibre required to meet the Group's strategic objectives.	To provide market competitive benefits, and to enable the Executive Directors to undertake their roles through ensuring their wellbeing and security.	To offer appropriate levels of pension, and to attract and retain individuals with the personal attributes, skills and experience required to deliver Group strategy.	To incentivise and reward performance against selected KPIs which are directly linked to business strategy, while ensuring a significant proportion of Executive Director remuneration is directly linked to business performance.	To incentivise and reward Executive Directors for delivering against long-term Group performance, to align Executive Directors' interests to those of shareholders, and to retain key Executive talent.

Changes at a glance 2020

Executive Directors	2020 Base salary	Change from 2019
Nicholas Anderson	£602,000	2.9%
Nimesh Patel ¹	£480,000	N/A
Kevin Boyd ²	£391,600	2.9%
Neil Daws	£380,400	2.9%

¹ From appointment on 27th July 2020.

² To retirement on 30th September 2020.

Non-Executive Directors	2020 Fee	Change from 2019*
Jamie Pike	£222,360	2.9%
Trudy Schoolenberg	£63,260	2.9%
Jane Kingston	£63,260	2.9%
Kevin Thompson	£63,260	2.9%
Caroline Johnstone	£63,260	2.9%
Peter France	£53,260	2.9%
Angela Archon ¹	£53,260	N/A
Olivia Qiu ¹	£53,260	N/A

* The 2.9% increase applies to base fee. Committee Chair and Senior Independent Director fees of £10,000 each were unchanged.

¹ From appointment on 1st December 2020.

Annual Report on Remuneration 2020

Strategic alignment

The Committee ensures that the remuneration paid to the Executive Directors, and the Group Executive Committee, is closely aligned with and reinforces the Group strategy. At their meeting in June 2020 the Board reviewed the strategic plan.

This alignment is achieved by using the strategic plan to set financial and individual strategic objectives for the Executive Directors, and the Group Executives, and, from this, bonus targets are agreed and approved by the Committee. This process forms part of the annual Board calendar, with the bonus targets approved in the early part of the financial year. The Group's strategic themes are set out on page 27.

1.0 Annual Report on Remuneration 2020

This section sets out the Directors' remuneration for the financial year ended 31st December 2020.

Senior leaders' cost contribution - voluntary salary reduction

Due to the impact of COVID-19, Nicholas Anderson, Kevin Boyd and Neil Daws, together with the Non-Executive Directors and over 100 senior managers and executives across all businesses, volunteered to take a 20% salary reduction for a six-month period with effect from 1st April 2020. Due to a strong business recovery, we were able to shorten this period to four months and, in December 2020, reimburse the contributions to all those who had participated.

1.1 Single total figure of remuneration (audited)

Executive Directors

	N.J. Anderson		N.B. Patel ¹		K.J. Boyd ²		N.H. Daws ³	
	2019	2020	2019	2020	2019	2020	2019	2020
Salary	£585,000	£602,000	N/A	£209,231	£380,500	£267,593	£369,600	£380,400
Pension	£146,250	£150,500	N/A	£20,923	£95,125	£73,425	£92,400	£95,100
Benefits ⁴	£26,115	£26,871	N/A	£86,707	£16,644	£12,844	£19,128	£19,609
Total fixed pay	£757,365	£779,371	N/A	£316,861	£492,269	£353,862	£481,128	£495,109
Annual bonus	£724,851	£270,900	N/A	£75,000	£321,918	£88,110	£348,126	£114,120
PSP ⁵	£1,304,135	£1,166,935	N/A	£975,159	£708,066	£1,149,321	£642,201	£573,819
ESOP ⁶	£1,900	£2,558	N/A	N/A	£1,900	£2,558	£1,900	£2,558
Total variable pay	£2,030,886	£1,440,393	N/A	£1,050,159	£1,031,884	£1,239,989	£992,227	£690,497
Single total figure	£2,788,251	£2,219,764	N/A	£1,367,020	£1,524,153	£1,593,851	£1,473,355	£1,185,606

Chair and Non-Executive Directors

	J. Pike		G.E. Schoolenberg ⁷		J.S. Kingston		K.J. Thompson ⁸	
	2019	2020	2019	2020	2019	2020	2019	2020
Fees	£216,090	£222,360	£58,042	£63,260	£61,760	£63,260	£39,115	£63,260
Single total figure	£216,090	£222,360	£58,042	£63,260	£61,760	£63,260	£39,115	£63,260

	C.A. Johnstone ⁹		P. France		A. Archon ¹⁰		O. Qui ¹⁰	
	2019	2020	2019	2020	2019	2020	2019	2020
Fees	£46,769	£63,260	£51,760	£53,260	N/A	£4,438	N/A	£4,438
Single total figure	£46,769	£63,260	£51,760	£53,260	N/A	£4,438	N/A	£4,438

¹ N.B. Patel joined the Company on 27th July 2020 and was appointed to the Board on 11th September 2020.

² K.J. Boyd retired on 30th September 2020. His 2020 salary excludes the 20% voluntary salary reduction of £26,107 referred to in the paragraph above. (See also Payments to past Directors on page 132.)

³ N.H. Daws retired on 31st December 2020.

⁴ The 2020 Benefits are set out in the table on page 124.

⁵ The 2020 column relates to the vesting of the 2018 PSP award on 5th March 2021 (N.J. Anderson, N.B. Patel and N.H. Daws). The 2020 column also relates to the vesting of K.J. Boyd's 2018 and 2019 PSP awards on his retirement date (30th September 2020). (See page 130 for further details on the vesting of these PSP awards, page 131 for N.B. Patel's exceptional awards* and page 133 for further details on the interests of Executive Directors in the PSP.) The 2019 column relates to vesting of the 2017 PSP award valued at 8655.0p.

Executive Directors	Date of grant of PSP award	Grant share price	No. of vested shares	Vesting share price	Amount attributable to growth in share price
N.J. Anderson	04.04.18	5560.0p	10,825	10780.0p	£565,065
N.B. Patel	27.07.20	7842.0p	9,046	10780.0p	£265,771
K.J. Boyd	04.04.18	5560.0p	6,682	11065.0p	£367,844
K.J. Boyd	15.05.19	8161.3p	3,705	11065.0p	£107,582
N.H. Daws	04.04.18	5560.0p	5,323	10780.0p	£277,861

⁶ Matching shares awarded during the year based on the mid-market price of the shares on the date of award; 11120.0p for 2020 and 7600.0p for 2019. (See page 133 for further details on the 2020 award.)

⁷ G.E. Schoolenberg was appointed Senior Independent Director on 15th May 2019.

⁸ K.J. Thompson was appointed to the Board and as Audit Committee Chair on 15th May 2019.

⁹ C.A. Johnstone was appointed to the Board on 5th March 2019 and as Chair of the newly established Employee Engagement Committee on 1st June 2019.

¹⁰ A. Archon and O. Qui were appointed on 1st December 2020.

5. Remuneration *continued*

Annual Report on Remuneration 2020 *continued*

Salary/fees

The following table sets out the 2020 base salary with effect from 1st January 2020 for each of the Executive Directors, compared to 2019.

Executive Directors	2019	2020	Increase
N.J. Anderson	£585,000	£602,000	2.9%
N.B. Patel ¹	N/A	£480,000	N/A
K.J. Boyd ²	£380,500	£391,600	2.9%
N.H. Daws	£369,600	£380,400	2.9%

¹ N.B. Patel joined the Company on 27th July 2020.

² K.J. Boyd retired from the Company on 30th September 2020.

The 2020, base salaries increased by 2.9% in line with the relevant workforce average, with above average increases available for top performers in accordance with internal guidelines. The increases for Executive Directors, like those of the broader UK employee population, took account of both individual performance and market data.

Nimesh Patel's salary is higher than his predecessor's (Kevin Boyd) reflecting the external market place from which we recruited.

The following table sets out the Policy fees for the Chair and Non-Executive Directors for 2020. Actual fees received, based on role and date of appointment, are set out in the Single Total Figure of Remuneration table on page 123. Pay for the Chair and Non-Executive Directors does not vary with performance. Fees for Non-Executive Directors are reviewed annually. The Chair and Non-Executive Directors did not receive any taxable benefits.

Chair and Non-Executive Directors	Basic fees	Additional fees	2020 Total fees
J. Pike	£222,360	N/A	£222,360
G.E. Schoolenberg ¹	£53,260	£10,000	£63,260
J.S. Kingston ²	£53,260	£10,000	£63,260
K.J. Thompson ²	£53,260	£10,000	£63,260
C.A. Johnstone ²	£53,260	£10,000	£63,260
P. France	£53,260	N/A	£53,260
A. Archon ³	£53,260	N/A	£53,260
O. Qiu ³	£53,260	N/A	£53,260

¹ G.E. Schoolenberg received £10,000 in respect of her duties as Senior Independent Director.

² C.A. Johnstone, J.S. Kingston and K.J. Thompson each received £10,000 in respect of their role as Employee Engagement Committee Chair, Remuneration Committee Chair and Audit Committee Chair respectively.

³ A. Archon and O. Qiu were appointed on 1st December 2020.

The Chair and Non-Executive Director fees were reviewed at the end of 2019 and were increased by 2.9%, consistent with the average rate of increase in the UK. The fee for the Senior Independent Director and Committee Chairs remained at £10,000, the benchmarked median.

Benefits (excluding pension)

Benefits	N.J. Anderson	N.B. Patel ¹	K.J. Boyd ²	N.H. Daws
Company car and associated running costs or cash alternative allowance	£26,467	£7,289	£12,541	£19,205
Private health insurance	£404	£173	£303	£404
Mobility-related benefit – relocation allowance	–	£79,245	–	–

¹ N.B. Patel joined the Company on 27th July 2020 and was appointed to the Board on 11th September 2020.

² K.J. Boyd retired on 30th September 2020.

Pension

Full details of the pension benefits are set out at section 1.2 on page 131.

Annual bonus

Executive Directors participate in the annual bonus plan, which rewards them for financial performance both at Group level and, where relevant, the business segment for which they are responsible. Targets are reviewed annually to ensure continuing alignment with strategy and are agreed at the start of the year. Resulting awards are determined following the end of the financial year by the Committee, based on performance against these targets.

For the Group Chief Executive, achievement of target performance results in a bonus of 90% of salary, increasing to 150% of salary for maximum performance. For the new Chief Financial Officer, Nimesh Patel, achievement of target performance results in a bonus of 75% of salary, increasing to 125% of salary for maximum performance. For the previous Chief Financial Officer, Kevin Boyd (retired 30th September 2020), and the Managing Director, Steam Specialties, Neil Daws (retired 31st December 2020), achievement of target performance resulted in a bonus of 60% of salary, increasing to 100% of salary for maximum performance.

Bonus payments are subject to a contractual right for the Company to clawback or apply malus for up to three years following payment. Circumstances that may result in a clawback or malus include financial misstatement, erroneous calculations determining bonus payments, gross misconduct, corporate failure or reputational damage.

In accordance with Policy, Executive Directors must use any bonus earned over 80% of maximum opportunity net of tax, if they have met their shareholding requirement, or any bonus earned over 60% of maximum opportunity, net of tax, if they have not met their shareholding requirement, to purchase shares in the Company until their shareholding guideline has been met. The shares must be held for two years. This is, in effect, a bonus deferral mechanism. To demonstrate our commitment to this principle, prior to the introduction of our 2020 Remuneration Policy, in 2019 our Group Chief Executive volunteered that any bonus earned above 125% (his maximum bonus opportunity at that time) would be subject to this mechanism for a two-year holding period.

The majority of each Executive Director's bonus opportunity (90%) is based on the achievement of stretching financial performance targets in areas that directly align with our areas of strategic focus. The remaining 10% is based on the achievement of individual strategic objectives, tailored to each Director's areas of responsibility. Performance standards are agreed and communicated at the start of the year. Financial measures have an established threshold, target and maximum with a sliding scale between each. Individual strategic measures are subject to three possible achievement levels: fully achieved, partially achieved and not achieved.

The table below sets out the performance measures that each of the Executive Directors' bonus awards were subject to.

2020 Measures (% of bonus)	Achieved (% of bonus)			
	N.J. Anderson	N.B. Patel ¹	K.J. Boyd ²	N.H. Daws
Group operating profit (70%)	0%	0%	0%	–
Group cash generation (20%)	20%	20%	20%	–
Personal strategic objectives (10%)	10%	10%	10%	–
Steam Specialties operating profit (50%)	–	–	–	0%
Group operating profit (20%)	–	–	–	0%
Group cash generation (20%)	–	–	–	20%
Personal strategic objectives (10%)	–	–	–	10%

¹ N.B. Patel joined the Company on 27th July 2020.

² K.J. Boyd retired from the Company on 30th September 2020.

The performance measures are adjusted to reflect certain items including the amortisation of acquisition-related intangible assets and exceptional reorganisational costs and to exclude any profit contribution and other impacts such as major acquisitions during the period.

2020 was a good year for the Group producing robust and reliable results in the face of a pandemic headwind and increased dividend to shareholders. The annual bonus payments to Executive Directors ranged between 30% and 45% of salary.

The table below summarises the achieved performance in 2020 in respect of each of the measures used in the determination of annual bonus, together with an indication of actual performance relative to target.

	Actual performance ¹	Achieved (% of target)	Threshold	Target	Maximum
Group operating profit	£274.9m	93.7%	£278.8m	£293.5m	£308.1m
Group cash generation	£275.8m	113.4%	£231.1m	£243.2m	£255.4m
Steam Specialties operating profit	£156.9m	90.6%	£164.4m	£173.1m	£181.7m

¹ To comply with the annual bonus plan rules these metrics use, as a base, the actual adjusted operating profit of £270.4 million for segmental operating profit performance, and exclude centrally allocated overheads from both the target measure and actual performance.

Personal strategic objective assessment

The Executive Directors were each obliged to complete an appraisal self-assessment on their performance against each personal strategic objective. The Group Chief Executive reviewed this self-assessment with the Executive Director and made his own assessment. In the case of the Group Chief Executive, the Chair of the Board conducted the assessment. A report was submitted to the Committee and, at its February 2021 meeting, the Committee reviewed the recommendations and approved a final decision.

The personal strategic objectives for 2020 are detailed on pages 126 to 128.

5. Remuneration *continued*

Annual Report on Remuneration 2020 *continued*

Personal strategic objective 2020	Description	Achievement
Nicholas Anderson		
Health, Safety and Sustainability (HS&S)	Improve the Group's HS&S performance: ensure improved H&S performance across the Group's Finance function, strengthening HS&S awareness and culture. Support the implementation of the Group's Sustainability programme.	The Group's HS&S performance improved in 2020 with both lagging and leading indicators making progress on 2019. There was a 15% reduction in lost time incidents. The number of minor (first aid) accidents fell by 30% in 2020 to 340 (482 in 2019). The 2020 Group accident rates (per 100,000 work hours) for lost time injuries improved by 12% while the "all accidents" rate fell by 13%.
Strategy implementation	Review and refresh the business strategies for the Watson-Marlow and Electric Thermal Solutions businesses.	Both business strategy reviews commenced in mid-January with full participation of the respective senior leadership teams. Final versions were presented at the Board strategy meeting in June and, during Q3, both businesses launched strategies to all employees. The implementation and governance plans were finalised during Q4 2020.
Thermocoax integration	Complete the integration of Thermocoax into the Electric Thermal Solutions business.	Thermocoax Isopad GmbH integrated with Chromalox Germany GmbH in October 2019 and during 2020 performed in line with expectations. Full year trading profit remained positive, despite sales volume being below Plan due to the COVID-19 pandemic. The integration of the small Alpharetta (USA) manufacturing facility into the Tennessee and Laredo plants was postponed until performance of the receiving plants has stabilised. Combined engineering, business development and back-office activities were created in France and the USA, while the integration of customer-facing activities were defined during the Electric Thermal Solutions business strategy review and will be implemented from 2021 onwards.
COVID-19	Successfully navigate Group through COVID-19 pandemic.	Multiple initiatives were undertaken to minimise infection rates amongst our global workforce and protect their health, safety and wellbeing. Only 10 of 30 manufacturing facilities suffered brief business interruptions, none lasting more than 15 days. Sadly, cases of COVID-19 occurred amongst our employee base (3.7%) in 2020, with 197 cases (68%) occurring in Q4 as the second and third pandemic waves ravaged the northern hemisphere. However, in over 85% of the confirmed cases, we were able to verify that the infections did not occur while in the Group's facilities, validating the strong protocols implemented across the Group. We secured extra liquidity lines preventively during Q2 and exceeded the £39 million full-year overhead savings target against Plan, underpinning the 22.7% trading profit margin achieved in 2020.
Nimesh Patel		
Health, Safety and Sustainability (HS&S)	Support the Group's HS&S drive to improve performance, strengthening HS&S awareness and culture. Support the implementation of the Group's Sustainability programme.	Engagement through the Group Executive Committee to help drive our continued commitment to improving safety and progressing our initiatives; supported the wellbeing of the Finance team during lockdown through regular 1:1 engagements and online social activities; worked with the Head of Sustainability to appoint consultants, understand investor needs and assess reporting frameworks; and introduced a specific Safety, Inclusion and Sustainability conversation within the Finance community to help emphasise that every person has a role in fulfilling our purpose.
Investor relations	Maintain excellent shareholder relations, keeping shareholders and the market appropriately informed to ensure analyst consensus remains in line with management's expected business performance.	Increased investor engagement through virtual meetings during COVID-19 to ensure investor base was kept informed on our response to the pandemic; built relationships with the analysts and ensured we were available to help them understand the business, its performance and prospects; and continued the development of the Investor Relations Officer, including through the defining our more structured approach to investor relations.

Personal strategic objective 2020	Description	Achievement
Nimesh Patel <i>continued</i>		
Information Technology and Systems	Advance the Group's global cybersecurity infrastructure, processes and responsiveness. Support the Steam Specialties' development of a global Enterprise Resource Planning (ERP), Customer Relationship Management (CRM) and Business Intelligence (BI) proposal (Project OPAL) and digital strategy.	Progressed our cybersecurity defences through achieving Cyber Essentials certification for Spirax Sarco and Watson-Marlow, continuing the education of internal colleagues around the threat and partnering with Verizon for cyber monitoring and response; supported the development of Project OPAL, successfully rolled-out in the Nordics; and contributed to the digital strategy through Information Systems' participation and based on prior experience.
COVID-19	Support the Group's initiatives in response to the COVID-19 pandemic: deploy all necessary actions to minimise infection rates and maintain safe operations across the Group during the COVID-19 pandemic, while maintaining the Group's reported trading margin above 20.0% in 2020.	Worked to model the impact of the pandemic on the financial position of the Group and develop response plans; engaged with financing providers to maintain support and confidence in our ability to withstand the challenges; and worked to ensure no disruption to critical Group processes as a result of pandemic related restrictions (e.g. internal and external audit).
Kevin Boyd		
Health, Safety and Sustainability (HS&S)	Improve the Group's HS&S performance: ensure improved H&S performance across the Group's Finance function, strengthening HS&S awareness and culture. Support the implementation of the Group's Sustainability programme.	The Group's HS&S performance improved in 2020 with both lagging and leading indicators making progress on 2019. There was a 15% reduction in lost time incidents. The number of minor (first aid) accidents fell by 30% in 2020 to 340 (482 in 2019). The 2020 Group accident rates (per 100,000 work hours) for lost time injuries improved by 12% while the "all accidents" rate fell by 13%.
Investor Relations	Maintain excellent shareholder relations, keeping shareholders and the market appropriately informed to ensure analyst consensus remains in line with management's expected business performance.	Increased investor relations activity during the crucial time of lockdown to ensure the investor base was kept informed on how we were dealing with the pandemic; attended a number of virtual conferences and roadshows; and trained the Investor Relations Officer.
Information Technology and Systems	Advance the Group's global cybersecurity infrastructure, processes and responsiveness. Support the Steam Specialties' development of a global Enterprise Resource Planning (ERP), Customer Relationship Management (CRM) and Business Intelligence (BI) proposal (Project OPAL) and digital strategy.	Cybersecurity remained a priority and continued to advance. The Information Systems department supported colleagues in other areas of the business on Project OPAL and digital strategy.
Treasury	Develop and implement a new Group foreign exchange hedging policy. Strengthen Group cash flow management and reporting practices across the Group's operating companies. Appoint a third bank and implement cash pooling in Europe and the USA. Support mergers and acquisitions funding requirements.	New foreign exchange hedging policy implemented; cash reporting strengthened during pandemic; enlarged Revolving Credit Facility secured in middle of first lockdown ahead of schedule; achieved third party Investment Grade credit rating and government COVID Corporate Financing Facility secured (but not drawn down). US Private Placement secured and drawn down to support balance sheet during first lockdown; third bank appointed and cash pooling in Europe and USA implemented.
COVID-19	Support the Group's initiatives in response to the COVID-19 pandemic: deploy all necessary actions to minimise infection rates and maintain safe operations across the Group during the COVID-19 pandemic, while maintaining the Group's reported trading margin above 20.0% in 2020.	The work done on securing the Group's liquidity during the initial lockdown (see Treasury above) gave us the security to pay dividends and not take government aid. Reassured and communicated with investors to ensure ongoing share price stability and growth.
Neil Daws		
Health, Safety and Sustainability (HS&S)	Ensure improved Health & Safety performance in the Steam Specialties business, strengthening the EH&S awareness and culture. Implement Behavioural Based Safety (BBS) in all Supply companies and continue the implementation of the Group's Sustainability programme.	Year-on-year 25% reduction in "all accidents" and 39% reduction in "lost time injuries" in Steam Specialties. Achieved zero "lost time injuries" in the final two months of 2020. BBS training rolled out in all Sales and Supply companies. BBS observations at 2,500 in 2020 with 90% closure within one month. Steam Specialties carbon intensity reduced by 10% in 2020 and tonnes of carbon emitted reduced by 15%. Head of Sustainability appointed 1st December 2020.

5. Remuneration *continued*

Annual Report on Remuneration 2020 *continued*

Personal strategic objective 2020	Description	Achievement
Neil Daws <i>continued</i>		
Strategy implementation	Drive continuous strategy implementation, increasing product vitality through the launch of seven new products, effective price index pricing to match or exceed weighted average cost of inflation (WACI) and advance Gestra Market Intelligence Committee (MIC). Pilot Computer-aided Design (CAD)/Product Development Management (PDM) approach to prove concept by mid-2020. Start implementation of digital strategy through smart maintenance pilot. Accelerate Employee Engagement programmes.	Continued strong momentum in Customer First, all target sectors other than Oil & Gas have growth above the market, service levels are at record highs, product vitality has risen and pricing activity to achieve plan. CAD/PDM pilot has proven (exceeded) business benefit leading to higher levels of new product introduction. Digital maturity and offers continue to progress. New orders won for digital installation and maintenance contracts. E-commerce active in 10 target operating companies enabling customers' self-product selection, application advice, pricing and order placement.
Thermal Energy Synergies	Co-sponsor a synergy project with the Electric Thermal Solutions business, with special priority on de-carbonisation of steam generation through medium voltage heating solutions.	Required delayed start whilst Electric Thermal Solutions developed their business strategy during H1. Strong progress through H2 with very committed team and strong signs of business synergy and customer pull once solutions are proven. Combined market pilot running in the USA to validate sectorisation and cross-selling.
Project OPAL	Ensure successful roll-out across the Nordics region by April 2020 and Argentina and Latin America by October 2020. (ERP (Enterprise Resource Planning), CRM (Customer Relationship Management), CPQ (Configure, Price, Quote) and BI (Business Intelligence) modules.)	COVID work from home limitations delayed Nordics roll-out to September. However, instead of ERP only roll-out in April, we rolled out the complete system in September. Roll-out very successful, no loss of business, with transactions restarted within first 24 hours. Argentina model (includes Supply) making good progress, targeted for March 2021 roll-out as now the basis of Group-wide Supply model. Plans in place to roll out to 15 operating companies during 2021. 29 operating companies already live on new CRM.
COVID-19	Successfully navigate Steam Specialties through COVID-19 pandemic: deploy all necessary actions to minimise infection rates and maintain safe operations across Steam Specialties, while maintaining the Group's reported trading margin above 20.0% in 2020.	Major effort went into keeping our workplaces and employees safe. We did suffer constant inevitable infections but less than 12% (16 in total) happened in the workplace. Longest factory closure was India, for two weeks, due to Government instruction, customer impact barely registered globally and we believe we won market share due to our product availability. 3,500 nozzles manufactured for ventilators and over 6,000 pieces of personal protective equipment (PPE) donated to the local community in Cheltenham during the first wave.

The personal strategic objective achievement levels are set out below.

	Performance targets			
	Fully achieved	Partly achieved	Not achieved	% of bonus
N.J. Anderson	4	0	0	10%
N.B. Patel ¹	4	0	0	10%
K.J. Boyd ²	5	0	0	10%
N.H. Daws	5	0	0	10%

¹ N.B. Patel joined the Company on 27th July 2020 and was appointed to the Board on 11th September 2020.

² K.J. Boyd retired on 30th September 2020.

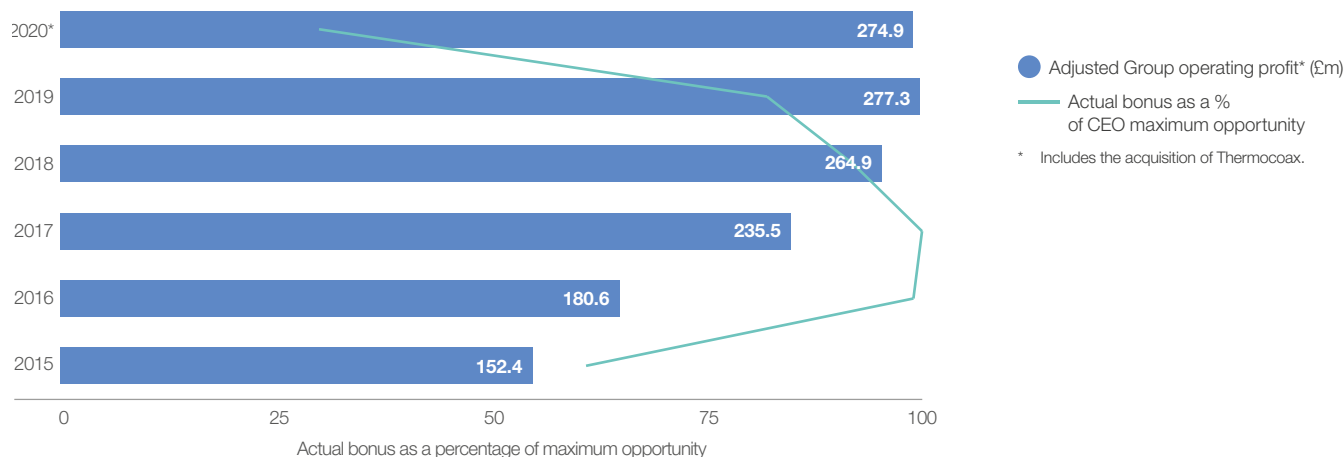
As a result of this performance in 2020, the following bonuses were achieved:

Executive Directors	Bonus achieved	Bonus (% of salary)
N.J. Anderson	£270,900	45.0%
N.B. Patel ¹	£75,000	37.5%
K.J. Boyd ²	£88,110	30.0%
N.H. Daws	£114,120	30.0%

¹ N.B. Patel joined the Company on 27th July 2020 and was appointed to the Board on 11th September 2020.

² K.J. Boyd retired on 30th September 2020.

The following graph provides a six-year summary of bonus outcomes for the Group Chief Executive against the performance of adjusted Group operating profit. This illustrates the strong historical alignment between pay and performance.



Spirax Sarco Performance Share Plan (PSP)

The Committee makes an annual conditional award of shares to each Executive Director under the PSP. Prior to award, the Committee reviews the performance targets for each measure to ensure they remain sufficiently stretching. For EPS this includes a review of analysts' forecasts.

PSP awards are subject to malus (reduction in the amount of deferred and as yet unpaid remuneration) and clawback (reimbursement of remuneration that has already been paid) for up to three years following the award, and can be applied during a holding period.

Circumstances that may result in a clawback or malus adjustment include financial misstatement, erroneous calculations determining bonus payments, gross misconduct, corporate failure or reputational damage.

Vesting is based on two performance conditions measured over a three-year period, which have been chosen as they are aligned with our strategy:

Performance measure	Weight	Threshold requirement	Maximum requirement
EPS growth	60%	Global IP +2% pa ¹	Global IP +8% pa
Relative TSR	40%	Median TSR	Upper quartile TSR

¹ The Global Industrial Production (IP) data source is the CHR Metals Global IP Index, providing data that incorporates over 90% of global industrial output.

For awards made in 2019 onwards, the Committee has reduced the value that can be earned for threshold performance from 25% of the award to 18%. Vesting between threshold and maximum is calculated on a straight-line basis.

The EPS element of the PSP is based on growth in excess of global industrial production growth rates, often referred to in our industry as "Global IP", rather than UK RPI. Global IP is a measure that the Board and management have used for some time as there is well documented evidence that it is the best predictor of the global and industrial markets within which the Group operates. For these reasons, Global IP was used in the formulation of the long-term strategic plan and targets for EPS growth approved by the Board. In setting the initial performance range in 2017, which was intended to be long-term in nature, the Committee reviewed the historical and projected data (2008 to 2021), including the Group's performance, market benchmarks and analysts' consensus. The Committee remains confident that this range remains sufficiently challenging across various market environments. Since 2018, EPS targets are also augmented to reflect the EPS obtained through major acquisitions. EPS disposed through the divestment of operating companies reduces EPS targets.

The TSR element of the PSP assesses TSR performance relative to a comparator group of companies that comprises the constituents of the FTSE 350 Industrial Goods and Services Supersector at the start of the performance period. This is the same sector classification as Spirax Sarco, and was selected as it objectively provides a sufficiently robust number of companies to compare performance against, that also operate in the industrial goods and services arena. While the exact number of companies varies from year-to-year, the comparator group generally has between 50 and 55 companies.

PSP awards vesting over 2018-2020

In 2018 the Executive Directors received share awards under the PSP, with vesting subject to EPS growth and relative TSR performance.

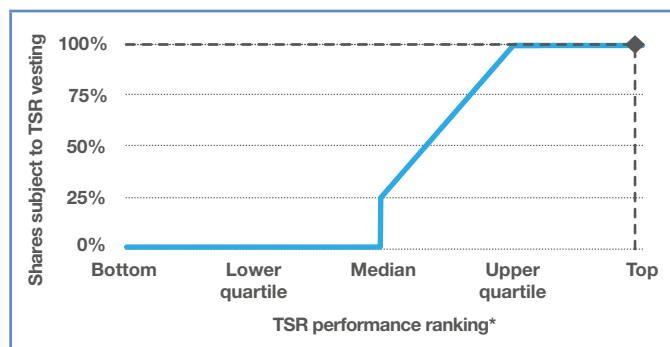
The diagrams on page 130 set out details of the performance measures and targets that applied, along with the actual performance during the period 1st January 2018 to 31st December 2020.

5. Remuneration *continued*

Annual Report on Remuneration 2020 *continued*

Relative TSR performance (40% of PSP award)

Over the three-year period to 31st December 2020, the Company delivered a TSR of 108.1%. This ranked in the top decile TSR of the comparator group significantly above the level required for full vesting. The comparator group, comprising 54 companies, for the purpose of measuring relative TSR performance was the FTSE 350 Industrial Goods and Services Supersector constituents at the start of the performance period.

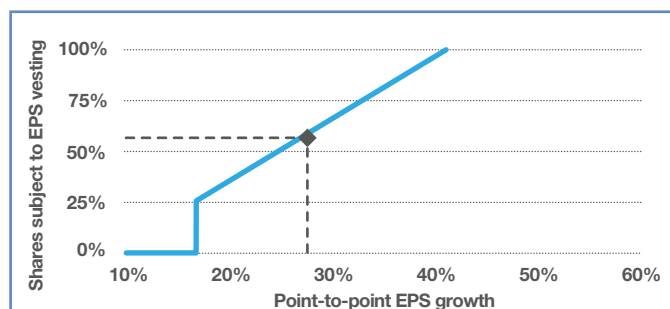


	Target	TSR	Vesting
Threshold	Median TSR	-8.0%	25.0%
Maximum	Upper quartile TSR or above	20.7%	100.0%
Actual		108.1%	100.0%

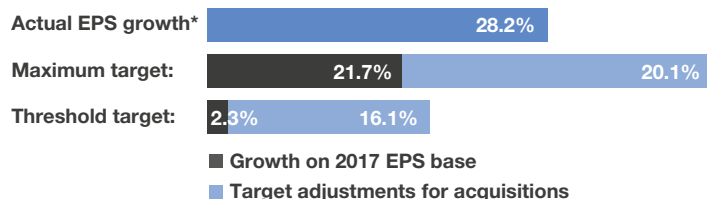
* Vesting is calculated based on Spirax Sarco's TSR relative to the median and upper quartile TSR of the peer group.

EPS growth (60% of PSP award)

Over the three-year period to 31st December 2020, the Company delivered adjusted EPS growth of 28.2%. This equated to growth of approximately 8.6% per annum over the three years. EPS is derived from the audited Annual Report for the relevant financial year but adjusted to exclude the items shown separately on the face of the Consolidated Income Statement. EPS is based on growth in excess of Global IP growth rates and augmented following the acquisitions of Gestra and Chromalox (see page 129).



	Performance (over 3 years)	Vesting
Threshold	18.4%	25.0%
Maximum	41.8%	100.0%
Actual	28.2%	56.4%



* Excludes the contribution of HygroMatik, which was sold in 2018, from the 2017 base.

As a result of the strong Company performance, as measured by relative TSR and EPS growth, 73.9% of the shares awarded under the 2018 PSP vested for Nicholas Anderson, Nimesh Patel and Neil Daws. The Committee considers that this result reflects holistic performance and a very positive return for shareholders.

91.8% of the shares awarded to Kevin Boyd under the 2018 PSP and 77.9% of the shares awarded under the 2019 PSP vested on 30th September 2020, his date of retirement.

Executive Directors	Award ¹	Vested ^{1,2}	Lapsed	Value on vesting ³
N.J. Anderson	14,649	10,825	3,824	£1,166,935
N.B. Patel ¹	12,241	9,046	3,195	£975,159
K.J. Boyd ²	7,942	6,682	1,260	£739,363
K.J. Boyd ²	8,158	3,705	4,453	£409,958
N.H. Daws	7,203	5,323	1,880	£573,819

¹ As set out on page 131, N.B. Patel received an exceptional PSP award at onboarding to replace existing arrangements with his former employer. Usual performance conditions applied. 63.85% of the award vested in the form of shares (5,776 shares) and 36.15% of the award vested in the form of a Nil Cost Option (3,270 shares) exercisable from March 2023.

² K.J. Boyd retired on 30th September 2020. Both his 2018 (7,942 shares) and 2019 (8,158 shares) PSP awards vested on retirement. The above awards have been prorated for service.

³ Based on share price at dates of vesting; 5th March 2021 (10780.0p) for N.J. Anderson, N.B. Patel and N.H. Daws and 30th September 2020 (11065.0p) for K.J. Boyd.

1.2 Pension (audited)

In line with the 2020 Policy which states incumbent Executive Directors' maximum pension is to be, by 31st December 2022, the current blended average in the market in which the Executive Director is based, reducing to the new Executive Director level by 2025, Nicholas Anderson received 25% of his basic salary in cash which, in the year ended 31st December 2020, amounted to £150,500.

Further to the above, a plan to achieve pension equity across the Group was accelerated in 2020. This included the closure of the UK final salary scheme during the year. The Committee is reviewing the impact of this decision on the blended workforce average in the UK and remains committed that serving Executive Directors will achieve this rate by the close of 2022, and the maximum rate for the Executive Directors will now be the new joiners rate of 10% by the end of 2023 at the latest.

Under the 2020 Policy, the maximum pension contribution for new Executive Directors is the same as the majority of newly appointed employees receive in the market in which the Executive Director is based. Therefore, Nimesh Patel receives 10% of his basic salary in cash which, in the year ended 31st December 2020, amounted to £20,923.

In lieu of pension benefits, Kevin Boyd received 25% of his basic salary in cash which, in the year ended 31st December 2020, amounted to £73,425. Kevin Boyd retired on 30th September 2020.

Neil Daws became a deferred member of an HMRC registered, contributory defined benefit scheme, the Spirax-Sarco Executives' Retirement Benefits Scheme, with effect from 31st December 2012, and is, therefore, no longer accruing any pension benefits within the defined benefit scheme. His defined benefit rights in the Scheme at 31st December 2020 were £6,516,860. In lieu of pension benefits, he received 25% of his basic salary in cash which, in the year ended 31st December 2020, amounted to £95,100. Neil Daws retired on 31st December 2020.

1.3 Scheme interests awarded during the financial year (audited)

Spirax Sarco Performance Share Plan (PSP)

All awards were granted under the PSP as a contingent right to receive shares, with the face value calculated as a percentage (200% for the Group Chief Executive and 175% for the Executive Directors) of base salary, using the share price at date of award (7775.0p). Awards were made on 13th March 2020. Nimesh Patel's award was made on 27th July 2020, his date of appointment, using the share price on 1st April 2020 (7842.0p), the date of his service agreement.

For awards made in 2020, vesting is based on two performance conditions measured over a three-year period, which have been chosen as they are aligned with our strategy. In addition to the three-year vesting period, a two-year holding period applies. These performance conditions are explained further on page 129.

Executive Director	PSP award ^{1,2}	Face value ³	Last day of the performance period	Vesting at threshold performance
N.J. Anderson	15,485 shares	£1,203,959	31.12.22	18%
K.J. Boyd ¹	8,814 shares	£685,288	31.12.22	18%
N.B. Patel	10,711 shares	£839,957	31.12.22	18%
N.H. Daws ²	8,562 shares	£665,695	31.12.22	18%

¹ K.J. Boyd retired on 30th September 2020. The above award has been prorated for service to 2,203 shares.

² N.H. Daws retired on 31st December 2020. The above award has been prorated for service to 2,854 shares.

³ Based on share price at date of award; 7775.0p for N.J. Anderson, K.J. Boyd and N.H. Daws and 7842.0p for N.B. Patel, as explained in the paragraph above.

Exceptional awards - Nimesh Patel

Awards were granted to Nimesh Patel to compensate him for remuneration forfeited with his previous employer. These include a share award on joining, which will lapse should he be a bad leaver within two years of appointment, together with PSP awards vesting in 2021 and 2022 with the same performance conditions as PSP awards granted under the Spirax Sarco Performance Share Plan that have performance periods ending on the same date. These performance conditions are explained further on page 129. The share price on 1st April 2020 (7842.0p), the date of Nimesh's service agreement, was used and the awards were made on 27th July 2020, his date of appointment. These awards are not subject to a holding period.

Executive Director	Type of award	Award	Face value	Last day of the performance period	Vesting at threshold performance
N.B. Patel ¹	Nil cost option	3,835 shares	£300,741	N/A	N/A
N.B. Patel ²	PSP	12,241 shares	£959,939	31.12.20	25%
N.B. Patel	PSP	12,241 shares	£959,939	31.12.21	18%

¹ Award will lapse if N.B. Patel is a bad leaver within two years of date of appointment.

² See page 130 for vesting of this award.

Spirax-Sarco Engineering plc Employee Share Ownership Plan (ESOP)

Executive Directors are eligible to participate in an HMRC approved Share Incentive Plan known as the ESOP. Nicholas Anderson is a participant and Kevin Boyd and Neil Daws were participants until retirement. Nimesh Patel was not eligible to participate in the 2019 ESOP. However, he is a participant in the 2020 ESOP which has a share purchase date of October 2021.

5. Remuneration *continued*

Annual Report on Remuneration 2020 *continued*

During the year ended 31st December 2020, Nicholas Anderson, Kevin Boyd and Neil Daws each purchased 23 partnership shares, were each awarded 23 matching shares and received eight, one and 12 dividend shares respectively. Further information is set out in the table on page 133.

The maximum annual investment in shares is £1,800 (the HMRC limit) for Executive Directors (and eligible UK employees). This can be matched by the Company on a one-for-one basis for each share that is purchased. Dividends paid can be reinvested as shares.

Shares acquired under the ESOP are not subject to performance measures as the aim of the ESOP is to encourage increased shareholding in the Company by all eligible UK employees. In 2020, 75.06% of eligible UK employees purchased partnership shares and were awarded matching shares under the ESOP.

1.4 Payments to past Directors (audited)

Following his retirement from the Company on 30th September 2020, Kevin Boyd received a payment related to his bonus entitlement as set out on page 128. In addition, the senior leaders' cost contribution voluntary salary reduction of 20% (£26,107) was reimbursed (see page 123).

1.5 Payments for loss of office (audited)

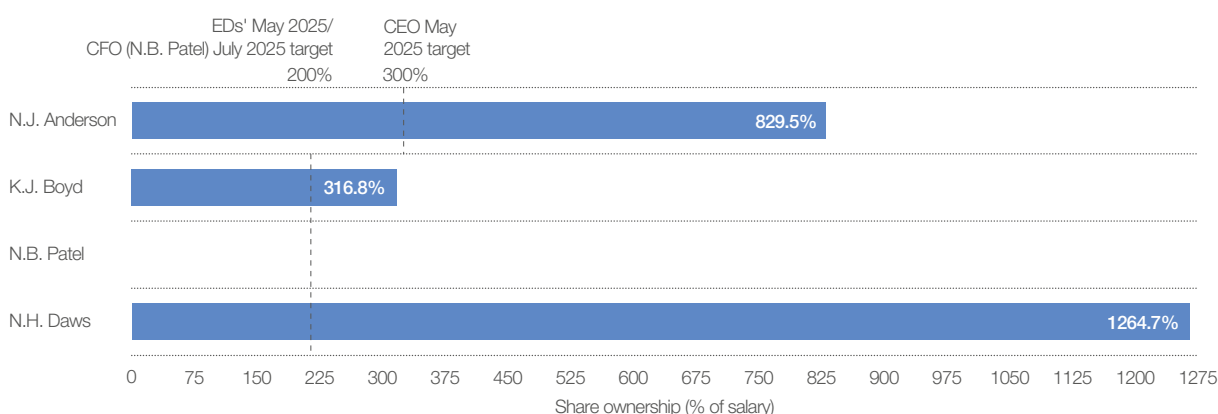
There were no payments made to Directors for loss of office during the year ended 31st December 2020.

1.6 Statement of Directors' shareholding and share interests (audited)

Progress towards share ownership guideline

In January 2019, the Executive Directors' share ownership guidelines were increased from 200% to 300% of base salary for the Group Chief Executive and from 125% to 200% of base salary for the other Executive Directors. These increased guidelines are included in our 2020 Policy.

The share ownership guidelines have been met by all Executive Directors, as illustrated in the chart below, with the exception of Nimesh Patel who joined the Company on 27th July 2020. The value of the shareholding is taken at 31st December 2020 as a percentage of 2020 base salary. The share price on 31st December 2020 was 11295.0p.



Outstanding share interests

The following table summarises the total interests of the Directors in shares of the Company as at 31st December 2020 or, as in Kevin Boyd's case, date of retirement if earlier. These cover beneficial and conditional interests. No Director had any dealing in the shares of the Company between 31st December 2020 and 9th March 2021.

	Beneficial ¹	PSP awards ^{2,5}	Nil-cost options ³	ESOP shares ^{4,5}	Total 31.12.20 (or date of retirement if earlier ⁶)	Total 09.03.21 ⁶
J. Pike	9,946	N/A	N/A	N/A	9,946	9,946
N.J. Anderson	43,476	44,469	0	737	88,682	84,858
N.B. Patel	0	35,193	3,835	0	39,028	35,833
K.J. Boyd ⁵	10,867	24,914	0	116	35,897	–
N.H. Daws	41,456	23,690	3,995	1,138	70,279	–
G.E. Schoolenberg	2,754	N/A	N/A	N/A	2,754	2,754
J.S. Kingston	3,900	N/A	N/A	N/A	3,900	3,900
K.J. Thompson	3,800	N/A	N/A	N/A	3,800	3,800
C.A. Johnstone	443	N/A	N/A	N/A	443	443
P. France	980	N/A	N/A	N/A	980	980
A. Archon ⁷	0	N/A	N/A	N/A	0	0
O. Qiu ⁷	0	N/A	N/A	N/A	0	0

¹ Shares include any owned by connected persons.

² Subject to the performance measures as set out on pages 129 to 130.

³ Explained in the table on page 131 (N.B. Patel) and in footnote 6 under the PSP table below (N.H. Daws).

⁴ Not subject to performance measures.

⁵ In addition, 23 partnership shares were purchased, at a price of 7835.0p, and 23 matching shares were awarded on 7th October 2020 in relation to K.J. Boyd's participation in the 2019 ESOP for the 12-month period from 1st October 2019 to 30th September 2020.

⁶ The decrease in shareholding at 9th March 2021 for N.J. Anderson and N.B. Patel is a result of 73.9% of the 2018 PSP award vesting and the balance of the award therefore lapsing. Full details are set out on page 130.

⁷ A. Archon and O. Giu joined the Board on 1st December 2020.

Spirax-Sarco Engineering plc Share Option Schemes (Option Schemes)

No Directors had interests under the Option Schemes.

Spirax Sarco Performance Share Plan (PSP)

The interests of Executive Directors in the PSP are set out below.

	Date of award			Balance	Vested	Lapsed	Awarded	Balance
	26.05.17 ¹	04.04.18/ 27.07.20 ²	15.05.19/ 27.07.20 ³	01.01.20/ 27.07.20	05.03.20 ¹	05.03.20 ¹	13.03.20/ 27.07.20 ⁴	31.12.20
N.J. Anderson	15,068	14,649	14,335	44,052	15,068	0	15,485	44,469
N.B. Patel	–	12,241	12,241	24,482	–	–	10,711	35,193
K.J. Boyd ⁵	8,181	7,942	8,158	24,281	8,181	0	8,814	24,914
N.H. Daws ^{5,6}	7,420	7,203	7,925	22,548	7,420	0	8,562	23,690

¹ The average mid-market price of the shares from 19th May to 25th May 2017 inclusive was 5256.0p. This was applied in determining the number of shares subject to the PSP awards granted on 26th May 2017. During the performance period 1st January 2017 to 31st December 2019, the TSR and the EPS performance of the Company resulted in 100% vesting. The shares vested on 5th March 2020 and the mid-market price of the shares on this date was 8655.0p. The 2017 awards vested in the form of whole shares.

² The mid-market prices of the shares on 4th April 2018 and 1st April 2020 were 5560.0p and 7842.0p respectively. These were applied in determining the number of shares subject to the PSP awards granted on 4th April 2018 (to N.J. Anderson, K.J. Boyd and N.H. Daws) and 27th July 2020 (to N.B. Patel) respectively. The period over which performance measures are calculated is 1st January 2018 to 31st December 2020. Details of the performance measures attached to these PSP awards are set out on pages 129 to 130 and details of the vesting of this award are set out on page 130. Further detail on N.B. Patel's exceptional PSP award is set out on page 131.

³ The average mid-market price of the shares from 9th May to 14th May 2019 was 8161.3p (N.J. Anderson, K.J. Boyd and N.H. Daws' awards). The share price on 1st April 2020 was 7842.0p (N.B. Patel's award). The period over which performance measures are calculated is 1st January 2019 to 31st December 2021. There are two performance measures governing vesting of this PSP award: 40% of the PSP award is subject to a TSR performance measure which requires the Company to rank at median relative to a comparator group of the constituents of the FTSE 350 Industrial Goods and Services Supersector for 18% of this portion of the PSP award to vest, increasing to full vesting for ranking at the upper quartile; 60% of the PSP award is subject to an EPS performance measure which requires growth of Global IP +2% per annum for 18% of this portion of the PSP award to vest, increasing to full vesting for growth of Global IP +8% per annum. A two-year post-vesting holding period applies to these awards, with the exception of N.B. Patel's exceptional PSP award. Further detail on this exceptional PSP award is set out on page 131.

⁴ The mid-market prices of the shares on 12th March 2020 and 1st April 2020 were 7775.0p and 7842.0p respectively. These were applied in determining the number of shares subject to the PSP awards granted on 13th March 2020 (to N.J. Anderson, K.J. Boyd and N.H. Daws) and 27th July 2020 (to N.B. Patel) respectively. The period over which performance measures are calculated is 1st January 2020 to 31st December 2022. Details of the performance measures attached to these PSP awards are set out on page 129. A two-year post-vesting holding period applies to these awards.

⁵ K.J. Boyd retired on 30th September 2020. His 2018 and 2019 PSP awards vested on this date. Details of the vesting of the 2018 PSP award are set out on page 130. The 2019 PSP award was prorated accordingly resulting in the vesting of 3,705 shares. The 2020 PSP award has been prorated for service to 2,203 shares (see page 131). N.H. Daws retired on 31st December 2020. Details of the vesting of the 2018 PSP award are set out on page 130. The 2019 PSP award has been prorated for service to 5,283 shares. The 2020 PSP award has been prorated for service to 2,854 shares (see page 131).

⁶ As noted in previous years, the 2011 PSP award that vested in 2014 took the form of a nil cost option. At 31st December 2020, N.H. Daws had a nil cost option balance of 3,995 shares.

Spirax-Sarco Engineering plc Employee Share Ownership Plan (ESOP)

The interests of eligible Executive Directors are set out below.

	Balance	Partnership shares	Matching shares	Dividend	Balance	Period of qualifying
	01.01.20	purchased ¹	awarded ¹	shares ²	31.12.20 (or date of retirement if earlier ¹)	conditions ³
N.J. Anderson	683	23	23	8	737	3 years
K.J. Boyd ¹	115	–	–	1	116	3 years
N.H. Daws	1,080	23	23	12	1,138	3 years

¹ Partnership shares were purchased, at a price of 7835.0p, and matching shares were awarded on 7th October 2020. The mid-market price of the shares on that date was 11120.0p. In addition, 23 partnership shares were purchased and 23 matching shares were awarded, on this same basis, to K.J. Boyd in relation to his participation in the 2019 ESOP for the 12-month period from 1st October 2019 to 30th September 2020. K.J. Boyd retired on 30th September 2020.

² 16 dividend shares were received on 22nd May 2020, on which date the mid-market price of the shares was 9732.0p. Five dividend shares were received on 6th November 2020, on which date the mid-market price of the shares was 11815.0p.

³ Partnership shares are not subject to qualifying conditions. No matching shares or dividend shares were released from the ESOP or forfeited during the year ended 31st December 2020.

1.7 Directors' service agreements and letters of appointment

Chair and Non-Executive Directors

The Chair and Non-Executive Directors have letters of appointment with the Company for a period of three years, subject to annual re-election at the AGM. Appointments may be terminated by the Company or individual with one month's notice. The appointment letters for the Chair and Non-Executive Directors provide that no compensation is payable on termination, other than accrued fees and expenses.

5. Remuneration *continued*

Annual Report on Remuneration 2020 *continued*

Directors' terms of service

The table below sets out the dates on which each Director was initially appointed, their latest service agreement or letter of appointment and their notice period. All Directors are subject to election or re-election (as the case may be) at the AGM.

Executive Directors	Original appointment date	Current agreement/ appointment/ re-appointment letter ¹	Expiry date	Notice period
N.J. Anderson	15.03.12	13.12.13	N/A	12 months
N.B. Patel	27.07.20	01.04.20	N/A	12 months
K.J. Boyd	15.03.12	17.04.12	30.09.20	12 months
N.H. Daws	01.06.03	25.09.12	31.12.20	12 months
Chair and Non-Executive Directors				
J. Pike	01.05.14	15.05.18	14.05.21	1 month
A. Archon	01.12.20	30.10.20	30.11.23	1 month
P. France	06.03.18	04.03.21	05.03.24	1 month
C.A. Johnstone	05.03.19	27.02.19	04.03.22	1 month
J.S. Kingston	01.09.16	05.08.19	31.08.22	1 month
O. Qiu	01.12.20	27.10.20	30.11.23	1 month
G.E. Schoolenberg	01.08.12	12.07.18	31.07.21	1 month
K.J. Thompson	15.05.19	15.05.19	14.05.22	1 month

¹ All letters of appointment and service agreements are available for inspection at the Group's headquarters in Cheltenham.

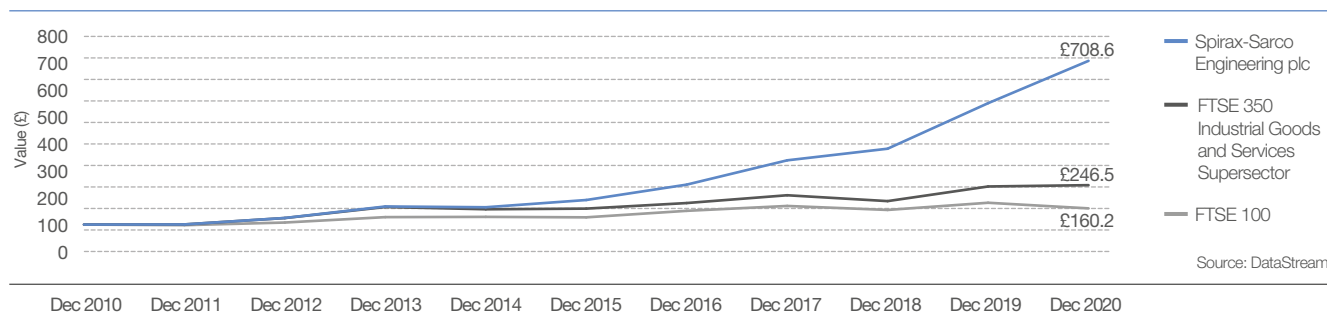
1.8 External Directorships

Nicholas Anderson served as a Non-Executive Director at BAE Systems plc from 1st November 2020, for which he received and retained total fees of £14,167.

Kevin Boyd served as a Non-Executive Director and Audit Committee Chair at EMIS Group plc and as a Non-Executive Director of Bodycote plc (with effect from 1st September 2020) and Polypipe Group plc (with effect from 22nd September 2020), for which he received and retained total fees of £39,750, £4,946 and £1,411 respectively up to 30th September 2020.

1.9 TSR performance graph

This graph demonstrates the growth in value of a £100 investment in the Company compared to the FTSE 350 Industrial Goods and Services Supersector from December 2010 to December 2020. This comparison is chosen as it is the supersector within which the Company is classified and it is a broad equity market index including companies of a similar size, complexity and sector. The graph also includes a comparison to the FTSE 100 and shows a similar level of out-performance.



The table below shows the historic levels of the Group Chief Executive's pay (single figure of total remuneration) and annual variable and PSP awards as a percentage of maximum.

	Single figure of annual remuneration	Annual variable pay as % of maximum	Vested PSP awards value as % of maximum
2020	£2,219,764	30.00%	73.90%
2019	£2,788,251	82.60%	100.00%
2018	£2,323,478	92.48%	100.00%
2017	£2,172,620	100.00%	100.00%
2016	£1,610,891	99.20%	40.00%
2015	£1,191,137	61.39%	80.33%
2014 (N.J. Anderson appointed Group Chief Executive in January 2014)	£1,000,115	55.76%	33.06%
2013	£1,593,150	95.24%	29.93%
2012	£1,402,668	31.69%	74.60%
2011	£1,516,798	80.08%	100.00%

Group Chief Executive pay ratio

The table below details the ratio of the Group Chief Executive's single figure of total remuneration to the median, 25th and 75th percentile total remuneration of the Group's full-time equivalent UK employees. Option B has been chosen for these calculations as the data used is consistent with that collected to inform the Group's UK gender pay gap report.

Financial year	Method	25th percentile pay ratio	50th median pay ratio	75th percentile pay ratio
2020	Option B	76:1	66:1	45:1

Single figure total remuneration	CEO	25th (lower quartile)	50th (median)	75th (upper quartile)
Salary	£602,000	£25,841	£30,567	£43,417
Benefits	£26,871	–	–	–
Bonus	£270,900	£1,000	£1,000	£1,000
PSP	£1,166,935	–	–	–
Pension	£150,500	£1,333	£917	£2,768
ESOP	£2,558	£1,112	£1,223	£1,779
Total pay	£2,219,764	£29,286	£33,707	£48,964

Year-on-year commentary

The median of our employee pay and benefits total pay is less than it was in 2019. The drivers for the change in the Group Chief Executive's pay ratio year-on-year is the reduction in the Group Chief Executive's performance-related pay elements and a lower total pay figure for the employee at the 50th median percentile. Performance-related pay elements were lower across the Group at all levels due to the unprecedented trading environment in 2020.

Pay Policy

The reward policies and practices for our workforce as a whole follow those set for the Executive Directors, including the Group Chief Executive, as detailed on page 123. The Committee has responsibility for setting and making any changes in remuneration for the senior management. This includes the reviewing of policies and practices for our workforce and consideration of shareholders and other stakeholder views as part of designing the Remuneration Policy and its operation for the Executive Directors. On this basis, the Committee is satisfied that the median pay ratio is consistent with the pay, reward and progression policies across all of the Company's employees.

The Committee will review any changes in the ratio over the forthcoming year and will provide an analysis of any changes in the Annual Report 2021.

1.10 Percentage change in remuneration of the Directors

The following table provides a summary of the 2020 and 2019 increases in base salary, benefits and bonus for the Directors compared to the average increase for the general UK employee population across the Group in the same period. The general UK employee population comparator group has been used because the parent company, Spirax-Sarco Engineering plc, only employs a very small number of people.

	2020 change			2019 change		
	Base Salary	Benefits	Bonus	Base Salary	Benefits	Bonus
General UK employee population	2.9%	2.9%	-32.1%	2.9%	2.9%	22.2%
N.J. Anderson	2.9%	2.9%	-62.6%	7.7%	5.2%	15.5%
N.B. Patel ¹	N/A	N/A	N/A	N/A	N/A	N/A
K.J. Boyd ²	2.9%	2.9%	-72.6%	7.7%	2.8%	-4.0%
N.H. Daws	2.9%	2.5%	-67.2%	5.0%	-6.1%	32.9%
J. Pike	2.9%	N/A	N/A	2.9%	N/A	N/A
G.E. Schoolenberg	2.9%	N/A	N/A	2.9%	N/A	N/A
J.S. Kingston	2.9%	N/A	N/A	2.9%	N/A	N/A
K.J. Thompson ³	2.9%	N/A	N/A	N/A	N/A	N/A
C.A. Johnstone ⁴	2.9%	N/A	N/A	N/A	N/A	N/A
P. France	2.9%	N/A	N/A	2.9%	N/A	N/A
A. Archon ⁵	N/A	N/A	N/A	N/A	N/A	N/A
O. Qiu ⁵	N/A	N/A	N/A	N/A	N/A	N/A

¹ N.B. Patel joined the Company on 27th July 2020.

² K.J. Boyd's 2020 change in bonus percentage reflects that his bonus has been prorated to 30th September 2020, his date of retirement.

³ K.J. Thompson was appointed on 15th May 2019.

⁴ C.A. Johnstone was appointed on 5th March 2019.

⁵ A. Archon and O. Qiu were appointed on 1st December 2020.

5. Remuneration *continued*

Annual Report on Remuneration 2020 *continued*

UK gender pay gap

A detailed narrative relating to the UK gender pay gap can be found on our website, www.spiraxsarcoengineering.com.

1.11 Relative importance of spend on pay

The table below demonstrates the relative importance of total pay spend relative to total employee numbers, profit before tax (selected as the best measure of efficiency) and dividends payable in respect of the year.

	2020	2019	Change
Total pay spend	£433.7m	£438.7m	-1.1%
Group average headcount	7,891	7,833	0.7%
Adjusted profit before tax	£261.5m	£274.5m	-4.7%
Dividends payable	£87.0m	£81.1m	7.3%

1.12 Changes for 2021

The table below summarises how we will implement each element of remuneration under the Policy in 2021.

Element of remuneration	How we will implement the Policy in 2021												
Salary	<p>The Executive Directors will receive salary increases of 2.0% in line with the wider UK workforce increase. The salaries effective 1st January 2021 are therefore:</p> <ul style="list-style-type: none">• Group Chief Executive: £614,000• Chief Financial Officer: £489,600												
Pension	<p>Pension contributions for the Executive Directors will be:</p> <ul style="list-style-type: none">• Group Chief Executive: 24.5% of salary (frozen at 2020 contribution of £150,500)• Chief Financial Officer: 10% of salary <p>The pension rate for the Group Chief Executive will be aligned to the pension contribution rate available to the UK workforce by the end of 2022 and to 10% by the end of 2023 at the latest.</p>												
Annual bonus	<p>The annual bonus opportunities for the Executive Directors will be:</p> <ul style="list-style-type: none">• Group Chief Executive: 150% of salary• Chief Financial Officer: 125% of salary <p>The performance measures will be unchanged from 2020:</p> <table><tr><th>Performance measure</th><th>Weighting (% of bonus)</th></tr><tr><td>Group operating profit</td><td>70%</td></tr><tr><td>Cash generation</td><td>20%</td></tr><tr><td>Personal strategic objectives</td><td>10%</td></tr></table> <p>The targets for the performance measures are considered to be commercially sensitive and therefore will be disclosed in next year's Directors' Remuneration Report.</p> <p>The Committee has discretion to adjust the formulaic outcome if it is not representative of the performance delivered.</p> <p>Executive Directors will be required to use the net of tax amount of any bonus earned above 80%, if they have met their shareholding requirement, or above 60% if they have not, to purchase shares in the Company which must be held for two years.</p>	Performance measure	Weighting (% of bonus)	Group operating profit	70%	Cash generation	20%	Personal strategic objectives	10%				
Performance measure	Weighting (% of bonus)												
Group operating profit	70%												
Cash generation	20%												
Personal strategic objectives	10%												
Performance Share Plan awards	<p>The 2021 PSP award levels are expected to be:</p> <ul style="list-style-type: none">• Group Chief Executive: 200% of salary• Chief Financial Officer: 175% of salary <p>The performance conditions will be unchanged from the 2020 PSP awards:</p> <table><tr><th>Performance measure</th><th>Weight</th><th>Threshold requirement (18% vests)</th><th>Maximum requirement (100% vests)</th></tr><tr><td>EPS growth</td><td>60%</td><td>Global IP +2% pa</td><td>Global IP +8% pa</td></tr><tr><td>Relative TSR</td><td>40%</td><td>Median TSR</td><td>Upper quartile TSR</td></tr></table> <p>The Committee has discretion to adjust the formulaic outcome if it is not representative of the business performance delivered.</p> <p>A two-year post vesting holding period will apply to the awards.</p>	Performance measure	Weight	Threshold requirement (18% vests)	Maximum requirement (100% vests)	EPS growth	60%	Global IP +2% pa	Global IP +8% pa	Relative TSR	40%	Median TSR	Upper quartile TSR
Performance measure	Weight	Threshold requirement (18% vests)	Maximum requirement (100% vests)										
EPS growth	60%	Global IP +2% pa	Global IP +8% pa										
Relative TSR	40%	Median TSR	Upper quartile TSR										
Non-Executive Director fees	<p>Effective from 1st January 2021, the Non-Executive Director basic fee was increased by 2.0%, which is in line with the average UK employee salary increase of 2.0%. The Committee Chair and Senior Independent Director's fees were unchanged.</p>												

1.13 Consideration by the Directors of matters relating to Directors' remuneration

Operation of the Remuneration Committee in 2020

Membership and attendance

Each Committee member is an independent Non-Executive Director and thus brings independence to all aspects of Board remuneration and the application of professional advice to matters relating to remuneration.

During 2020, the Committee was chaired by Jane Kingston and the members comprised: Trudy Schoolenberg, Kevin Thompson, Caroline Johnstone, Peter France and, with effect from their appointment to the Board on 1st December 2020, Angela Archon and Olivia Qiu.

In 2020, the Committee met (in person and virtually) five times. All members attended each meeting relative to their Committee membership. Angela Archon and Olivia Qiu each attended one meeting. On his appointment to Chair of the Board in May 2018, Jamie Pike ceased being a formal member of the Committee, but continued to attend meetings at the invitation of the Committee Chair. The Chair of the Board was independent on appointment and did not formally vote on matters approved by the Committee.

Advisers to the Committee

During 2020, the Committee sought advice and information from Jamie Pike, the Chair; Nicholas Anderson, the Group Chief Executive; and Jim Devine, the Group Human Resources Director. None of the invitees participated in any discussions regarding their own remuneration or fees. The General Counsel and Company Secretary acts as Secretary to the Committee.

In addition, the Committee received external advice from Korn Ferry, who were appointed by the Committee in 2019 and provided material advice to the Committee on various matters such as Executive remuneration levels and structure, performance updates in respect of the PSP, the Remuneration Report and attendance at Committee meetings. In 2020, on a time and materials basis, Korn Ferry's fees in respect of these services totalled £87,923. In addition, Korn Ferry work with management on other matters relating to remuneration with the approval of the Committee. The Committee is of the opinion that the advice received is objective and independent, given that Korn Ferry are a signatory to the Remuneration Consultants Group Code of Conduct, the manner in which advice is delivered and the separate teams that advise management more generally.

In 2020, Baker & McKenzie LLP and Lewis Silkin LLP provided legal advice to the Company (which was available to the Committee). Legal fees relate to advice provided to the Company and not the Committee, and are charged on a time-cost basis.

1.14 Statement of voting at general meeting

At the AGM in 2020, shareholders approved the Remuneration Policy 2020 (mandatory) and the Annual Report on Remuneration 2019 (advisory). The table below shows the results which required a simple majority (i.e. 50%) of the votes cast to be in favour for the resolutions to be passed.

	Votes for	%	Votes against	%	Votes withheld
Remuneration Policy 2020	60,088,522	95.71	2,690,784	4.29	378,510
Annual Report on Remuneration 2019	58,799,273	93.65	3,984,629	6.35	373,913

This Annual Report on Remuneration 2020 has been approved by the Board of Directors of Spirax-Sarco Engineering plc and signed on its behalf by:

Jane Kingston

Chair of Remuneration Committee

9th March 2021

5. Remuneration *continued*

Remuneration Policy 2020

Remuneration Policy Report 2020

Please note that the Remuneration Policy Report 2020 is reproduced exactly as published in the Annual Report 2019 and as approved by shareholders at the 2020 AGM. Therefore, as the content remains the same, the page numbers, examples and illustrations are necessarily historical.

2.0 Remuneration Policy

The table below summarises the Remuneration Policy which will take effect, if approved, from the AGM to be held on 13th May 2020.

Element	Purpose and link to strategy	Operation	Performance measures	Maximum potential value
Fixed elements of Executive Director remuneration				
Base salary	To enable the Group to attract, retain and motivate high performing Executive Directors of the calibre required to meet the Group's strategic objectives.	<p>Reviewed annually by the Committee, taking into account:</p> <ul style="list-style-type: none"> scale, scope and complexity of the role; skills and experience of the individual; wider workforce comparisons; and market benchmarking, within defined external comparator groups. The Committee uses this information with caution, given the limited number of direct comparators and to avoid remuneration inflation as a result of benchmarking exercises with no corresponding improvement in performance. <p>The Committee considers the impact of any base salary increase on the total remuneration package.</p>	<p>Reviews take into account Company and individual performance.</p>	<p>Ordinarily, salary increases will not exceed the average increase awarded to other Group employees from the same country/region.</p> <p>A salary increase may be higher than the average increase awarded to employees in circumstances such as (i) where a new recruit or promoted Executive Director's salary has been set lower than the market level for such a role; (ii) where there is a significant increase in the size and responsibilities of the Executive Director's role; or (iii) where the salary level has fallen below the lower quartile level against market benchmarks.</p>
Pension	<p>To offer appropriate levels of pension and benefit.</p> <p>To attract and retain individuals with the personal attributes, skills and experience required to deliver Group strategy.</p>	<p>For eligible Executive Directors who joined the UK Company before 2001 the Company provides a UK defined benefits pension scheme (DB scheme) or cash alternative allowance.</p> <p>For UK nationals who joined the UK Company after 2001 the Company provides a defined contribution pension arrangement (DC plan) and/or contributions to a private pension and/or a cash allowance.</p> <p>Executive Directors who have transferred internally from overseas may continue to participate in home country pension arrangements and/or receive a cash allowance.</p>	N/A	<p>The maximum pension contribution for new Executive Directors will be the same basis as the majority of newly appointed employees receive in the market in which the Executive Director is based.</p> <p>Incumbent Executive Directors' maximum pension to be, by 31st December 2022, the current blended average in the market in which the Executive Director is based (17% of salary in the UK), reducing to the new Executive Director level by 2025.</p> <p>No element other than base salary is pensionable.</p>

Element	Purpose and link to strategy	Operation	Performance measures	Maximum potential value
Fixed elements of Executive Director remuneration				
Common benefits	<p>To provide market competitive benefits.</p> <p>To enable the Executive Directors to undertake their roles through ensuring their wellbeing and security.</p>	<p>The Company provides common benefits including:</p> <ul style="list-style-type: none"> • Company car and associated running costs or cash alternative allowance; • private health insurance; telecommunications and computer equipment; • life assurance; and • long-term disability insurance. 	N/A	The aggregate maximum cash cost of providing all common benefits will not exceed 20% of base salary.
Mobility-related benefits	To ensure that Executive Directors who have relocated nationally or internationally are compensated for costs incurred.	<p>The Company will pay all reasonable expenses and applicable tax due for the Executive Director and his/her family to relocate on appointment and for repatriation to the original home country at the end of their assignment and/or employment.</p> <p>Executive Directors are personally responsible for all taxes and social charges incurred in the home and host locations as a result of their appointment. The Company will pay for reasonable tax advice and filing support in relation to work related income for international Executive Directors.</p> <p>Executive Directors are reimbursed under a Tax Treaty Adjustment for any double tax they might be liable for as a result of being subject to home country and host country taxation typically for days worked in the home location.</p> <p>Executive Directors are not entitled to tax equalisation.</p>	N/A	<p>Based on individual circumstances and subject to written agreement.</p> <p>Maximum values will not exceed the normal market practice of companies of a similar size and nature at the time of relocation.</p>

5. Remuneration *continued*

Remuneration Policy 2020 *continued*

Element	Purpose and link to strategy	Operation	Performance measures	Maximum potential value
Variable elements of Executive Director remuneration				
Annual bonus	<p>To incentivise and reward performance against selected KPIs which are directly linked to business strategy.</p> <p>To recognise performance through variable remuneration and enable the Company to flexibly control its cost base and react to events and market circumstances.</p> <p>To ensure a significant proportion of Executive Director remuneration is directly linked to business performance.</p>	<p>Measures, targets and their relative weightings are reviewed regularly by the Committee to ensure continuing alignment with strategic objectives and will be detailed in the relevant Annual Report on Remuneration.</p> <p>Bonus is based largely or entirely on the achievement of challenging financial performance measures, which have been selected to ensure the Company is focused on its strategic objectives.</p> <p>Bonus is delivered in cash.</p> <p>However, Executive Directors must use the net of tax amount of any bonus they earn above 80% of the maximum opportunity to increase the level of shareholding they have and to hold for a further two years. Where a Director has not met their shareholding requirement, the bonus deferred increases to any bonus they earn above 60% of the maximum opportunity.</p> <p>Bonus is subject to clawback and/or malus for up to three years following payment. Circumstances include financial misstatement, erroneous calculations determining bonus payments, gross misconduct, corporate failure and reputational damage.</p> <p>The Committee can adjust some performance targets to reflect certain non-operating items and retains the ability to adjust the amount of a bonus if the formulaic outcome is not reflective of the business performance.</p>	<p>Any measure can be incorporated at the Committee's discretion provided it is clearly aligned to the Group's strategic objectives. At least 70% of the bonus opportunity will be governed by financial performance measures.</p>	<p>150% of salary.</p> <p>No more than 60% of the bonus opportunity can be earned for target performance in any year.</p>

Element	Purpose and link to strategy	Operation	Performance measures	Maximum potential value
Variable elements of Executive Director remuneration				
Performance Share Plan (PSP)	<p>To incentivise and reward Executive Directors for delivery against long-term Group performance.</p> <p>To align Executive Directors' interests to those of shareholders.</p> <p>To drive sustainable Company performance.</p> <p>To retain key executive talent.</p>	<p>The Committee makes conditional awards of shares to each Executive Director. Annual participation is subject to Committee approval.</p> <p>Measures, targets and their relative weightings are reviewed regularly by the Committee to ensure continuing alignment with strategic objectives and will be detailed in the relevant Annual Report on Remuneration.</p> <p>Performance is measured over a three-year period, normally starting at the beginning of the financial year in which awards are granted.</p> <p>An additional two-year post-vesting holding period will apply.</p> <p>Awards can vest in the form of shares, a nil-cost option or, exceptionally, cash.</p> <p>Share awards made from 2012 are subject to clawback and/or malus for up to three years following award. Circumstances include financial misstatement, erroneous calculations determining bonus payments, gross misconduct, corporate failure and reputational damage. PSP awards accrue dividends between grant and vesting.</p> <p>The Committee retains the ability to adjust awards if the formulaic outcome is not reflective of the business performance.</p> <p>The Committee will be able to add dividend equivalents accrued during a vesting period to any award granted under this Policy.</p>	<p>Vesting is currently based on two performance measures, which have been chosen as they are clearly aligned with our strategic objectives:</p> <ul style="list-style-type: none"> • TSR; and • EPS growth. <p>To ensure continued alignment with the Company's strategic priorities, the Committee may, at its discretion, vary the measures and their weightings for future grants from time-to-time including the consideration of financial and non-financial measures.</p> <p>The Committee reserves the right to adjust targets, for example for the effects of divestments or major acquisitions, to ensure that those results are in line with the principles that supported the targets when they were originally set.</p>	<p>250% of the annual rate of salary at the time of award.</p> <p>Currently the maximum award level is 200% of salary (for the CEO). Any increase beyond this level will only take place following consultation with leading shareholders.</p>

5. Remuneration *continued*

Remuneration Policy 2020 *continued*

Element	Purpose and link to strategy	Operation	Performance measures	Maximum potential value
Variable elements of Executive Director remuneration				
Employee Share Ownership Plan (ESOP)	<p>To offer all eligible UK-based employees the opportunity to build a shareholding in a tax-efficient way.</p> <p>To align Executive Director interests to those of shareholders.</p>	<p>Eligible UK Executive Directors are entitled to participate in an HMRC approved Share Incentive Plan known as the ESOP.</p> <p>Whilst not currently operated, if in the future employee share plans are offered outside the UK, or if alternative or additional plans are operated within the UK, eligible Executive Directors will be entitled to participate on the same basis as all other eligible employees.</p> <p>Awards granted under the ESOP are not subject to clawback or malus.</p> <p>The ESOP operates over a five-year period.</p>	N/A	Executive Directors will be subject to the same limitations as all other participants.
Other				
Share ownership guidelines	To provide alignment with shareholder interests.	<p>Executive Directors are required to accumulate through retaining at least half of the shares acquired (after sales to meet tax due) from PSP awards and the investment of bonus, a shareholding in the Company worth a minimum of 200% (300% for the CEO) of their annual salary. Subject to the level of PSP awards that vest and of bonus invested, it is anticipated that this will be achieved within five years of appointment. In addition, on departure as an Executive Director, the required shareholding (or level of holding achieved by the date of departure), normally has to be retained for two years.</p> <p>If an Executive Director purchases shares from his/her own resources then he/she can deem those shares as not counting towards the share ownership guidelines and therefore also the two year post-cessation requirement.</p> <p>This retention policy applies to all Executive Directors not under notice at the time the Policy is approved by shareholders.</p>	N/A	N/A

Element	Purpose and link to strategy	Operation	Performance measures	Maximum potential value
Chair and Non-Executive Directors				
Fees	To attract and retain high calibre individuals, with appropriate experience or industry related skills, by offering market competitive fee levels.	<p>The Chair is paid a single fee for all responsibilities.</p> <p>The Non-Executive Directors are paid a basic fee. The Chairs of the main Board Committees, the Senior Independent Director and any individual with other separate responsibilities are paid an additional fee to reflect their extra responsibilities.</p> <p>Fees for the Chair and the Non-Executive Directors are reviewed annually by the Board, with reference to any change in the time commitment required, UK market levels and the average base salary increase across the wider workforce.</p> <p>The Chair and the Non-Executive Directors do not participate in any annual bonus or incentive plans, pension schemes, healthcare arrangements, the Company's PSP or ESOP.</p> <p>The Company repays the reasonable expenses (including any tax due thereon) that the Chair and the Non-Executive Directors incur in carrying out their duties as Directors.</p>	N/A	The aggregate value of fees paid to the Chair and Non-Executive Directors will not exceed the amount set out in the Articles of Association.

2.1 Notes to the Policy table

Changes to the Remuneration Policy

The main proposed changes to the Remuneration Policy are as follows:

- AIP award: introduce deferral of bonus;
- PSP award: increase potential maximum award from 200% of salary to 250% of salary (subject to shareholder consultation) and dividend equivalents to apply;
- pensions: set the level of pension benefit for newly appointed Executive Directors to no higher than the level available to the workforce and incumbent Directors to move, by 31st December 2022, to the current blended average for all employees in the market in which the Executive Director is based (17% in the UK), reducing to the new Executive Director level by 2025;
- enhancement of the clawback/malus arrangements;
- share ownership requirements: increase guideline levels to 300% for the CEO and 200% for other Executive Directors and introduce post-cessation shareholding requirements for the two-year period following an Executive Director's departure; and
- permit minor changes to be made to the Policy without shareholder approval in a General Meeting.

Additional details and an explanation of the changes can be found in the Statement by Committee Chair on pages 104 to 105.

Outstanding incentive awards

Details of outstanding incentive awards granted to Executive Directors prior to the Policy coming into force, including awards granted in 2019, and details of the performance targets are set out on pages 108 to 114.

All incentive awards granted prior to this Policy coming into force will continue on their existing terms including the exercise of discretion to amend such awards.

5. Remuneration *continued*

Remuneration Policy 2020 *continued*

Remuneration policy for other employees

The Company's approach to annual salary reviews is consistent across the Group, with consideration given to the scope of the role, level of experience, responsibility, individual performance and market pay levels. The most senior managers in the business (approximately 150 people globally) participate in bonus arrangements with similar targets, measures and relative weightings to the Executive Directors. Target and maximum potential values are lower and determined by the grade of the manager's role. Performance targets are based on an appropriate combination of Group, divisional and local operating company financial measures, in addition to personal strategic objectives. Contractual terms and benefits for the wider workforce are subject to local employment legislation and best practice.

Measure selection and the target setting process

Measures are selected taking into account the key strategic priorities of the Company, shareholder expectations and factors that sit within an individual's span of control.

Targets are set with reference to internal and external forecasts to ensure that they are realistic, yet sufficiently stretching. An appropriate mix of long- and short-term targets will be used, informed by the nature of the measure.

The Committee may make minor amendments to the Policy set out in this Policy Report (for regulatory, exchange control, tax or administrative purposes or to take account of a change in legislation) without obtaining shareholder approval for that amendment.

2.2 External directorships

Directors are permitted to hold external directorships in order to broaden their experience, to the benefit of the Company. Such appointments are subject to approval by the Board and the Director may retain any fees paid in respect of such directorships. The Board ensures compliance by Directors with Code provision B.3.

2.3 Approach to recruitment and promotion remuneration

When appointing external hires, promoting executives, or an Executive Director internally, the Committee will continue to act in the best interests of shareholders when determining remuneration, in line with the stated Policy. The main elements of the Remuneration Policy for Executive Director appointments are:

- base salary will be set on appointment taking into account the factors set out in the Policy table, but also the individual's experience. Depending on an individual's prior experience, the Committee may set salary below market norms, with the intention that it is realigned over time, typically two to three years, subject to performance in the role;
- pension benefits will not exceed the rate applicable to the relevant country's workforce, as determined by the Committee;
- mobility related benefits may include the payment of some or all of an individual's tax on relocation expenses incurred within 12 months of joining;
- on-going annual incentive pay opportunity will not exceed 400% of salary, in line with the maximums stated in the Policy table (up to 150% of salary for annual bonus and an award of up to 250% of salary under the PSP). In the year of appointment an off-cycle award under the PSP and different annual bonus conditions may be made by the Committee to ensure an immediate alignment of individual interests;
- in addition to the standard elements of remuneration, on the appointment of an external candidate, the Committee reserves the right to buy-out incentives that the individual has foregone by accepting the appointment, if appropriate. The terms of such awards would be informed by the amounts being forfeited and the associated terms (for example the extent to which the outstanding awards were subject to performance, the vehicles and the associated time horizons). Awards would be made either through the existing share plans or in accordance with the relevant provisions contained within the Listing Rules; and
- when an internal appointment to the Board is made, any pre-existing obligations may be honoured by the Committee and payment will be permitted under this Remuneration Policy.

Details of the remuneration for any new Chair or Executive Director appointed to the Board will be disclosed on the Group's website, www.spiraxsarcoengineering.com.

2.4 Service agreements and termination policy

The Company's policy on service agreements and termination arrangements for Executive Directors is set out below. Service agreements are designed to reflect the interests of the Company, as well as the individual concerned. Executive Directors' service agreements are kept at the Company's headquarters in Cheltenham.

In accordance with the Code and guidelines issued by institutional investors, Executive Directors have service agreements that are terminable by either the Company or the Executive Director on 12 months' notice. In the event of termination or resignation, and subject to business reasons, the Company would not necessarily hold the Executive Director to his or her full notice period. All Directors are subject to election (if newly appointed in the year) or re-election at the AGM.

Service agreements set out restrictions on the ability of the Executive Director to participate in businesses competing with those of the Group or to entice or solicit away from the Group any senior employees or to solicit/deal with clients of the Group or interfere with supply, in the 12 months following the cessation of employment.

Salary, pension and benefits are included in the agreements and are treated as described in the policy table on pages 122 to 127. There is no contractual entitlement to payment of an annual bonus or granting of an award under the PSP, until individual participation, level of award, measures and targets have been set for a particular year.

The Chair and Non-Executive Directors do not have service agreements but serve the Company under letters of appointment, for an initial period of three years, subject to annual re-election at the AGM. Appointments may be terminated by the Company or individual with one month's notice.

Group Chief Executive and new appointments from 1st January 2013

The details of the service agreements of the Group Chief Executive and for new appointments to the Board are outlined below and comply with best practice. In the event of a material change in role, function or responsibilities, Executive Directors' agreements will be reviewed and will be expected to be updated to meet the requirements outlined below.

Notice period	12 months by the Executive Director and 12 months by the Company
Termination	<p>No payment if Executive Director commits a repudiatory breach of the service agreement or for gross misconduct or in certain circumstances.</p> <p>No additional termination payment if notice worked.</p> <p>If notice only part worked/part on garden leave, payment in respect of unexpired period of notice, otherwise 12 months' base salary only.</p> <p>Company discretion to pay in lieu of notice in lump sum or monthly except within 12 months of a change of control, when a lump sum will be paid.</p> <p>If paid monthly, payment will be reduced by the value of any salary, fees and benefits, excluding long-term incentives, earned in new paid employment in that period (mitigation clause).</p> <p>No automatic entitlement to payments under the annual bonus or PSP. See pages 130 to 131.</p> <p>Payment of reasonable legal fees and any legally enforceable entitlements.</p> <p>Garden leave clause.</p> <p>Robust post-termination restrictions on confidentiality, non-compete, non-solicitation and non-interference with customers or suppliers.</p> <p>Service agreements may be terminated without notice and without payment of compensation on the occurrence of certain events, such as gross misconduct or financial misstatement.</p>
Clawback or malus	<p>Bonus payments and PSP awards are subject to clawback or malus until the third anniversary of bonus payment and PSP vesting respectively. Circumstances include financial misstatement, erroneous calculations determining bonus payment, gross misconduct, reputational damage and corporate failure.</p>

5. Remuneration *continued*

Remuneration Policy 2020 *continued*

Executive Directors' legacy agreements (appointments before 2013)

Within the legacy agreements of Executive Directors, termination of agreements is subject to a 12 month notice period. Where payment is made in lieu of notice on termination, the payment of a sum in respect of lost future bonus opportunity (based on an average of the preceding three years' bonus payments) is subject to the Committee's discretion. The Committee has the power to reduce the amount to reflect performance on the part of the Executive Director that is considered by the Committee to be unsatisfactory. On termination of such an Executive Director's service agreement, the Committee will take into account the departing Executive Director's need to mitigate his or her loss when determining the amount of bonus. Payment will only be made at the discretion of the Committee after taking into account individual performance in order to ensure that there will be no "payments for failure". In any event, payments will be subject to clawback or malus provisions.

Executive Directors' service agreements may be terminated without notice and without payment of compensation on the occurrence of certain events, such as termination for gross misconduct or financial misstatement.

While the Executive Directors' service agreements include a provision to deal with termination on a change of control, in the event of an offer being made, shareholders have discretion to accept the offer or not. The decision to recommend acceptance, or not, is a matter for the Board, and the Committee is of the clear view that the change of control provision within the Executive Directors' service agreements would have no influence on the voting pattern of those Executive Directors. Executive Directors' legacy agreements are summarised in the table below.

Notice period	12 months by the Executive Director and 12 months by the Company
Termination	<p>No payment if Executive Director commits a repudiatory breach of the service agreement or for gross misconduct or in certain circumstances.</p> <p>No additional termination payment if notice worked.</p> <p>If notice only part worked/part on garden leave, payment in respect of unexpired period of notice.</p> <p>Otherwise 12 months' base salary, the value of other benefits, plus the cost of pension credits or contributions for the period plus the average of the prior three years' annual bonus payments, with Committee discretion to reduce the amount of the bonus that would otherwise be calculated, to reflect performance on the part of the Executive Director that is considered by the Committee to be below the required standards, provided that termination by the Company does not occur within 12 months of a change of control.</p> <p>Committee discretion to pay in lump sum or monthly except within 12 months of a change of control when a lump sum will be paid.</p> <p>If paid monthly, payment will be reduced by the value of any salary, fees and benefits excluding long-term incentives, earned in new paid employment in that period.</p> <p>No automatic entitlement to payments under the current annual bonus or PSP. See pages 130 to 131.</p> <p>Garden leave clause.</p> <p>Robust post-termination restrictions on confidentiality, non-compete, non-solicitation and non-interference with customers or suppliers.</p>
Clawback or malus	<p>Bonus payments and PSP awards are subject to clawback or malus for up to three years following award. Circumstances include financial misstatement, erroneous calculations determining bonus payments, reputational damage or gross misconduct.</p>

Treatment of leavers under the incentive plans

Whilst it is not an entitlement, it is expected that where an Executive Director is a "good leaver" (ie where the cessation of employment is due to death, disability, redundancy, retirement or the company business in which he/she works being disposed of or where the ending of employment is instigated by the Company and is not for cause), payments will be made under the annual bonus plan if performance targets are met subject to, and in accordance with, the plan rules. If the Executive Director is not a "good leaver" it is expected that no bonus will be paid.

The treatment of leavers under the PSP is determined in accordance with the shareholder approved PSP rules. Any awards granted within six months prior to termination (or the giving or receiving of notice) will lapse. Any awards granted six months or longer prior to termination of employment (but prior to the end of the performance period) will lapse unless the Executive Director is considered to be a "good leaver".

In the case of such a "good leaver" the award will vest on the termination date, or the normal vesting date, at the Committee's discretion. This is subject to the satisfaction of the performance targets at that date and a pro-rata reduction in the number of shares to take account of the shortening of the performance period. For awards granted after the 2020 AGM, the award will vest on the normal vesting date.

If the Executive Director is a "good leaver" where the ending of employment is not for cause, the number of shares vested may be reduced (including to zero) by the Committee in its absolute discretion.

Where an Executive Director ceases employment (or notice is given) on or after the end of the performance period but prior to the date on which the Committee has determined the extent to which the award has vested, if the Executive Director is a "good leaver", his/her award will be preserved and will be treated in the same way as if his/her employment had continued, whereas if the Executive Director is not a "good leaver", his/her award will lapse on the earlier of his/her cessation of employment and the giving of notice.

In relation to the ESOP, as an HMRC approved plan, where an Executive Director leaves the treatment will be in line with the approved plan rules and HMRC guidance.

Change of control

Bonus: if termination occurs within 12 months following a change of control, the Executive Director is entitled to (i) a lump sum payment in lieu of notice and (ii) receive a full bonus payment calculated by reference to the average of the preceding three years' bonus payments (without any reduction for performance).

PSP: the rules provide that in the event of a change of control, outstanding share-based awards will vest to the extent that performance targets are met at the date of the event. Any such vesting would generally be on a time prorated basis. The Committee may, at its discretion, increase the level of vesting if it believes that exceptional circumstances warrant such treatment.

2.5 Illustrations of application of the Remuneration Policy

Under the Remuneration Policy, a significant portion of remuneration is variable and depends on the Company's performance. Below we illustrate how the total pay opportunity for the Executive Directors varies under three performance scenarios: maximum, on target, and below threshold.

The scenarios for 2020, informed by the current application of our pay policy, are as follows:

Element

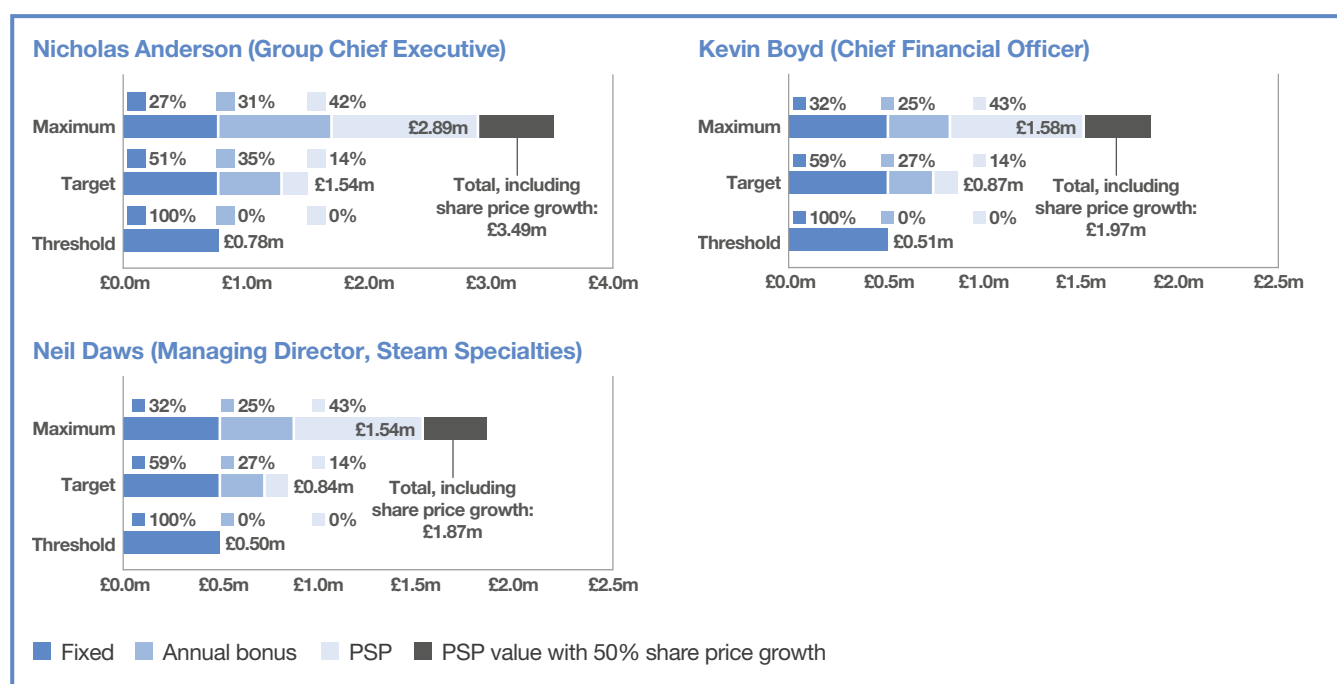
Fixed pay, benefits and ESOP

Fixed pay and ESOP does not vary with performance and comprises:

- base salary effective 1st January 2020;
- benefits value based on 2019 disclosure;
- pension value (DB 2019: cash allowance: rate applied to 2020 salary); and
- ESOP participation of up to £1,800 1:1 matching shares for eligible Executive Directors.

	Percentage of base salary		
	Below threshold	On target	Maximum
Annual bonus (% of salary)	0%	90% CEO 60% ED	150% CEO 100% ED
PSP ¹ (% of salary at award)	0%	36.0% CEO 31.5% ED	200% CEO 175% ED

¹ A level of 18% vesting for "on target" performance is equivalent to threshold performance under the PSP, which the Committee believes to be a fair assumption for on target performance given the approach taken to setting performance targets.



5. Remuneration *continued*

Remuneration Policy 2020 *continued*

2.6 Statement of consideration of employment conditions elsewhere in the Group

When determining the remuneration of Executive Directors, the Committee considers the pay of employees across the Group. When conducting the annual salary review, the average base salary increase awarded to the UK workforce and senior managers across the Group provides a key reference point when determining levels of increase for Executive Director remuneration. The Remuneration Policy was drawn up by the Committee without the need for any consultation with employees.

The Committee also determines the principles and policy of remuneration which shall apply to the Group's senior managers. The responsibility for determining precise compensation packages that meet local practice and performance targets lies with the Group Chief Executive and the responsible Executive Director.

To ensure consistency in Remuneration Policy across the Group and to encourage a performance culture, senior managers participate in the PSP. The Board believes that share ownership is an effective way of aligning the interests of managers and shareholders and to strengthen the development of the business.

2.7 Statement of consideration of shareholder views

In developing and reviewing the Company's Remuneration Policy for Executive Directors and other senior executives, the Committee seeks and takes into account the range of views of shareholders and institutional shareholder advisers. The Committee Chair actively engages with major shareholders and institutional shareholder advisers when appropriate and takes into account their views when reviewing and implementing the Company's Remuneration Policy.

The Committee considers shareholder feedback received in relation to the AGM each year and guidance from institutional shareholder advisers more generally. This feedback, plus any additional feedback received during the year at meetings with shareholders, is considered as part of the Company's annual Remuneration Policy review. At the AGMs in 2019 and 2018, the advisory votes on the 2018 and 2017 Annual Reports on Remuneration received 94.66% and 98.96% in favour respectively. At the AGM in 2017 the Remuneration Policy received 95.06% in favour.

Regulatory disclosures



Compliance with good governance assisted us with managing COVID-19.”

Andy Robson

Group General Counsel and Company Secretary

Principal activities

Spirax-Sarco Engineering plc is a multi-national industrial engineering group that is domiciled and incorporated in the UK under registration number 596337 and which has expertise in steam, electric thermal solutions, peristaltic pumping and fluid path technologies. An overview of our principal activities, by business, is given on pages 6 and 20 to 23 of the Strategic Report.

Future development

An indication of likely future developments in the Group is given in the Strategic Report.

Strategic Report

This is set out on the inside front cover to page 86 of the Annual Report.

Risk management and principal risks

A description of risk management and the principal risks facing the business are on pages 60 to 65 and 114 to 117.

Constructive use of AGM

The Notice of Meeting convening the AGM, to be held on Wednesday, 12th May 2021, and an explanation of the resolutions sought, is set out in the Circular posted on our website and sent to shareholders in the format selected by them.

COVID-19

In light of the UK Government's COVID-19 laws and advice that is likely to apply at the time of our AGM on 12th May 2021 (presence reasonably necessary for work purposes only) and in order to act responsibly, we will hold our AGM virtually with a minimum number of essential attendees in person and make the meeting available to our shareholders on our website. In addition, we will limit the meeting to formal business and questions from shareholders relating directly and only to the resolutions and the business of the meeting, with no business presentation. This position is based on the Government's guidelines in the period up to 21st June 2021. If the guidelines change and we are able to hold a face to face meeting, we will inform shareholders via our website, www.spiraxsarcoengineering.com (see AGM notices under investors/shareholder information.)

While we are always delighted to meet with our shareholders at our AGMs, given the advice and laws, please can all shareholders vote by submitting a Form of Proxy, in line with the instructions set out in the Circular. In 2020, 84.54% of the proxy votes received were lodged electronically through the CREST system.

The results of the votes will be announced on the London Stock Exchange and on the Group's website, www.spiraxsarcoengineering.com, shortly after the conclusion of the meeting.

We appreciate your understanding and hope that we have achieved the right balance between accountability and responsibility and we look forward to May 2022 when hopefully we can meet our shareholders face-to-face.

Results

The Group's results for the year have been prepared in accordance with the International Financial Reporting Standards as adopted by the European Union. They are set out in the Consolidated Income Statement, which appears on page 163.

Dividend

The Directors are proposing the payment of a final dividend of 84.5p (2019: 78.0p) which, together with the interim dividend of 33.5p (2019: 32.0p), makes a total distribution for the year of 118.0p (2019: 110.0p). If approved at the AGM, the final dividend will be paid on 21st May 2021 to shareholders on the register at the close of business on 23rd April 2021.

Directors' interests

The interests of the Directors in the share capital of Spirax-Sarco Engineering plc as at 31st December 2020 are set out on pages 132 to 133.

Directors' and Officers' Insurance

The Company provides Directors' and Officers' Insurance for Board members, Directors of the Group's operating companies and senior officers.

The Company has also provided each Director with an indemnity to the extent permitted by law in respect of the liabilities incurred as a result of their holding office as a Director of the Company.

Appointment and replacement of Directors

The appointment and replacement of Directors is governed by the Company's Articles of Association, the Code, the Companies Act 2006 and related legislation.

All Directors will seek election or re-election (as the case may be) at the AGM, with the exception of Neil Daws, who retired from the Board on 31st December 2020.

Regulatory disclosures *continued*

The Directors stand for election or re-election on an annual basis at each AGM, in accordance with the Code. The Board considers that all Directors standing for election or re-election continue to perform effectively and demonstrate commitment to their roles. In addition, the Board considers that all Directors have the necessary skills and experience, as set out in their biographies on pages 90 to 91.

Conflicts of interest

Under the Companies Act 2006 and the provisions of the Company's Articles of Association, the Board is required to consider potential conflicts of interest. The Company has established formal procedures for the disclosure and review of any conflicts, or potential conflicts, of interest which the Directors may have and for the authorisation of such matters of conflict by the Board. To this end the Board considers and, if appropriate, authorises any conflicts, or potential conflicts, of interest as they arise and reviews any such authorisation annually.

New Directors are required to declare any conflicts, or potential conflicts, of interest to the Board at the first Board meeting after his or her appointment. The Board believes that the procedures established to deal with conflicts of interest are operating effectively.

Share capital

As at 28th February 2021 there were no treasury shares held by the Company. Details of shares issued during the year are set out in Note 21 on page 193.

As at 31st December 2020 the Company's share capital was made up of Ordinary shares which each carry one vote at general meetings of the Company. Except as set out in the Articles of Association or in applicable legislation, there are no restrictions on the transfer of shares in the Company and there are no restrictions on the voting rights in the Company's shares.

The Company is not aware of any agreements entered into between any shareholders in the Company which restrict the transfer of shares or the exercise of any voting rights attached to the shares.

Substantial shareholdings

The voting rights in the table below have been determined in accordance with the requirements of the UK Listing Authority's Disclosure and Transparency Rules DTR 5, and represent 3% or more of the voting rights attached to issued shares in the Company as at 19th February 2021 and 31st December 2020. There are no Controlling Founder Shareholders.

Powers of the Directors and purchase of own shares

Subject to the provisions of the Articles of Association, the Directors may exercise all the powers of the Company.

A shareholder's authority for the purchase by the Company of a maximum of 10% of its own shares was in existence during the year. However, the Company did not purchase any of its shares during that time.

This authority expires at the forthcoming AGM and it is proposed that a similar authority be approved. The total number of shares in issue as at 31st December 2020 was 73,765,547.

PSP and Employee Benefit Trust (EBT)

The number of shares held in the EBT at 31st December 2020 was 60,038 for the purpose of satisfying the vesting of awards and options granted to employees under the various Company schemes. Dividends on shares in the EBT are waived.

Articles of Association

The Company's Articles of Association are available from Companies House in the UK or by writing to the General Counsel and Company Secretary at the Group's registered office in Cheltenham. They are also available on the Company's website. Amendments to the Articles of Association can only be made by means of a special resolution at a general meeting of the shareholders of the Company.

Significant contracts

The Company is not a party to any significant agreements that take effect, alter or terminate upon a change of control of the Company following a takeover bid.

There are provisions in the Executive Directors' service agreements which state that following a takeover or change of control, if the Executive Director's employment is terminated then both salary/benefits and a sum in respect of lost future bonus opportunity become payable as a lump sum.

The Strategic Report contains all the information required to comply with Section 414(c) of the Companies Act 2006 and there are no contractual arrangements that need to be disclosed which are essential to the business of the Group.

Disclosure of information to the auditor

As at the date of the approval of this Annual Report, as far as each Director is aware, there is no relevant audit information of which the Company's auditor is unaware. Each Director has taken all such steps as he or she ought to have taken as a Director in order to make himself/herself aware of any relevant audit information and to establish that the Company's auditor is aware of that information.

This confirmation is given and should be interpreted in accordance with the provisions of Section 418 of the Companies Act 2006.

Auditor

The Company's auditor throughout the period of this Annual Report was Deloitte LLP, who was appointed on 20th May 2014.

Deloitte LLP has expressed its willingness to continue in office as auditor and a resolution to re-appoint Deloitte LLP will be proposed at the forthcoming AGM.

	As at 31.12.20		As at 19.02.21	
	Number of Ordinary shares	% of issued share capital	Number of Ordinary shares	% of issued share capital
Substantial shareholdings				
BlackRock, Inc.	5,785,574	7.8%	5,936,797	8.0%
The Capital Group Companies, Inc.	5,588,987	7.6%	5,446,376	7.4%
Fiera Capital Corporation	4,551,991	6.2%	4,521,599	6.1%
Sun Life Financial, Inc.	4,252,127	5.8%	4,238,629	5.7%
APG Groep N.V.	4,074,269	5.5%	4,072,344	5.5%
The Vanguard Group, Inc.	2,716,202	3.7%	2,744,173	3.7%

Research and development

The Group continues to devote significant resources to the research and development and the updating and expansion of its range of products in order to remain at the forefront of its world markets. The R&D functions in Cheltenham (Spirax Sarco Steam Specialties), Falmouth (Watson-Marlow), Huddersfield (Afex Hose), Bremen (Gestra), Normandy (Thermocoax) and the Product Development function in Pittsburgh and Utah (Chromalox) are tasked with improving the Group's pipeline of new products, decreasing the time to launch, expanding the Group's addressable market and realising additional sales. Further information on the expenditure on R&D is contained in Note 1 on page 170. The amount of R&D expenditure capitalised, and the amount amortised, in the year, are given in Note 15 on page 187.

Relationships with suppliers and customers

Our relationship with our customers is explained throughout the Report, including pages 81 and 95 (Our customers). Our relationship with our suppliers is specifically addressed on pages 75 to 76 (Our supply chain) and 95 (Our suppliers).

Treasury and foreign exchange

The Group has in place appropriate treasury policies and procedures, which are approved by the Board. The treasury function manages interest rates for both borrowings and cash deposits for the Group and is also responsible for ensuring there is sufficient headroom against any banking covenants contained within its credit facilities, and for ensuring there are appropriate facilities available to meet the Group's strategic plans. The Group's treasury policy was reviewed in 2020 and credit facilities were enhanced to ensure material levels of headroom.

In order to mitigate and manage exchange rate risk, the Group routinely enters into forward contracts and continues to monitor exchange rate risk in respect of foreign currency exposures.

All these treasury policies and procedures are regularly monitored and reviewed. It is the Group's policy not to undertake speculative transactions which create additional exposures over and above those arising from normal trading activity.

Political donations

The Group has a policy of not making political donations and no political donations were made during the year (2019: nil).

Greenhouse gas emissions

Details of our greenhouse gas emissions can be found on page 78.

Going concern

Our Going Concern Statement is set out on pages 56 to 57.

Scope of the reporting in this Annual Report

The Board has prepared a Strategic Report (including the Chair's Statement, the Strategic Review and the Review of Operations) which provides an overview of the development and performance of the Group's business in the year ended 31st December 2020 and its position at the end of that year, and which covers likely future developments in the business of the Company and the Group.

For the purposes of compliance with DTR 4.1.5 R(2) and DTR 4.1.8 R, the required content of the management report can be found in the Strategic Report and these Regulatory disclosures, including the sections of the Annual Report incorporated by reference.

The Strategic Report and the Directors' Report were approved by the Board on 9th March 2021. Pages 149 to 151 form the Directors' Report for the purposes of the Companies Act 2006.

The Annual Report contains the information required for compliance with the Companies, Partnerships and Groups (and Non-Financial Reporting) Regulations 2016.

For the purposes of LR 9.8.4C R, the information required to be disclosed by LR 9.8.4 R is set out in the following table.

Section	Topic	Location
(1)	Interest capitalised	Not applicable
(2)	Publication of unaudited financial information	Not applicable
(4)	Details of long-term incentive schemes	Remuneration Report, pages 129 to 130
(5)	Waiver of emoluments by a Director	Not applicable
(6)	Waiver of future emoluments by a Director	Not applicable
(7)	Non pre-emptive issues of equity for cash	Not applicable
(8)	Item (7) in relation to major subsidiary undertakings	Not applicable
(9)	Parent participation in a placing by a listed subsidiary	Not applicable
(10)	Contracts of significance	Regulatory Disclosures, page 150
(11)	Provision of services by a controlling shareholder	Not applicable
(12)	Shareholder waivers of dividends	Regulatory Disclosures, page 150
(13)	Shareholder waivers of future dividends	Not applicable
(14)	Agreements with controlling shareholders	Not applicable

Andy Robson

Group General Counsel and Company Secretary

9th March 2021

Spirax-Sarco Engineering plc
Registered no. 596337

Statement of Directors' responsibilities



Financial stability, going concern and viability remain paramount for investors. Our Group has proven its resilience and has a strong financial position.”

Nimesh Patel
Chief Financial Officer

Board of Directors

The Directors are responsible for preparing the Annual Report and the Financial Statements in accordance with applicable laws and regulations.

Company law requires the Directors to prepare consolidated Group Financial Statements for each financial year in accordance with IFRS as adopted by the EU. Parent Company Financial Statements are prepared under FRS 101.

In addition, by law the Directors must not approve the Financial Statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and Parent Company and of their profit or loss for that period. In preparing these Financial Statements, the Directors are required to:

- properly select and apply accounting policies;
- present information, including accounting policies, in a manner which is relevant, reliable, comparable and understandable;
- provide additional disclosures when compliance with the specific requirements in IFRS are insufficient to enable users to understand the impact of particular transactions, other events and conditions on the entity's financial position and financial performance; and
- make an assessment of the Company's ability to continue as a going concern.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Company's transactions and disclose with reasonable accuracy at any time the financial position of the Company and enable them to ensure that its Financial Statements comply with the Companies Act 2006.

They are also responsible for safeguarding the assets of the Company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the Group's website, www.spiraxsarcoengineering.com. Legislation in the UK governing the preparation and dissemination of Financial Statements may differ from legislation in other jurisdictions.

Cautionary statement

All statements other than statements of historical fact included in this document, including those regarding the financial condition, results, operations and businesses of Spirax-Sarco Engineering plc (its strategy, plans and objectives), are forward-looking statements. These forward-looking statements reflect management's assumptions made on the basis of information available at this time. They involve known and unknown risks, uncertainties and other important factors which could cause the actual results, performance or achievements of Spirax-Sarco Engineering plc to be materially different from future results, performance or achievements expressed or implied by such forward-looking statements. Spirax-Sarco Engineering plc and its Directors accept no liability to third parties in respect of this Report save as would arise under English law.

Any liability to a person who has demonstrated reliance on any untrue or misleading statement or omission shall be determined in accordance with schedule 10A of the Financial Services and Markets Act 2000. Schedule 10A contains limits on the liability of the Directors of Spirax-Sarco Engineering plc and their liability is solely to Spirax-Sarco Engineering plc.

Responsibility statement

We confirm that to the best of our knowledge:

- the Financial Statements, prepared in accordance with IFRS as adopted by the EU, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the undertakings included in the consolidation taken as a whole;
- the Strategic Report includes a fair review of the development and performance of the business and the position of the Company and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face; and
- the Annual Report 2020 taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Company's financial position, performance, business model and strategy.

This responsibility statement was approved by the Board of Directors on 9th March 2021 and is signed on its behalf by:

Nimesh Patel
Chief Financial Officer
9th March 2021

Financial Statements

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Independent Auditor's Report

To the Members of Spirax-Sarco Engineering plc

Report on the audit of the Financial Statements

1. Opinion

In our opinion:

- the Financial Statements of Spirax-Sarco Engineering plc (the 'Parent Company') and its subsidiaries (the 'Group') give a true and fair view of the state of the Group's and of the Parent Company's affairs as at 31st December 2020 and of the Group's profit for the year then ended;
- the Group Financial Statements have been properly prepared in accordance with international accounting standards in conformity with the requirements of the Companies Act 2006 and International Financial Reporting Standards (IFRSs) as adopted by the European Union;
- the Parent Company Financial Statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice, including Financial Reporting Standard 101 "Reduced Disclosure Framework"; and
- the Financial Statements have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the Financial Statements which comprise:

- the Consolidated and Parent Company Statements of Financial Position;
- the Consolidated Income Statement;
- the Consolidated Statement of Comprehensive Income;
- the Consolidated and Parent Company Statements of Changes in Equity;
- the Consolidated Statement of Cash Flows; and
- the related Notes 1 to 27 to the Consolidated Financial Statements and 1 to 11 for the Parent Company Financial Statements.

The financial reporting framework that has been applied in the preparation of the Group Financial Statements is applicable law, international accounting standards in conformity with the requirements of the Companies Act 2006 and IFRSs as adopted by the European Union.

The financial reporting framework that has been applied in the preparation of the Parent Company Financial Statements is applicable law and United Kingdom Accounting Standards, including FRS 101 "Reduced Disclosure Framework" (United Kingdom Generally Accepted Accounting Practice).

2. Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the Financial Statements section of our report.

We are independent of the Group and the Parent Company in accordance with the ethical requirements that are relevant to our audit of the Financial Statements in the UK, including the Financial Reporting Council's (the 'FRC's') Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We confirm that the non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the Parent Company.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

3. Summary of our audit approach

Key audit matters	<p>The key audit matters that we identified in the current year were:</p> <ul style="list-style-type: none"> • Revenue recognition in relation to cut-off for certain components • Defined benefit pension liability valuation focusing on the judgements and assumptions made by management in determining the discount rate, mortality assumption and inflation rate; and • Goodwill impairment review for the Electric Thermal Solutions (ETS) cash generating unit (CGU) <p>Within this report, key audit matters are identified as follows:</p> <ul style="list-style-type: none"> ⚠ Newly identified ⬅ Similar level of risk
Materiality	<p>The materiality that we used for the Group Financial Statements was £11.4m which was determined on the basis of 5% of statutory profit before tax adjusted for a one-off gain of £10.5m from the closure of the pension schemes in the UK and Canada to future accruals.</p>
Scoping	<p>We focused our Group audit scope primarily on the audit work at 25 components (statutory companies). These components represent the principal business units and account for 73% of the Group's net assets, 74% of the Group's revenue and 73% of the Group's profit before tax.</p>
Significant changes in our approach	<p>We have refined our key audit matters relative to the prior year through:</p> <ul style="list-style-type: none"> • the removal of the German pension scheme from our defined benefit pension liability valuation key audit matter given its relative materiality. • the removal of significant contracts spanning year-end from the revenue recognition key audit matter as these are not prevalent enough to result in a significant risk of material misstatement. <p>In the current year we have identified a key audit matter on the valuation of goodwill for the ETS CGU focused on sales and EBIT margin growth in 2021 to 2025 and the discount rate assumptions. This has replaced the prior year key audit matter in relation to the valuation of goodwill for the Chromalox CGU, following a change in the CGU structure in the year ended 31st December 2019.</p> <p>As there were no acquisitions in the period, the key audit matter in relation to the valuation of acquired intangible assets is no longer applicable.</p>

4. Conclusions relating to going concern

In auditing the Financial Statements, we have concluded that the Directors' use of the going concern basis of accounting in the preparation of the Financial Statements is appropriate.

Our evaluation of the Directors' assessment of the Group's and Parent Company's ability to continue to adopt the going concern basis of accounting included:

- evaluated the financing facilities available to the Group including nature of facilities, repayment terms and covenants;
- considered the business model and principal risks and uncertainties;
- challenged the assumptions used in the forecasts through assessing the accuracy of historical budgeting and by reference to market data;
- recalculated and assessed the amount of headroom in the forecasts (cash and covenants); and
- performed a sensitivity analysis to consider specific scenarios including a reverse stress test.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Group's and Parent Company's ability to continue as a going concern for a period of at least twelve months from when the Financial Statements are authorised for issue.

In relation to the reporting on how the Group has applied the UK Corporate Governance Code, we have nothing material to add or draw attention to in relation to the Directors' statement in the Financial Statements about whether the Directors considered it appropriate to adopt the going concern basis of accounting.

Our responsibilities and the responsibilities of the Directors with respect to going concern are described in the relevant sections of this report.

5. Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the Financial Statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified. These matters included those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit; and directing the efforts of the engagement team.

These matters were addressed in the context of our audit of the Financial Statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

5.1. Revenue recognition

Key audit matter description	<p>The Group policy is to recognise revenue when performance obligations have been fulfilled which, in the majority of cases, is at time of dispatch ('ex works') or at time of delivery ('FOB'). We have identified a key audit matter relating to a risk of material misstatement, whether due to fraud or error, in relation to cut-off for revenue recognition. In particular the potential overstatement of revenue within certain components where a significantly higher proportion of annual revenue is recognised in December 2020 compared to the rest of the year. The risk for these components focuses on the recognition of revenue by reference to the contracted shipping terms and meeting the performance obligations for product despatches and deliveries spanning year-end.</p> <p>Refer to Note 1 for the Group's revenue recognition policy and the significant issues section of the Audit Committee Report on pages 110 to 111.</p>
How the scope of our audit responded to the key audit matter	<p>In response to the key audit matter described above, we performed a risk assessment across the Group to identify specific areas of risk, focusing our testing accordingly. Our audit response consisted of several procedures including those summarised below.</p> <p>We performed walkthroughs to obtain an understanding of the relevant controls relating to the revenue cycle.</p> <p>We reviewed the product despatch cycle and revenue recognition profile across the year-end period and tested a sample of items by assessing whether the date of transfer of control was in line with the revenue recognition date in accordance with the terms of trade with customers. We focused our procedures on those components with a higher than average volume and value of trade in December 2020.</p>
Key observations	<p>From the work performed above we are satisfied that there are no material cut-off errors.</p>

Independent Auditor's Report *continued*

5.2. Defined benefit pension liability valuation

Key audit matter description



At 31st December 2020 the gross retirement benefit liability recognised in the Consolidated Statement of Financial Position was £630.3m (2019: £559.1m). There is a risk of material misstatement relating to the judgements made by management in valuing the defined benefit pension liabilities including the use of key model input assumptions specifically the discount rate, mortality assumption and inflation rate over the four main schemes (three in the UK and one in the USA). These variables can have a material impact in calculating the quantum of the retirement benefit liability.

Refer to Note 1 for the Group's policy on defined benefit plans and post-retirement benefit key sources of estimation uncertainty, Note 23 for the financial disclosure including the key estimates and assumptions used in the defined benefit pension plan valuation and the significant issues section of the Audit Committee Report on pages 110 to 111.

How the scope of our audit responded to the key audit matter



Working with our internal actuarial specialists we assessed the key assumptions applied in determining the pension obligations for the four main pension schemes, and determined whether the key assumptions are reasonable. Testing covered 94.3% (2019: 97.4%) of defined benefit pension liabilities.

For each of the four schemes, we challenged management's key assumptions by reference to illustrative benchmark rates, sensitising any difference between management's rates and the illustrative benchmark rates. Additionally, we benchmarked the key assumptions against other listed companies to check for any outliers in the data used.

Key observations



From the work performed above we are satisfied that the key assumptions applied in respect of the valuation of the schemes' liabilities are appropriate.

5.3. Goodwill impairment review for the Electric Thermal Solutions CGU

Key audit matter description



There is a high level of judgement surrounding the valuation of goodwill and the risk of impairment. Key judgements include assumptions in estimating future net cash flows to determine whether assets are impaired, alongside setting appropriate discount rates (including country specific risk premiums) for each of the CGUs.

Out of the three CGUs, revenue and margins for Electric Thermal Solutions (ETS) have been most affected by the Covid-19 pandemic. Revenue and profit margin has been below management forecast. The value of goodwill for the ETS CGU as at the balance sheet date was £243.7m (2019: £244.7m).

Considering the above factors, we identified a key audit matter relating to the impairment of goodwill and intangibles for the ETS CGU. We have focused this risk on sales and EBIT margin growth in 2021 to 2025 and the discount rate assumptions. The Audit Committee Report on page 111 refers to impairment of goodwill and other intangibles as an area considered by the Audit Committee. Note 1 to the Consolidated Financial Statements sets out the Group's accounting policy for testing of goodwill and intangibles for impairment. The basis for the impairment reviews is outlined in Note 15 to the Consolidated Financial Statements, including details of the discount rates and growth rates used. Note 15 to the Consolidated Financial Statements also includes details of the extent to which the CGUs to which the goodwill and other intangible assets are allocated are sensitive to changes in the key inputs.

How the scope of our audit responded to the key audit matter



In response to the key audit matter identified, we performed the following procedures to challenge management's assumptions and assessment:

- obtained an understanding of the relevant controls relating to the impairment review process;
- assessed the integrity of management's impairment model through testing of the mechanical accuracy and verifying the application of the input assumptions;
- evaluated the process management undertook to prepare the cash flow forecasts in its impairment model including agreement with the latest Board approved plans and management approved forecasts;
- challenged the cash flow projections through assessing the accuracy of historical budgeting by comparing them with actual performance and independent evidence to assess any significant expected future changes to the business, including consideration of the potential impact of Brexit and COVID-19 on the cash flow projections;
- considered a range of available market data and performed a benchmarking exercise to assess and challenge the growth rates forecasted by management in revenue and trading profit margins;
- considered reasonable possible changes in assumptions to challenge the appropriateness of management's assessment of reasonable possible change scenarios; and
- challenged the discount rate used with input from our internal valuations specialists, utilising their knowledge and expertise.

Key observations



From the work performed above we are satisfied that the value in use supports the carrying value. This was on the basis that the assumptions applied, when taken in aggregate, are within our acceptable range.

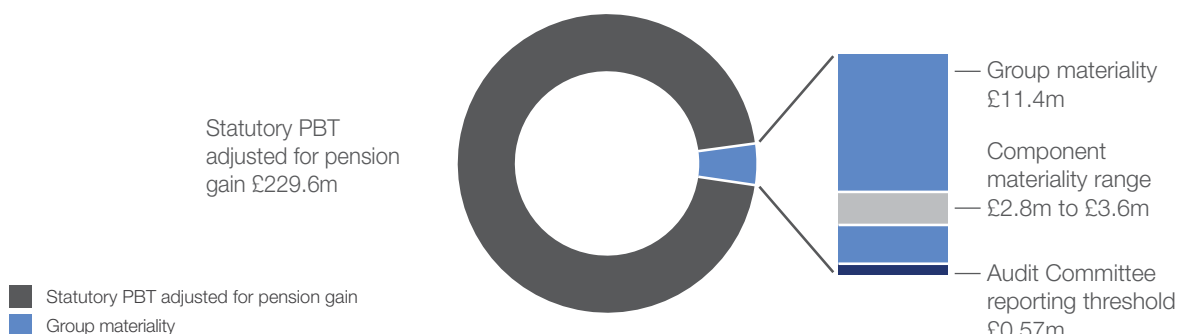
6. Our application of materiality

6.1. Materiality

We define materiality as the magnitude of misstatement in the Financial Statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

Based on our professional judgement, we determined materiality for the Financial Statements as a whole as follows:

	Group Financial Statements	Parent Company Financial Statements
Materiality	£11.4m (2019: £11.5m)	£5.1m (2019: £5.7m)
Basis for determining materiality	5% of statutory profit before tax adjusted to remove a one-off gain of £10.5m in relation to the closure of the UK and Canada defined benefit pension schemes to future accruals. (2019: 5% of statutory profit before tax).	Parent Company materiality is set at 3% of net assets, which is capped at £5.1m (2019: £5.7m).
Rationale for the benchmark applied	We have used statutory profit before tax adjusted for a one-off gain for determining materiality. This is considered to be a key benchmark as this metric is important to the users of the Financial Statements (investors and analysts being the key users for a listed entity) because it portrays the performance of the business and hence its ability to pay a return on investment to the investors.	We have considered net assets as the appropriate measure given the Parent Company is primarily a holding company for the Group. We then capped materiality at the £5.1m.



6.2. Performance materiality

We set performance materiality at a level lower than materiality to reduce the probability that, in aggregate, uncorrected and undetected misstatements exceed the materiality for the Financial Statements as a whole.

	Group Financial Statements	Parent Company Financial Statements
Performance materiality	70% (2019: 70%) of Group materiality	70% (2019: 70%) of Parent Company materiality
Basis and rationale for determining performance materiality	In determining performance materiality we considered our risk assessment, including our assessment of the Group's overall control environment and the level of misstatements identified in previous audits. We have also considered changes in key management personnel of the Group and the impact of COVID-19 on the Group.	

6.3. Error reporting threshold

We agreed with the Audit Committee that we would report to the Committee all audit differences in excess of £570,000 (2019: £575,000), as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds. We also report to the Audit Committee on disclosure matters that we identified when assessing the overall presentation of the Financial Statements.

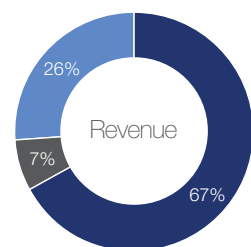
Independent Auditor's Report *continued*

7. An overview of the scope of our audit

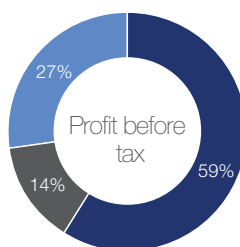
7.1. Identification and scoping of components

Our Group audit was scoped by obtaining an understanding of the Group and its environment, including Group-wide controls, and assessing the risks of material misstatement at the Group level. Based on that assessment, we focused our Group audit scope primarily on the audit work at 25 (2019: 27) components. 17 (2019: 20) of these were subject to a full audit, whilst the remaining eight components (2019: seven components) were subject to specified audit procedures where the extent of our testing was based on our assessment of the risks of material misstatement and of the materiality of the Group's operations at those components. These components represent the principal business units and account for 73% (2019: 82%) of the Group's net assets, 74% (2019: 76%) of the Group's revenue and 73% (2019: 77%) of the Group's profit before tax. They were also selected to provide an appropriate basis for undertaking audit work to address the risks of material misstatement identified above. Our audit work at the components was executed at levels of materiality applicable to each individual entity which were lower than Group materiality and ranged from £2.8m to £3.6m (2019: £2.8m to £4.0m) except for the Parent Company where we have determined a materiality of £5.1m (2019: £5.7m). We have tailored our scoping to ensure sufficient coverage not only at a consolidated Group level, but also across the three CGU's (Steam, Watson-Marlow and Electric Thermal Solutions), as well as across all geographies (EMEA, APAC and Americas).

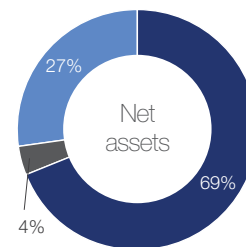
At the Parent Company level we also tested the consolidation process and carried out analytical procedures to confirm our conclusion that there were no significant risks of material misstatement of the aggregated financial information of the remaining components not subject to audit or audit of specified account balances.



■ Full audit scope
■ Specified audit procedures
■ Review at Group level



■ Full audit scope
■ Specified audit procedures
■ Review at Group level



■ Full audit scope
■ Specified audit procedures
■ Review at Group level

7.2. Our consideration of the control environment

Given the disaggregated nature of the Group, we largely continue to adopt a substantive audit approach. Where control improvements are identified these are reported to management and the Audit Committee as appropriate. Management determines their response to these observations and continues to monitor their resolution with reporting to and oversight from the Audit Committee.

7.3. Working with other auditors

The Group audit was conducted exclusively by a global network of Deloitte member firms under the direction and supervision of the UK Group audit team. Dedicated members of the Group audit team were assigned to each component to facilitate an effective and consistent approach to component oversight.

In response to the COVID-19 pandemic, which limited our ability to make component visits, more frequent calls were held between the Group and component teams and remote access to relevant documents was provided. Given the pandemic, the majority of our year-end audit was performed under a remote working environment. Throughout this time, we increased the frequency of our meetings with the audit teams and with management to ensure progress. Other than instances where we needed to perform virtual stock counts, we were able to perform our procedures without needing to make substantial changes to our planned approach.

8. Other information

The other information comprises the information included in the Annual Report, other than the Financial Statements and our auditor's report thereon. The Directors are responsible for the other information contained within the Annual Report. Our opinion on the Financial Statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the Financial Statements or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated.

If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the Financial Statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

9. Responsibilities of Directors

As explained more fully in the Directors' Responsibilities Statement, the Directors are responsible for the preparation of the Financial Statements and for being satisfied that they give a true and fair view, and for such internal control as the Directors determine is necessary to enable the preparation of Financial Statements that are free from material misstatement, whether due to fraud or error.

In preparing the Financial Statements, the Directors are responsible for assessing the Group's and the Parent Company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or the Parent Company or to cease operations, or have no realistic alternative but to do so.

10. Auditor's responsibilities for the audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the Financial Statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Financial Statements.

A further description of our responsibilities for the audit of the Financial Statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditor's report.

11. Extent to which the audit was considered capable of detecting irregularities, including fraud

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below.

11.1. Identifying and assessing potential risks related to irregularities

In identifying and assessing risks of material misstatement in respect of irregularities, including fraud and non-compliance with laws and regulations, we considered the following:

- the nature of the industry and sector, control environment and business performance including the design of the Group's remuneration policies, key drivers for Directors' remuneration, bonus levels and performance targets;
- results of our enquiries of management, internal audit, and the audit committee about their own identification and assessment of the risks of irregularities;
- any matters we identified having obtained and reviewed the Group's documentation of their policies and procedures relating to:
 - o identifying, evaluating and complying with laws and regulations and whether they were aware of any instances of non-compliance;
 - o detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected or alleged fraud;
 - o the internal controls established to mitigate risks of fraud or non-compliance with laws and regulations; and
- the matters discussed among the audit engagement team including significant component audit teams and relevant internal specialists, including tax, valuations, pensions and IT regarding how and where fraud might occur in the Financial Statements and any potential indicators of fraud.

As a result of these procedures, we considered the opportunities and incentives that may exist within the organisation for fraud and identified the greatest potential for fraud in the following area: cut-off for components where a significantly higher proportion of annual revenue is recognised in December 2020. In common with all audits under ISAs (UK), we are also required to perform specific procedures to respond to the risk of management override.

We also obtained an understanding of the legal and regulatory frameworks that the Group operates in, focusing on provisions of those laws and regulations that had a direct effect on the determination of material amounts and disclosures in the Financial Statements. The key laws and regulations we considered in this context included the UK Companies Act, Listing Rules, pensions legislation and tax legislation.

In addition, we considered provisions of other laws and regulations that do not have a direct effect on the Financial Statements but compliance with which may be fundamental to the Group's ability to operate or to avoid a material penalty.

Independent Auditor's Report *continued*

11.2. Audit response to risks identified

As a result of performing the above, we identified cut-off for components where a significantly higher proportion of annual revenue is recognised in December 2020 as a key audit matter related to the potential risk of fraud. The key audit matters section of our report explains the matter in more detail and also describes the specific procedures we performed in response to that key audit matter.

In addition to the above, our procedures to respond to risks identified included the following:

- reviewing the Financial Statement disclosures and testing to supporting documentation to assess compliance with provisions of relevant laws and regulations described as having a direct effect on the Financial Statements;
- enquiring of management, the audit committee and in-house legal counsel concerning actual and potential litigation and claims;
- performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud;
- reading minutes of meetings of those charged with governance, reviewing internal audit reports and reviewing correspondence with HMRC; and
- in addressing the risk of fraud through management override of controls, testing the appropriateness of journal entries and other adjustments; assessing whether the judgements made in making accounting estimates are indicative of a potential bias; and evaluating the business rationale of any significant transactions that are unusual or outside the normal course of business.

We also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members including internal specialists and significant component audit teams, and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

Report on other legal and regulatory requirements

12. Opinions on other matters prescribed by the Companies Act 2006

In our opinion the part of the Directors' Remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006.

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the Strategic Report and the Directors' Report for the financial year for which the Financial Statements are prepared is consistent with the Financial Statements; and
- the Strategic Report and the Directors' Report have been prepared in accordance with applicable legal requirements.

In the light of the knowledge and understanding of the Group and the Parent Company and their environment obtained in the course of the audit, we have not identified any material misstatements in the Strategic Report or the Directors' Report.

13. Corporate Governance Statement

The Listing Rules require us to review the Directors' statement in relation to going concern, longer-term viability and the part of the Corporate Governance Statement relating to the Group's compliance with the provisions of the UK Corporate Governance Code specified for our review.

Based on the work undertaken as part of our audit, we have concluded that each of the following elements of the Corporate Governance Statement is materially consistent with the Financial Statements and our knowledge obtained during the audit:

- the Directors' statement with regards to the appropriateness of adopting the going concern basis of accounting set out on page 151;
- the Directors' explanation as to its assessment of the Group's prospects, the period this assessment covers and why the period is appropriate set out on pages 56 and 57;
- the Directors' statement on fair, balanced and understandable set out on page 89;
- the Board's confirmation that it has carried out a robust assessment of the emerging and principal risks set out on page 115;
- the section of the Annual Report that describes the review of effectiveness of risk management and internal control systems set out on page 116; and
- the section describing the work of the audit committee set out on page 107.

14. Matters on which we are required to report by exception

14.1. Adequacy of explanations received and accounting records

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not received all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the Parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the Parent Company Financial Statements are not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

14.2. Directors' remuneration

Under the Companies Act 2006 we are also required to report if in our opinion certain disclosures of Directors' remuneration have not been made or the part of the Directors' Remuneration report to be audited is not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

15. Other matters which we are required to address

15.1. Auditor tenure

Following the recommendation of the audit committee, we were appointed by the Directors and subsequently at the Annual General Meeting on 11th May 2014 to audit the Financial Statements for the year ending 31st December 2014 and subsequent financial periods. The period of total uninterrupted engagement including previous renewals and reappointments of the firm is seven years, covering the years ending 31st December 2014 to 31st December 2020.

15.2. Consistency of the audit report with the additional report to the audit committee

Our audit opinion is consistent with the additional report to the audit committee we are required to provide in accordance with ISAs (UK).

16. Use of our report

This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006.

Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Andrew Bond, FCA

(Senior statutory auditor)

For and on behalf of Deloitte LLP

Statutory Auditor

London, United Kingdom

9th March 2021

Consolidated Statement of Financial Position

at 31st December 2020

	Notes	2020 £m	2019* £m	1 January 2019* £m
Assets				
Non-current assets				
Property, plant and equipment	13	261.3	251.2	230.8
Right-of-use assets	14	36.3	40.8	–
Goodwill	15	422.4	417.7	368.0
Other intangible assets	15	280.3	303.9	277.2
Prepayments		1.4	0.9	6.2
Investment in Associate	12	–	0.2	–
Deferred tax assets	16	50.9	40.8	41.3
		1,052.6	1,055.5	923.5
Current assets				
Inventories	17	180.1	185.9	160.6
Trade receivables	27	226.3	240.7	245.1
Other current assets	18	31.8	35.3	32.9
Taxation recoverable		8.1	8.4	4.6
Cash and cash equivalents*	24	246.2	330.6	324.6
		692.5	800.9	767.8
Total assets		1,745.1	1,856.4	1,691.3
Equity and liabilities				
Current liabilities				
Trade and other payables	19	160.2	174.8	167.0
Provisions	20	6.1	3.5	5.0
Bank overdrafts*	24	22.2	162.3	137.9
Short-term borrowings	24	–	–	15.7
Current portion of long-term borrowings	24	0.6	34.3	41.5
Short-term lease liabilities	24	10.3	11.1	–
Current tax payable		28.6	26.7	23.7
		228.0	412.7	390.8
Net current assets		464.5	388.2	377.0
Non-current liabilities				
Long-term borrowings	24	452.2	429.2	365.3
Long-term lease liabilities	24	23.8	27.8	–
Deferred tax liabilities	16	79.4	83.9	76.8
Post-retirement benefits	23	98.6	71.3	85.1
Provisions	20	2.0	1.3	3.7
Long-term payables		5.1	3.9	2.7
		661.1	617.4	533.6
Total liabilities		889.1	1,030.1	924.4
Net assets	2, 3	856.0	826.3	766.9
Equity				
Share capital	21	19.8	19.8	19.8
Share premium account		84.8	81.0	77.8
Other reserves	21	(36.1)	(10.6)	22.2
Retained earnings		786.5	735.1	646.0
Equity shareholders' funds		855.0	825.3	765.8
Non-controlling interest		1.0	1.0	1.1
Total equity		856.0	826.3	766.9
Total equity and liabilities		1,745.1	1,856.4	1,691.3

* The prior period comparatives for Cash and cash equivalents and Bank overdrafts have been adjusted to reflect a reclassification to meet the presentational requirements of IAS 32, with further detail given within Note 1. This had no impact on the net assets of the Group.

These Financial Statements of Spirax-Sarco Engineering plc, company number 00596337, were approved by the Board of Directors and authorised for issue on 9th March 2021 and signed on its behalf by:

N.J. Anderson N.B.Patel Directors

Consolidated Income Statement

for the year ended 31st December 2020

	Notes	Adjusted 2020 £m	Adjustments 2020 £m	Total 2020 £m	Adjusted 2019 £m	Adjustments 2019 £m	Total 2019 £m
Revenue	3	1,193.4	–	1,193.4	1,242.4	–	1,242.4
Operating costs	4	(923.0)	(21.4)	(944.4)	(959.7)	(37.7)	(997.4)
Operating profit	2, 3	270.4	(21.4)	249.0	282.7	(37.7)	245.0
Financial expenses		(10.1)	–	(10.1)	(9.9)	–	(9.9)
Financial income		1.4	–	1.4	1.5	–	1.5
Net financing expense	3, 6	(8.7)	–	(8.7)	(8.4)	–	(8.4)
Share of (loss)/profit of Associate	12	(0.2)	–	(0.2)	0.2	–	0.2
Profit before taxation	7	261.5	(21.4)	240.1	274.5	(37.7)	236.8
Taxation	9	(72.0)	5.8	(66.2)	(78.3)	8.5	(69.8)
Profit for the period		189.5	(15.6)	173.9	196.2	(29.2)	167.0
Attributable to:							
Equity shareholders		189.2	(15.6)	173.6	195.8	(29.2)	166.6
Non-controlling interest		0.3	–	0.3	0.4	–	0.4
Profit for the period		189.5	(15.6)	173.9	196.2	(29.2)	167.0
Earnings per share	2, 10						
Basic earnings per share		256.6p		235.5p	265.7p		226.2p
Diluted earnings per share		255.8p		234.8p	264.9p		225.5p
Dividends	11						
Dividends per share				118.0p			110.0p
Dividends paid during the year (per share)				111.5p			103.0p

Adjusted figures exclude certain items, as set out and explained in the Financial Review and as detailed in Notes 2 and 3. All amounts relate to continuing operations.

The Notes on pages 167 to 209 form an integral part of the Financial Statements.

Consolidated Statement of Comprehensive Income

for the year ended 31st December 2020

	Notes	2020 £m	2019 £m
Profit for the year		173.9	167.0
Items that will not be reclassified to profit or loss:			
Remeasurement (loss)/gain on post-retirement benefits	23	(40.2)	9.0
Deferred tax on remeasurement loss/(gain) on post-retirement benefits	23	8.2	(1.4)
		(32.0)	7.6
Items that may be reclassified subsequently to profit or loss:			
Foreign exchange translation differences and net investment hedges	21	(24.5)	(33.5)
Non-controlling interest foreign exchange translation differences		–	(0.1)
(Loss)/profit on cash flow hedges net of tax	21, 27	(0.7)	3.3
		(25.2)	(30.3)
Total comprehensive income for the year		116.7	144.3
Attributable to:			
Equity shareholders		116.4	144.0
Non-controlling interest		0.3	0.3
Total comprehensive income for the year		116.7	144.3

Consolidated Statement of Changes in Equity

for the year ended 31st December 2020

	Notes	Share capital £m	Share premium account £m	Other reserves £m	Retained earnings £m	Equity shareholders' funds £m	Non-controlling interest £m	Total equity £m
Balance at 1st January 2020		19.8	81.0	(10.6)	735.1	825.3	1.0	826.3
Profit for the year		–	–	–	173.6	173.6	0.3	173.9
Other comprehensive (expense)/income:								
Foreign exchange translation differences and net investment hedges	21	–	–	(24.5)	–	(24.5)	–	(24.5)
Remeasurement loss on post-retirement benefits	23	–	–	–	(40.2)	(40.2)	–	(40.2)
Deferred tax on remeasurement loss on post-retirement benefits	16, 23	–	–	–	8.2	8.2	–	8.2
Cash flow hedges	21, 27	–	–	(0.7)	–	(0.7)	–	(0.7)
Total other comprehensive expense for the year		–	–	(25.2)	(32.0)	(57.2)	–	(57.2)
Total comprehensive (expense)/income for the year		–	–	(25.2)	141.6	116.4	0.3	116.7
Contributions by and distributions to owners of the Company:								
Dividends paid	11	–	–	–	(82.2)	(82.2)	(0.3)	(82.5)
Equity settled share plans net of tax		–	–	–	(8.0)	(8.0)	–	(8.0)
Issue of share capital	21	–	3.8	–	–	3.8	–	3.8
Employee Benefit Trust shares	21	–	–	(0.3)	–	(0.3)	–	(0.3)
Transfer between reserves	21	–	–	–	–	–	–	–
Balance at 31st December 2020		19.8	84.8	(36.1)	786.5	855.0	1.0	856.0

Other reserves represent the Group's translation, net investment hedge, cash flow hedges, capital redemption and Employee Benefit Trust reserves (see Note 21). The non-controlling interest is a 2.5% share of Spirax-Sarco (Korea) Ltd held by employee shareholders.

Consolidated Statement of Changes in Equity

for the year ended 31st December 2019

	Notes	Share capital £m	Share premium account £m	Other reserves £m	Retained earnings £m	Equity shareholders' funds £m	Non- controlling interest £m	Total equity £m
Balance at 1st January 2019		19.8	77.8	22.2	646.0	765.8	1.1	766.9
Adoption of IFRS 16		–	–	–	(2.4)	(2.4)	–	(2.4)
Balance at 1st January 2019 (restated)		19.8	77.8	22.2	643.6	763.4	1.1	764.5
Profit for the year		–	–	–	166.6	166.6	0.4	167.0
Other comprehensive (expense)/income:								
Foreign exchange translation differences and net investment hedges	21	–	–	(33.5)	–	(33.5)	(0.1)	(33.6)
Remeasurement gain on post-retirement benefits	23	–	–	–	9.0	9.0	–	9.0
Deferred tax on remeasurement gain on post-retirement benefits	16, 23	–	–	–	(1.4)	(1.4)	–	(1.4)
Cash flow hedges	21, 27	–	–	3.3	–	3.3	–	3.3
Total other comprehensive (expense)/ income for the year		–	–	(30.2)	7.6	(22.6)	(0.1)	(22.7)
Total comprehensive (expense)/ income for the year		–	–	(30.2)	174.2	144.0	0.3	144.3
Contributions by and distributions to owners of the Company:								
Dividends paid	11	–	–	–	(75.9)	(75.9)	(0.4)	(76.3)
Equity settled share plans net of tax		–	–	–	(5.4)	(5.4)	–	(5.4)
Issue of share capital	21	–	3.2	–	–	3.2	–	3.2
Employee Benefit Trust shares	21	–	–	(4.0)	–	(4.0)	–	(4.0)
Transfer between reserves	21	–	–	1.4	(1.4)	–	–	–
Balance at 31st December 2019		19.8	81.0	(10.6)	735.1	825.3	1.0	826.3

Consolidated Statement of Cash Flows

for the year ended 31st December 2020

	Notes	2020 £m	2019 £m
Cash flows from operating activities			
Profit before taxation		240.1	236.8
Depreciation, amortisation and impairment	3, 4	75.4	76.6
(Profit)/loss on disposal of fixed assets	7	(0.3)	0.4
Disposal of subsidiary	26	0.4	–
Reversal of acquisition-related fair value adjustments to inventory	2	1.0	4.1
Cash payments to the pension schemes greater than the charge to operating profit	23	(14.7)	(5.2)
Equity settled share plans	23	7.0	6.2
Net financing expense	6	8.7	8.4
Operating cash flow before changes in working capital and provisions		317.6	327.3
Change in trade and other receivables		15.1	2.4
Change in inventories		3.8	(23.8)
Change in provisions		3.3	(2.4)
Change in trade and other payables		(8.7)	2.3
Cash generated from operations		331.1	305.8
Income taxes paid		(71.9)	(78.4)
Net cash from operating activities		259.2	227.4
Cash flows from investing activities			
Purchase of property, plant and equipment		(42.0)	(50.9)
Proceeds from sale of property, plant and equipment		2.2	3.4
Purchase of software and other intangibles		(4.9)	(8.3)
Development expenditure capitalised		(2.7)	(3.2)
Disposal of subsidiary		(0.3)	–
Acquisition of businesses net of cash acquired	26	(4.8)	(117.9)
Interest received		1.4	1.5
Net cash used in investing activities		(51.1)	(175.4)
Cash flows from financing activities			
Proceeds from issue of share capital	21	2.0	2.1
Employee Benefit Trust share purchase		(14.5)	(14.7)
Repaid borrowings	24	(175.0)	(80.2)
New borrowings	24	138.3	129.8
Interest paid including interest on lease liabilities		(8.6)	(7.0)
Repayment of lease liabilities	24	(12.2)	(11.2)
Dividends paid (including minorities)		(82.5)	(76.3)
Net cash used in financing activities		(152.5)	(57.5)
Net change in cash and cash equivalents		55.6	(5.5)
Net cash and cash equivalents at beginning of period	24	168.3	186.7
Exchange movement	24	0.1	(12.9)
Net cash and cash equivalents at end of period	24	224.0	168.3
Borrowings	24	(452.8)	(463.5)
Net debt at end of period	24	(228.8)	(295.2)
Lease liabilities	24	(34.1)	(38.9)
Net debt and lease liabilities at end of period	24	(262.9)	(334.1)

Notes to the Consolidated Financial Statements

1 Accounting policies

Basis of preparation

The Consolidated Financial Statements have been prepared on a historical cost basis except for items that are required by International Financial Reporting Standards (IFRS) to be measured at fair value, principally certain financial instruments. The Consolidated Financial Statements have been prepared in accordance with IFRS which includes the standards and interpretations issued by the International Accounting Standards Board (IASB) that have been adopted by the European Union (EU).

The preparation of Financial Statements in conformity with IFRS requires the Directors to apply IAS 1 and make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not apparent from other sources. The estimates and associated assumptions are based on historical experiences and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an on-going basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Critical judgements in applying the Group's accounting policies

The Directors have concluded that no critical judgements, apart from those involving estimations (which are dealt with separately below) have been made in the process of applying the Group's accounting policies.

Key sources of estimation uncertainty

The key assumptions concerning the future, and other key sources of estimation uncertainty at the reporting period that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are outlined below.

(i) Post-retirement benefits

The Group's defined benefit obligation is assessed by selecting key assumptions. The selection of mortality rates, inflation and pay increases are key sources of estimation uncertainty which could lead to material adjustment in the defined benefit obligation within the next financial year. These assumptions are set with close reference to market conditions.

The Group's defined benefit obligation is discounted at a rate set by reference to market yields at the end of the reporting period on high quality corporate bonds. The most significant criteria considered for the selection of bonds include the issue size of the corporate bonds, quality of the bonds and the identification of outliers which are excluded.

The assumptions selected and associated sensitivity analysis are disclosed in Note 23.

The impact the COVID-19 outbreak has had on our business in 2020 and the actions we are taking to mitigate its impact are discussed in the Chair's Statement starting on page 10. Our view is that we do not believe there is a significant risk of COVID-19 causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, and therefore we have concluded the impacts from COVID-19 do not create any further key sources of estimation uncertainty.

Climate change is a global challenge and an emerging risk to businesses, people and the environment across the world. We have a role to play in limiting warming by improving our energy management, reducing our carbon emissions and by helping our customers do the same. Growing awareness of climate change and customer sustainability targets will provide impetus for business growth as we provide products, services and solutions that increase efficiency and reduce customers' energy use and carbon emissions. As a result, in our view climate change does not create any further key sources of estimation uncertainty. For further detail see the Risk Management and Sustainability sections of the Strategic Report.

The Group has considerable financial resources together with a diverse range of products and customers across wide geographic areas and industries. As a consequence, the Directors believe that the Group is well placed to manage its business risks successfully.

Further information on the Group's business activities, performance and position, together with the financial position of the Group, its capital structure and cash flow are included in the Strategic Report from the inside front cover to page 86. In addition, Note 27 to the Financial Statements discloses details of the Group's financial risk management and credit facilities.

The Consolidated Financial Statements are presented in pounds sterling, which is the Company's functional currency, rounded to the nearest one hundred thousand.

The Group's Income Statement includes an adjustment column where certain items are included. Details of the items included and the reasons why they are included are disclosed in Note 2.

Reclassification of prior period balances

During the period, it was determined that the Group's cash and overdrafts with notional cash pooling arrangements did not meet the criteria for offsetting as set out in paragraph 42 of IAS 32 (Financial Instruments: Presentation) and therefore cannot be presented net in the Statement of Financial Position. As a result, for presentation purposes, amounts have been reclassified in the comparative periods with the impact being an increase to both Cash and cash equivalents and Bank overdrafts of £162.1m as at 31st December 2019 and £137.5m as at 1st January 2019.

This change had no impact on the net assets of the Group.

Notes to the Consolidated Financial Statements

continued

1 Accounting policies *continued*

New standards and interpretations applied in the current year

During the current year, the Group has applied a number of amendments to IFRS Standards and Interpretations issued by the International Accounting Standards Board (IASB) that are effective for annual periods that begin on or after 1st January 2020. Their adoption has not had a material impact on the disclosures or on the amounts reported in these Financial Statements:

- Amendments to References to the Conceptual Framework in IFRS Standards;
- Definition of a Business (Amendments to IFRS 3);
- Definition of Material (Amendments to IAS 1 and IAS 8); and
- Interest Rate Benchmark Reform (Amendments to IFRS 9, IAS 39 and IFRS 7).

The Economy in Argentina remains subject to high inflation. At 31st December 2020 we have concluded that applying IAS 29 (Financial Reporting in Hyperinflationary Economies) is not required as the impact of adopting is not material. We will continue to assess the position going forward.

New standards and interpretations not yet applied

At the date of authorisation of these Financial Statements, the Group has not applied the following new and revised IFRS Standards that have been issued but are not yet effective:

- IFRS 17 (Insurance Contracts);
- IFRS 10 and IAS 28 (amendments): Sale or Contribution of Assets between an Investor and its Associate or Joint Venture;
- Amendments to IAS 1: Classification of liabilities as current or non-current
- Amendments to IAS 16: Proceeds before intended use;
- Amendments to IAS 37: Cost of fulfilling a contract; and
- Annual Improvements to IFRS Standards 2018-2020 cycle.

The Directors do not expect that the adoption of the Standards listed above will have a material impact on the Financial Statements of the Group in future periods.

The transition away from London Inter-Bank Offered Rate (LIBOR), and other Inter-Bank Offered Rates (IBORs) (together "IBOR Reform") will remove IBOR as an interest rate benchmark for financial instruments including the floating rate debt held by the Group. There is uncertainty as to the timing and the methods of transition for replacing existing IBOR benchmark rates with alternative rates. The Group has considered whether hedge accounting relationships continue to qualify for hedge accounting as at 31st December 2020. IBOR continues to be used as a reference rate in financial markets and is used in the valuation of instruments with maturities that exceed the expected transition deadline. Therefore, the Group believes the current market structure supports the continuation of hedge accounting as at 31st December 2020. The changes proposed are not considered to have an immediate impact on the Group and we will continue to monitor developments of IBOR Reform throughout 2021.

Basis of accounting

(i) Subsidiaries

The Group Consolidated Financial Statements include the results of the Company and all its subsidiary undertakings. Subsidiaries are entities controlled by the Group. Control exists when the Group has the power, directly or indirectly, to govern the financial and operating policies of an entity so as to obtain benefits from its activities. In assessing control, potential voting rights that presently are exercisable or convertible are taken into account. The Financial Statements of subsidiaries are included in the Consolidated Financial Statements from the date that control commences until the date that control ceases.

(ii) Associates

Associates are those entities for which the Group has significant influence, but not control, over the financial and operating policies. The Financial Statements include the Group's share of the total recognised income and expense of Associates on an equity accounted basis, from the date that significant influence commenced until the date that significant influence ceases.

(iii) Transactions eliminated on consolidation

Intra-Group balances, and any unrealised gains and losses or income and expenses arising from intra Group transactions, are eliminated in preparing the Group Consolidated Financial Statements. Unrealised gains arising from transactions with Associates are eliminated to the extent of the Group's interest in the entity.

Foreign currency

(i) On consolidation

The assets and liabilities of foreign operations are translated into sterling at exchange rates ruling at the date of the Consolidated Statement of Financial Position (closing rate). The revenues, expenses and cash flows of foreign operations are translated into sterling at average rates of exchange ruling during the year. Where the Notes to the Group Consolidated Financial Statements include tables reconciling movements between opening and closing balances, opening and closing assets and liabilities are translated at closing rates and revenue, expenses and all other movements translated at average rates, with the exchange differences arising being disclosed separately.

Exchange differences arising from the translation of the assets and liabilities of foreign operations are taken to a separate translation reserve within equity. They are recycled and recognised in the Income Statement upon disposal of the operation. In respect of all foreign operations, any differences that have arisen before 1st January 2004, the date of transition to IFRS, are not presented as a separate component of equity.

1 Accounting policies *continued*

(ii) Foreign currency transactions

Transactions in foreign currencies are translated to the respective currencies of the Group entities at the foreign exchange rate at the date of the transaction. Monetary assets and liabilities at the date of the Statement of Financial Position denominated in a currency other than the functional currency of the entity are translated at the foreign exchange rate ruling at that date. Foreign exchange differences arising on translation are recognised in the Income Statement. Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are translated at foreign exchange rates ruling at the dates fair value was determined.

Cash flow hedges

Where a derivative financial instrument is designated as a hedge of the variability in cash flows of a highly probable forecasted transaction, the effective part of any gain or loss on the derivative financial instrument is recognised in other comprehensive income and presented in the cash flow hedges reserve. The associated gain or loss is removed from equity and recognised in the Income Statement in the period in which the transaction to which it relates occurs.

Net investment hedge accounting

The Group uses foreign currency denominated borrowings as a hedge against translation exposure on the Group's net investment in overseas companies. Where the hedge is fully effective at hedging, the variability in the net assets of such companies caused by changes in exchange rates and the changes in value of the borrowings are recognised in the Consolidated Statement of Comprehensive Income and accumulated in the translation reserve. The ineffective part of any changes in value caused by changes in exchange rates is recognised in the Consolidated Income Statement.

Interest-bearing borrowings

Interest-bearing borrowings are recognised initially at the fair value of consideration received, less directly attributable transaction costs. Subsequent to initial recognition, interest-bearing borrowings are measured at amortised cost with any difference between cost and redemption value being recognised in the Consolidated Income Statement over the period of the borrowings on an effective-interest basis.

Other financial liabilities

Other financial liabilities, including borrowings, are initially measured at fair value, net of transaction costs. Other financial liabilities are subsequently measured at amortised cost using the effective interest method, with interest expense recognised on an effective yield basis. The effective interest method is a method of calculating the amortised cost of the financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

The Group has not participated in any supplier financing arrangements during the current or prior year.

Property, plant and equipment

Items of property, plant and equipment are stated at cost or deemed cost, less accumulated depreciation.

Certain items of property, plant and equipment that had been revalued to fair value prior to 1st January 2004, the date of transition to IFRS, are measured on the basis of deemed cost, being the revalued amount at the date of that revaluation.

Depreciation is charged to the Income Statement on a straight-line basis at rates which write down the value of assets to their residual values over their estimated useful lives. Land is not depreciated.

The principal rates are as follows:

Freehold buildings	1.5-4.0%
Leasehold buildings (short and long-term)	Over life of lease
Plant and machinery	10-12.5%
Office furniture and fittings	10%
Office equipment	12.5-33.3%
Motor vehicles	20%
Tooling and patterns	10%

The depreciation rates are reassessed annually.

Business Combinations

Acquisitions of subsidiaries and businesses are accounted for using the acquisition method of accounting. Identified assets acquired and liabilities assumed are measured at their respective acquisition date fair values. The excess of the fair value of the consideration given over the fair value of the identifiable net assets acquired is recorded as goodwill. Acquisition related costs are expensed as incurred. The operating results of the acquired business are reflected in the Group's Consolidated Financial Statements after the date of acquisition.

Notes to the Consolidated Financial Statements

continued

1 Accounting policies *continued*

Intangible assets

(i) Goodwill

Goodwill represents the difference between the cost of the acquisition and the fair value of the net identifiable assets acquired. Goodwill is stated at cost less any accumulated impairment losses. Goodwill is allocated to cash-generating units and is not amortised but is tested annually for impairment (see Note 15 for more detail). In respect of acquisitions prior to 1st January 2004, goodwill is included on the basis of its deemed cost, which represents the amount recorded under previous UK Generally Accepted Accounting Practice (GAAP).

(ii) Research and development

Expenditure on R&D is charged to the Income Statement in the period in which it is incurred except that development expenditure is capitalised where the development costs relate to new or substantially improved products that are subsequently to be released for sale and will generate future economic benefits. The expenditure capitalised includes staff costs and related expenses. Capitalised development expenditure is stated at cost less accumulated amortisation (see below) and any impairment losses.

(iii) Other intangible assets

Intangible assets other than goodwill that are acquired by the Group are stated at cost less accumulated amortisation (see below) and any impairment losses. Annual impairment tests are performed on acquired intangible assets by comparing the carrying value with the recoverable amount, being the higher of the fair value less cost to sell and value in use, discounted at an appropriate discount rate, of future cash flows in respect of intangible assets for the relevant cash-generating unit. More detail is given in Note 15.

(iv) Amortisation

Amortisation is charged to the Income Statement on a straight-line basis over the estimated useful lives of intangible assets, other than those with indefinite useful lives, from the date they are available for use. The principal amortisation rates are as follows:

Capitalised development costs	20%
ERP systems and software	12-33%
Brand names and trademarks	5-33%
Manufacturing designs and core technology	6-50%
Non-compete undertakings	20-50%
Customer relationships	6-33%

Inventories

Inventories are measured at the lower of cost and net realisable value. The cost of inventories includes expenditure incurred in acquiring the inventories, production or conversion costs and other costs in bringing them to their existing location and condition. In the case of manufactured inventories and work in progress, cost includes an appropriate share of production overheads based on normal operating capacity.

Trade receivables and other receivables

Trade and other receivables are carried at original invoice amount (which is considered a reasonable proxy for fair value) and are subsequently held at amortised cost less provision for impairment. The provision for impairment of receivables is based on lifetime expected credit losses. Lifetime expected credit losses are calculated by assessing historic credit loss experience, adjusted for factors specific to the receivable and operating company. The movement in the provision is recognised in the Consolidated Income Statement. In continuing to assess the impact of the adoption of IFRS 9, specifically expected credit losses, is immaterial, we have considered that there is no material concentration or dependency on large customers, specific industries or geographies.

Trade and other payables

Trade and other payables are recognised at the amounts expected to be paid to counterparties and subsequently held at amortised cost.

Provisions and contingent liabilities

A provision is recognised in the Consolidated Statement of Financial Position when the Group has a present legal or constructive obligation as a result of a past event and it is probable that an outflow of resources, that can be reliably measured, will be required to settle the obligation. If the obligation is expected to be settled within 12 months of the reporting date the provision is included within current liabilities and if expected to be settled after 12 months included in non-current liabilities.

In respect of product warranties, a provision is recognised when the underlying products or services are sold. Obligations arising from restructuring plans are recognised when detailed formal plans have been established and there is a valid expectation that such a plan will be carried out.

Provisions are recognised at an amount equal to the best estimate of the expenditure required to settle the Group's liability.

If the likelihood of having to settle the obligation is less than probable but more than remote, or the amount of the obligation cannot be measured reliably then a contingent liability is disclosed.

Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits with an original maturity usually of three months or less, and are held at amortised cost. Bank overdrafts that are repayable on demand and form an integral part of the Group's cash management are included as a component of cash and cash equivalents for the purpose of the Statement of Cash Flows.

1 Accounting policies *continued*

Going concern

The statement on the going concern assumption set out on pages 56 to 57.

Alternative performance measures

The Group reports under International Financial Reporting Standards (IFRS) and also uses alternative performance measures where the Board believe that they help to effectively monitor the performance of the Group, users of the Financial Statements might find them informative and an aid to comparison with our peers. Certain alternative performance measures also form a meaningful element of Executive Directors' annual bonuses. A definition of the alternative performance measures included in the Annual Report and a reconciliation to the closest IFRS equivalent are disclosed in Note 2.

Employee benefits

(i) Defined contribution plans

Obligations for contributions to defined contribution pension plans are recognised as an expense in the Income Statement as incurred.

(ii) Defined benefit plans

The costs of providing pensions under defined benefit schemes are calculated in accordance with the advice of qualified actuaries and spread over the period during which benefit is expected to be derived from the employees' services. The Group's net obligation or surplus in respect of defined benefit pensions is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods. Past service costs are recognised straight away.

That benefit is discounted at rates reflecting the yields on AA credit rated corporate bonds that have maturity dates approximating the terms of the Group's obligations to determine its present value. Pension scheme assets are measured at fair value at the Statement of Financial Position date. Actuarial gains and losses, differences between the expected and actual returns, and the effect of changes in actuarial assumptions are recognised in the Statement of Comprehensive Income in the year they arise. Any scheme surplus (to the extent it is considered recoverable under the provisions of IFRIC 14) or deficit is recognised in full in the Statement of Financial Position.

The cost of other post-employment liabilities are calculated in a similar way to defined benefit pension schemes and spread over the period, which benefit is expected to be derived from the employees' services, in accordance with the advice of qualified actuaries.

(iii) Employee share plans

Incentives in the form of shares are provided to employees under share option and share award schemes. The fair value of these options and awards at their date of grant is charged to the Income Statement over the relevant vesting periods with a corresponding increase in equity. The value of the charge is adjusted to reflect expected and actual levels of options and share awards vesting.

(iv) Long-term share incentive plans

The fair value of awards is measured at the date of grant and the cost spread over the vesting period. The amount recognised as an expense is not adjusted to reflect market based performance conditions, but is adjusted for non-market based performance conditions.

Revenue

The Group applies the following five step framework when recognising revenue.

Step 1: Identify the contracts with customers.

Step 2: Identify the performance obligations in the contract.

Step 3: Determine the transaction price.

Step 4: Allocate the transaction price to the performance obligations in the contract.

Step 5: Recognise revenue when (or as) the entity satisfies a performance obligation.

The criteria the Group uses to identify the performance obligations within a contract are:

- the customer must be able to benefit from the goods or services either on its own or in combination with other resources available to the customer; and
- the entity's promise to transfer the good or service to the customer is separable from other promises in the contract.

The transaction price is the value that the Group expects to be entitled to from the customer and includes discounts, rebates, credits, price concessions, incentives, performance bonuses, penalties and liquidated damages, but is not reduced for bad debts. It is net of any Value Added Tax (VAT) and other sales-related taxes. Variable consideration that is dependent on certain events is included in the transaction price when it is "highly probable" that the variable consideration will occur.

Revenue is recognised over time as the product is being manufactured or a service being provided if any of the following criteria are met:

- the Group is creating a bespoke item which doesn't have an alternative use to the Group (i.e. we would incur a significant loss to re-work and/or sell to another customer) and the entity has a right to payment for work completed to date including a reasonable profit;
- the customer controls the asset that is being created or enhanced during the manufacturing process i.e. the customer has the right to significantly modify and dictate how the product is built during construction; and
- services provided where the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs.

Notes to the Consolidated Financial Statements

continued

1 Accounting policies *continued*

Judgement is made when determining if a product is bespoke and the value of revenue to recognise over time as products are being manufactured. However due to the low value of orders for bespoke items in progress at the 31st December 2020 where we have a right to payment of costs plus a reasonable profit this is not considered a critical judgement.

The value of revenue to be recognised over time for goods being manufactured is calculated using a cost based input approach. This is considered a faithful depiction of the transfer of the goods as the costs incurred, total costs expected to be incurred and order value are known.

The value of revenue to be recognised over time for services being provided is calculated based on the value to the customer transferred to date as a proportion of the total value of the service being provided.

If the criteria to recognise revenue over time are not met then revenue is recognised at a point in time when the customer obtains control of the asset and the performance obligation is satisfied. The customer obtains control of the asset when the customer can direct the use of the asset and obtain the benefits from the asset.

Factors the Group considers when determining the point in time when control of the asset has passed to the customer and revenue recognised include:

- the Group has a right to payment;
- legal title is transferred to the customer;
- physical possession of the asset has been transferred to the customer;
- the customer has the significant risks and rewards of ownership; and
- the customer has accepted the asset.

Control normally passes and revenue recognised when the goods are either despatched or delivered to the customer (in accordance with the terms and conditions of the sale) or the installation and testing is completed.

A large proportion of the Group's revenue qualifies for recognition on despatch or delivery of the goods to the customer as this is when the performance obligation is satisfied. This is normally the trigger point for raising an invoice per the terms and conditions of the order. Therefore invoicing for a large proportion of the Group's revenue occurs at the same time as when the performance obligation is satisfied. Contract assets at 31st December 2020 were £2.8m (0.2% of total revenue).

All revenue recognised by the Group is generated through contracts with customers.

When the unavoidable costs of fulfilling the contract exceed the revenue to be recognised the contract is loss making and the expected loss is recognised in the Consolidated Income Statement immediately.

Warranties that give assurance that a product meets agreed-upon specifications are accounted for as a cost provision and do not impact the timing and value of revenue. The Group does not have any material warranties that promise more than just providing assurance that a product meets agreed-upon specifications.

Costs of obtaining a contract, that are only incurred because the contract was obtained, are capitalised and expensed at a later date. At 31st December 2020 no costs of obtaining a contract were capitalised. All other assets recognised to fulfil a contract are within the scope of other accounting standards and policies.

Leases

The Group assesses whether a contract is or contains a lease, at inception of the contract. The Group recognises a right-of-use asset and a corresponding lease liability with respect to all lease arrangements in which it is the lessee, except for short-term leases (defined as leases with a lease term of 12 months or less) and leases of low value assets (assets with a value of less than £5,000). For these leases, the Group recognises the lease payments as an operating expense on a straight-line basis over the term of the lease unless another systematic basis is more representative of the time pattern in which economic benefits from the leased assets are consumed.

For new leases entered into, the lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by using the incremental borrowing rate for the related geographical location unless the rate implicit in the lease is readily determinable. The incremental borrowing rate is calculated at the rate of interest at which the company would have been able to borrow for a similar term and with a similar security the funds necessary to obtain a similar asset in a similar market.

Lease payments included in the measurement of the lease liability comprise:

- fixed lease payments (including in substance fixed payments), less any lease incentives receivable;
- variable lease payments that depend on an index or rate, initially measured using the index or rate at the commencement date;
- the amount expected to be payable by the company under residual value guarantees;
- the exercise price of purchase options, if the company is reasonably certain to exercise the options; and
- payments of penalties for terminating the lease, if the lease term reflects the exercise of an option to terminate the lease.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability and by reducing the carrying amount to reflect the lease payments made.

1 Accounting policies *continued*

The Group remeasures the lease liability (and makes a corresponding adjustment to the related right-of-use asset) whenever:

- the lease term has changed or there is a significant event or change in circumstances resulting in a change in the assessment of exercise of a purchase option; and
- the lease payments change due to changes in an index or rate or a change in expected payment under a residual guarantee value.

The right-of-use assets comprise the initial measurement of the corresponding lease liability, lease payments made at or before the commencement date and any initial direct costs. They are subsequently measured at cost less accumulated depreciation and impairment losses.

Right-of-use assets are depreciated over the shorter period of lease term and useful life of the underlying asset. If a lease transfer's ownership of the underlying asset or the cost of the right-of-use asset reflects that the Group expects to exercise a purchase option, the related right-of-use asset is depreciated over the useful life of the underlying asset.

Variable lease payments that do not depend on an index or rate are not included in the measurement of the lease liability and the right-of-use asset. The related payments are recognised as an expense in the period in which the event or condition that triggers those payments occurs.

Judgement is required when determining whether to include or exclude optional extension periods within the lease term, and estimation is required when calculating the incremental borrowing rate used to discount the future lease cash flows. These are not considered critical judgements or a key source of estimation uncertainty.

Taxation

The tax charge comprises current and deferred tax. Income tax expense is recognised in the Income Statement unless it relates to items recognised directly in equity or in other comprehensive income, when it is also recognised in equity or other comprehensive income respectively. Current tax is the expected tax payable on the profit for the year and any adjustments in respect of previous years using tax rates enacted or substantively enacted at the reporting date. Tax positions are reviewed to assess whether a provision should be made on prevailing circumstances. Tax provisions are included within Current taxation payable. Deferred tax is provided on temporary differences arising between the tax base of assets and liabilities, and their carrying amounts in the Financial Statements. Deferred tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the asset can be utilised. Deferred tax is provided using rates of tax that have been enacted or substantively enacted at the date of the Statement of Financial Position or the date that the temporary differences are expected to reverse. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Share capital and repurchased shares

When share capital recognised as equity is repurchased, the amount of the consideration paid, including directly attributable costs, is recognised as a deduction from equity. Repurchased shares are classified as treasury shares or placed in an Employee Benefit Trust and are presented as a deduction from total equity.

Share-based benefits granted to subsidiary employees

The Company grants share-based benefits over its own Ordinary shares directly to employees of subsidiary companies. These employees provide services to the subsidiary companies. The cost of these shares is not recharged and therefore the fair value of the share options granted is recognised as a capital contribution to the subsidiary companies. This is accounted for as an increase in investments with a corresponding increase in a non-distributable component of equity.

2 Alternative performance measures

The Group reports under International Financial Reporting Standards (IFRS) and also uses alternative performance measures where the Board believes that they help to effectively monitor the performance of the Group, users of the Financial Statements might find them informative and an aid to comparison with our peers. Certain alternative performance measures also form a meaningful element of Executive Directors' variable remuneration. Please see the Annual Report on Remuneration 2020 on pages 118 to 148 for further detail. A definition of the alternative performance measures and a reconciliation to the closest IFRS equivalent are disclosed below.

Adjusted operating profit

Adjusted operating profit excludes items that are considered to be significant in nature and/or quantum and where treatment as an adjusted item provides stakeholders with additional useful information to assess the period-on-period trading performance of the Group and an aid to comparison with our peers. The Group excludes such items including those defined as follows:

- amortisation and impairment of acquisition-related intangible assets;
- impairment of goodwill;
- costs associated with acquisitions and disposal;
- reversal of acquisition-related fair value adjustments to inventory;
- changes in deferred consideration payable on acquisitions;
- profit or loss on disposal of subsidiary;
- significant restructuring costs;
- foreign exchange gains and losses on borrowings;
- significant profits or losses on disposal of property; and
- significant plan amendments and/or legal rulings requiring a past service cost or credit for post-retirement benefit plans.

Notes to the Consolidated Financial Statements

continued

2 Alternative performance measures *continued*

A reconciliation between operating profit as reported under IFRS and adjusted operating profit is given below.

	2020 £m	2019 £m
Operating profit as reported under IFRS	249.0	245.0
Amortisation of acquisition-related intangible assets	26.6	26.8
Impairment of goodwill	–	4.2
Acquisition-related items	–	2.6
Reversal of acquisition-related fair value adjustments to inventory	1.0	4.1
Restructuring costs	4.3	–
Post-retirement benefit plans in the UK and Canada being closed to future accrual	(10.5)	–
Adjusted operating profit	270.4	282.7

The related tax effects of the above are included as adjustments in taxation as disclosed in Note 9.

Adjusted earnings per share

	2020	2019
Profit for the period attributable to equity holders as reported under IFRS (£m)	173.6	166.6
Items excluded from adjusted operating profit disclosed above (£m)	21.4	37.7
Tax effects on adjusted items (£m)	(5.8)	(8.5)
Adjusted profit for the period attributable to equity holders (£m)	189.2	195.8
Weighted average shares (million)	73.7	73.7
Basic adjusted earnings per share	256.6p	265.7p
Diluted weighted average shares (million)	73.9	73.9
Diluted adjusted earnings per share	255.8p	264.9p

Basic adjusted earnings per share is defined as adjusted profit for the period attributable to equity holders divided by the weighted average number of shares. Diluted adjusted earnings per share is defined as adjusted profit for the period attributable to equity holders divided by the diluted weighted average number of shares.

Basic and diluted EPS calculated on an IFRS profit basis are included in Note 10.

Adjusted cash flow

A reconciliation showing the items that bridge between net cash from operating activities as reported under IFRS to an adjusted basis is given below. Adjusted cash from operations is used by the Board to monitor the performance of the Group, with a focus on elements of cash flow, such as Net capital expenditure, which are subject to day to day control by the business.

	2020 £m	2019 £m
Net cash from operating activities as reported under IFRS	259.2	227.4
Acquisition and disposal costs	–	2.5
Restructuring costs	4.3	–
Net capital expenditure excluding acquired intangibles from acquisitions	(47.4)	(59.0)
Tax paid	71.9	78.4
Repayments of principal under lease liabilities	(12.2)	(11.2)
Adjusted cash from operations	275.8	238.1

Adjusted cash conversion in 2020 is 102% (2019: 84%). Cash conversion is calculated as adjusted cash from operations divided by adjusted operating profit.

The adjusted cash flow is included in the Financial Review on page 55.

2 Alternative performance measures *continued*

Cash generation

Cash generation is one of the Group's key performance indicators used by the Board to monitor the performance of the Group and measure the successful implementation of our strategy. It is one of two financial measures on which Executive Directors' variable remuneration is based.

Cash generation is calculated as adjusted operating profit after adding back depreciation and amortisation, less cash payments to pension schemes in excess of the charge to operating profit, equity settled share plans, net capital expenditure excluding acquired intangibles, working capital changes and repayment of principal under lease liabilities. Cash generation is equivalent to adjusted cash from operations, a reconciliation between this and net cash from operating activities as reported under IFRS is shown on page 174.

Return on invested capital (ROIC)

ROIC measures the after tax return on the total capital invested in the business. It is calculated as adjusted operating profit after tax divided by average invested capital. Average invested capital is defined as the average of the closing balance at the current and prior year end.

An analysis of the components is as follows:

	2020 £m	2019 £m
Total equity	856.0	826.3
Net debt	262.9	334.1
Total invested capital	1,118.9	1,160.4
Average invested capital	1,139.7	1,081.6
Average invested capital (excluding IFRS 16)	1,101.2	1,061.2
Operating profit as reported under IFRS	249.0	245.0
Adjustments (see adjusted operating profit)	21.4	37.7
Adjusted operating profit	270.4	282.7
Taxation	(74.4)	(80.6)
Adjusted operating profit after tax	196.0	202.1
Adjusted operating profit after tax (excluding IFRS 16)	195.2	201.2
Return in invested capital	17.2%	18.7%
Return in invested capital (excluding IFRS 16)	17.7%	19.0%

Notes to the Consolidated Financial Statements

continued

2 Alternative performance measures *continued*

Return on capital employed (ROCE)

ROCE measures effective management of fixed assets and working capital relative to the profitability of the business. It is calculated as adjusted operating profit divided by average capital employed. Average capital employed is defined as the average of the closing balance at the current and prior year end. More information on ROCE can be found in the Capital Employed and ROCE sections of the Financial Review on page 59.

An analysis of the components is as follows:

	2020 £m	2019 £m
Property, plant and equipment	261.3	251.2
Right-of-use assets (IFRS 16)	36.3	40.8
Software & development costs	37.1	36.2
Prepayments	1.4	0.9
Inventories	180.1	185.9
Trade receivables	226.3	240.7
Other current assets	31.8	35.3
Tax recoverable	8.1	8.4
Trade, other payables and current provisions	(166.3)	(178.3)
Current tax payable	(28.6)	(26.7)
Capital employed	587.5	594.4
Average capital employed	591.0	556.0
Average capital employed (excluding IFRS 16)	552.5	535.6
Operating profit	249.0	245.0
Adjustments (see adjusted operating profit on page 173 to 174)	21.4	37.7
Adjusted operating profit	270.4	282.7
Adjusted operating profit (excluding IFRS 16)	269.3	281.4
Return on capital employed	45.8%	50.8%
Return on capital employed (excluding IFRS 16)	48.7%	52.5%

A reconciliation of capital employed to net assets as reported under IFRS and disclosed on the Consolidated Statement of Financial Position is given below.

	2020 £m	2019 £m
Capital employed	587.5	594.4
Goodwill and acquired intangibles	665.6	685.4
Investment in Associate	–	0.2
Post-retirement benefits	(98.6)	(71.3)
Net deferred tax	(28.5)	(43.1)
Non-current provisions and long-term payables	(7.1)	(5.2)
Lease liabilities	(34.1)	(38.9)
Net debt	(228.8)	(295.2)
Net assets as reported under IFRS	856.0	826.3

Net debt including IFRS 16 lease liabilities

A reconciliation between net debt and net debt including IFRS 16 lease liabilities is given below. A breakdown of the balances that are included within net debt is given within Note 24. Net debt excludes IFRS 16 lease liabilities to enable comparability with prior years.

	2020 £m	2019 £m
Net debt	228.8	295.2
IFRS 16 lease liabilities	34.1	38.9
Net debt and IFRS 16 lease liabilities	262.9	334.1

2 Alternative performance measures *continued*

Net debt to earnings before interest, tax, depreciation and amortisation (EBITDA)

To assess the size of the net debt balance relative to the size of the earnings for the Group, we analyse net debt as a proportion of EBITDA. EBITDA is calculated by adding back depreciation and amortisation of owned property, plant and equipment, software and development to adjusted operating profit. Net debt is calculated as Cash and cash equivalents less Bank overdrafts and external borrowings (excluding IFRS 16 lease liabilities). The net debt to EBITDA ratio is calculated as follows:

	2020 £m	2019 £m
Adjusted operating profit	270.4	282.7
Depreciation and amortisation of property, plant and equipment, software and development	36.7	34.3
Earnings before interest, tax, depreciation and amortisation	307.1	317.0
Net debt	228.8	295.2
Net debt to EBITDA	0.7	0.9

The components of net debt are disclosed in Note 24.

Organic measures

As we are a multi-national group of companies, which trade in a large number of foreign currencies and regularly acquire and sometimes dispose of companies, we also refer to organic performance measures throughout the Annual Report. These strip out the effects of the movement of foreign currency exchange rates and of acquisitions and disposals. The Board believes that this allows users of the accounts to gain a further understanding of how the Group has performed.

Exchange translation movements are assessed by re-translating prior period values to current period exchange rates. Exchange transaction impacts on operating profit are assessed on the basis of transactions being at constant currency between years.

The incremental impact of any acquisitions and disposals that occurred in either the current period or prior period are excluded from the results of the current period at current period exchange rates.

The organic percentage movement is calculated as the organic movement divided by the sum of the prior period and exchange.

The organic bps change in adjusted operating margin is the difference between the current period margin excluding acquisitions and disposals and the prior period margin at current period exchange rates.

A reconciliation of the movement in revenue and adjusted operating profit compared to the prior period is given below.

	2019	Exchange	Organic	Acquisitions and disposals	2020	Organic	Reported
Revenue	£1,242.4m	(£27.2m)	(£37.0m)	£15.2m	1,193.4	-3%	-4%
Adjusted operating profit	£282.7m	(£12.0m)	(£3.4m)	£3.1m	270.4	-1%	-4%
Adjusted operating margin	22.8%				22.7%	+40 bps	-10 bps

The reconciliation for each segment is included in the Strategic Report.

Notes to the Consolidated Financial Statements

continued

3 Segmental reporting

As required by IFRS 8 (Operating Segments), the following segmental information is presented in a consistent format with management information considered by the Board.

Following recent material acquisitions into the Group, the composition of the Group's Reportable Segments changed in the financial year ended 31st December 2019 to align with both how the business is managed and how information is presented to the Board. This change resulted in Steam Specialties being reported as one single consolidated operating segment. In previous years Steam Specialties was an aggregation of three separate operating segments, EMEA, Americas and Asia Pacific, however changes to the management structure in the prior year resulted in the creation of a separate Steam Specialties management team reporting to the Chief Executive and Chief Financial Officer on the consolidated Steam Specialties results.

Following the acquisition of Thermocoax in May 2019, the Chromalox operating segment was renamed to Electric Thermal Solutions which now includes the combination of both businesses from 2019. No changes to the structure of operating segments have been made during the current period.

Analysis by operating segment

2020

	Revenue £m	Total operating profit £m	Adjusted operating profit £m	Adjusted operating margin %
Steam Specialties	694.1	157.8	154.3	22.2%
Electric Thermal Solutions	178.0	4.8	24.6	13.8%
Watson-Marlow	321.3	102.2	107.3	33.4%
Corporate expenses		(15.8)	(15.8)	
Total	1,193.4	249.0	270.4	22.7%
Net finance expense		(8.7)	(8.7)	
Share of profit of Associate		(0.2)	(0.2)	
Profit before tax		240.1	261.5	

2019

	Revenue £m	Total operating profit £m	Adjusted operating profit £m	Adjusted operating margin %
Steam Specialties	755.4	172.6	177.9	23.6%
Electric Thermal Solutions	186.1	7.9	24.7	13.3%
Watson-Marlow	300.9	82.7	95.8	31.8%
Corporate expenses		(18.2)	(15.7)	
Total	1,242.4	245.0	282.7	22.8%
Net finance expense		(8.4)	(8.4)	
Share of profit of Associate		0.2	0.2	
Profit before tax		236.8	274.5	

The following table details the split of revenue by geography for the combined Group:

	2020 £m	2019 £m
Europe, Middle East and Africa	507.8	518.7
Asia Pacific	288.5	296.0
Americas	397.1	427.7
Total revenue	1,193.4	1,242.4

Revenue generated by Group companies based in the USA is £303.0m (2019: £319.4m), in China is £134.6m (2019: £134.6m), in the UK is £90.2m (2019: £103.5m), in Germany is £109.8m (2019: £105.3m) and the rest of the world is £555.8m (2019: £579.6m).

3 Segmental reporting *continued*

The total operating profit for the period includes certain items, as analysed below:

2020

	Amortisation of acquisition-related intangible assets £m	Restructuring costs £m	UK and Canada pension plans closed to future accrual £m	Reversal of acquisition- related fair value adjustments to inventory £m	Total £m
Steam Specialties	(5.0)	–	8.5	–	3.5
Electric Thermal Solutions	(14.5)	(4.3)	–	(1.0)	(19.8)
Watson-Marlow	(7.1)	–	2.0	–	(5.1)
Corporate expenses	–	–	–	–	–
Total	(26.6)	(4.3)	10.5	(1.0)	(21.4)

2019

	Amortisation of acquisition-related intangible assets £m	Acquisition- related items £m	Impairment of goodwill £m	Reversal of acquisition- related fair value adjustments to inventory £m	Total £m
Steam Specialties	(5.3)	–	–	–	(5.3)
Electric Thermal Solutions	(12.7)	–	–	(4.1)	(16.8)
Watson-Marlow	(8.8)	(0.1)	(4.2)	–	(13.1)
Corporate expenses	–	(2.5)	–	–	(2.5)
Total	(26.8)	(2.6)	(4.2)	(4.1)	(37.7)

Net financing income and expense

	2020 Income £m	2020 Expense £m	2020 Net £m	2019 Income £m	2019 Expense £m	2019 Net £m
Steam Specialties	1.3	(2.4)	(1.1)	1.1	(3.3)	(2.2)
Electric Thermal Solutions	–	(0.3)	(0.3)	0.1	(0.3)	(0.2)
Watson-Marlow	–	(0.4)	(0.4)	0.1	(0.5)	(0.4)
Corporate expenses	0.1	(7.0)	(6.9)	0.2	(5.8)	(5.6)
Total net financing expense	1.4	(10.1)	(8.7)	1.5	(9.9)	(8.4)

Net assets

	2020 Assets £m	2020 Liabilities £m	2019 Assets £m	2019 Liabilities £m
Steam Specialties	640.8	(198.0)	669.4	(176.3)
Electric Thermal Solutions	530.0	(27.5)	552.0	(36.3)
Watson-Marlow	269.1	(46.5)	255.2	(42.2)
	1,439.9	(272.0)	1,476.6	(254.8)
Liabilities		(272.0)		(254.8)
Net deferred tax		(28.5)		(43.1)
Net current tax payable		(20.5)		(18.3)
Net debt including lease liabilities		(262.9)		(334.1)
Net assets	856.0		826.3	

Non-current assets in the UK were £203.4m (2019: £187.1m), in the USA were £350.8m (2019: £375.8m), in Germany were £168.9m (2019: £165.0m) and in France were £148.9m (2019: £146.5m).

Notes to the Consolidated Financial Statements

continued

3 Segmental reporting *continued*

Capital additions, depreciation, amortisation and impairment

	2020 Capital additions £m	2020 Depreciation, amortisation and impairment £m	2019 Capital additions £m	2019 Depreciation and amortisation £m
Steam Specialties	34.5	36.4	57.7	35.8
Electric Thermal Solutions	3.8	20.8	81.6	18.4
Watson-Marlow	19.6	18.2	40.6	22.4
Group total	57.9	75.4	179.9	76.6

Capital additions include property, plant and equipment of £42.0m (2019: £59.0m), of which £nil (2019: £8.1m) was from acquisitions in the period, and other intangible assets of £7.6m (2019: £72.0m) of which £nil (2019: £60.2m) relates to acquired intangibles from acquisitions in the period. Right-of-use asset additions of £8.3m occurred during the 12 month period to 31st December 2020, all of which relates to new leases entered into during 2020. Capital additions split between the UK and rest of the world are UK £28.2m (2019: £36.8m) and rest of the world £29.7m (2019: £143.1m).

4 Operating costs

	2020 Adjusted £m	2020 Adjustments £m	2020 Total £m	2019 Adjusted £m	2019 Adjustments £m	2019 Total £m
Cost of inventories recognised as an expense	288.7	1.0	289.7	297.5	4.1	301.6
Staff costs (Note 5)	430.8	–	430.8	438.7	–	438.7
Depreciation, amortisation and impairment	48.8	26.6	75.4	45.6	31.0	76.6
Other operating charges	154.7	(6.2)	148.5	177.9	2.6	180.5
Total operating costs	923.0	21.4	944.4	959.7	37.7	997.4

Total depreciation, amortisation and impairment includes amortisation of acquisition-related intangible assets of £26.6m (2019: £26.8m) and impairment of goodwill of £nil (2019: £4.2m). Total other operating charges include restructuring costs of £4.3m (2019: £nil), UK and Canada pension plans closure to future accrual credit of £10.5m and acquisition-related items of £nil (2019: £2.6m). Total cost of inventories recognised as an expense includes the reversal of acquisition-related fair value adjustments to inventory £1.0m (2019: £4.1m). Operating costs include exchange difference benefits of £1.0m (2019: £2.7m).

Total staff costs includes a credit of £2.9m relating to amounts capitalised during the year. Excluding this credit, total staff costs were £433.7m.

5 Staff costs and numbers

The aggregate payroll costs of persons employed by the Group were as follows:

	2020 £m	2019 £m
Wages and salaries	343.5	345.6
Social security costs	68.9	71.6
Pension costs	21.3	21.5
Total payroll costs	433.7	438.7

The average number of persons employed by the Group (including Directors) during the year was as follows:

	2020	2019
United Kingdom	2,009	2,014
Overseas	5,882	5,819
Group average	7,891	7,833

6 Net financing income and expense

	2020 £m	2019 £m
Financial expenses:		
Bank and other borrowing interest payable	(7.4)	(6.4)
Interest expense on lease liabilities	(1.2)	(1.3)
Net interest on pension scheme liabilities	(1.5)	(2.2)
	(10.1)	(9.9)
Financial income:		
Bank interest receivable	1.4	1.5
Net financing expense	(8.7)	(8.4)
Net pension scheme financial expense	(1.5)	(2.2)
Interest expense on lease liabilities	(1.2)	(1.3)
Net bank interest	(6.0)	(4.9)
Net financing expense	(8.7)	(8.4)

7 Profit before taxation

Profit before taxation is shown after charging:

	2020 £m	2019 £m
Depreciation of owned tangible fixed assets	(28.9)	(27.0)
Depreciation of right-of-use assets	(12.1)	(11.3)
Amortisation of acquired intangibles	(26.6)	(26.8)
Impairment of goodwill	–	(4.2)
Leases exempt from IFRS 16 (short-term, low value or variable lease payments)	(2.4)	(2.5)
Exchange difference benefits	1.0	2.7
Profit/(loss) on disposal of property, plant and equipment	0.3	(0.4)
Research and development	(10.0)	(10.2)

	2020 £m	2019 £m
Auditor's remuneration		
Audit of these Financial Statements	0.3	0.2
Amounts receivable by the Company's auditor and its Associates in respect of:		
Audit of Financial Statements of subsidiaries of the Company	1.6	1.7
Total audit fees	1.9	1.9
Audit-related assurance services – Interim review	0.1	0.1
Total non-audit fees	0.1	0.1
Total auditor's remuneration	2.0	2.0

8 Directors' emoluments

Directors represent the key management personnel of the Group under the terms of IAS 24 (Related Party Disclosures). Total remuneration is shown below.

Further details of salaries and short-term benefits, post-retirement benefits, share plans and long-term share incentive plans are shown in the Annual Report on Remuneration 2020 on pages 118 to 148. The share-based payments charge comprises a charge in relation to the Performance Share Plan and the Employee Share Ownership Plan (as described in Note 23).

	2020 £m	2019 £m
Salaries and short-term benefits	2.7	4.1
Post-retirement benefits	0.3	0.5
Share-based payments	2.1	1.7
Total Directors' remuneration	5.1	6.3

Notes to the Consolidated Financial Statements

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9 Taxation

	2020 Adjusted £m	2020 Adjustments £m	2020 Total £m	2019 Adjusted £m	2019 Adjustments £m	2019 Total £m
Analysis of charge in period						
UK corporation tax:						
Current tax on income for the period	13.8	–	13.8	14.1	–	14.1
Adjustments in respect of prior periods	(3.1)	–	(3.1)	(1.1)	–	(1.1)
	10.7	–	10.7	13.0	–	13.0
Foreign tax:						
Current tax on income for the period	60.4	–	60.4	56.9	–	56.9
Adjustments in respect of prior periods	0.6	–	0.6	(0.1)	–	(0.1)
	61.0	–	61.0	56.8	–	56.8
Total current tax charge	71.7	–	71.7	69.8	–	69.8
Deferred tax – UK	2.7	–	2.7	(0.1)	–	(0.1)
Deferred tax – Foreign	(2.4)	(5.8)	(8.2)	8.6	(8.5)	0.1
Tax on profit on ordinary activities	72.0	(5.8)	66.2	78.3	(8.5)	69.8

Reconciliation of effective tax rate

	2020 Adjusted £m	2020 Adjustments £m	2020 Total £m	2019 Adjusted £m	2019 Adjustments £m	2019 Total £m
Profit before tax and share of profit of Associate	261.7	(21.4)	240.3	274.3	(37.7)	236.6
Expected tax at blended rate	65.7	(5.9)	59.8	69.2	(9.6)	59.6
Increased withholding tax on overseas dividends	4.6	–	4.6	4.0	–	4.0
Benefit of financing structures	–	–	–	(1.2)	–	(1.2)
Non-deductible expenditure	1.7	–	1.7	2.7	–	2.7
Over provided in prior years	(2.6)	–	(2.6)	0.1	–	0.1
Other reconciling items	2.6	0.1	2.7	3.5	1.1	4.6
Total tax in income statement	72.0	(5.8)	66.2	78.3	(8.5)	69.8
Effective tax rate	27.5%	27.1%	27.5%	28.5%	22.6%	29.5%

The Group's tax charge in future years is likely to be affected by the proportion of profits arising and the effective tax rates in the various territories in which the Group operates. The blended tax rate is calculated using each subsidiary company's headline tax rate as a proportion of its respective profit.

The Group's tax charge for the year ended 31st December 2020 includes a credit of £5.8m in relation to certain items excluded from adjusting operating profit (as disclosed in Note 2). The tax impacts of these items are:

- Amortisation of acquisition-related intangible assets (£6.3m credit);
- Reversal of acquisition-related fair value adjustments to inventory (£0.3m credit);
- Costs related to the restructuring of Chromalox (£1.1m credit); and
- Closure of defined benefit UK and Canadian pension schemes to future accrual (£1.9m debit).

Excluding these adjustments the tax on profit and the effective tax rate are £72.0m and 27.5% respectively.

9 Taxation *continued*

In October 2017, the European Commission (EC) opened a State Aid investigation into the UK's Controlled Foreign Company (CFC) regime. In April 2019, the EC published its final decision that the UK CFC Finance Company Exemption (FCE) constituted State Aid in certain circumstances, following which the UK Government appealed the decision. Similar to other UK companies, in October 2019, the Group submitted its own appeal. The Group's benefit from the FCE in the period from 1st January 2013 to 31st December 2020 is approximately £8.6m including compound interest. On 1st March 2021, the Group received a Charging Notice issued by the UK tax authority to recover a benefit of £4.6 million, assessed for the period from 1st January 2017 to 31st December 2018. The Group will make a payment in 2021 with the expectation that this is refundable in the event of a successful appeal. The Group has not received a Charging Notice for the balance of £4.0m, being £2.8m for the period from 1st January 2013 to 31st December 2016 and £1.2m for the period from 1st January 2019 to the balance sheet date. No provision has been recognised at the year-end balance sheet date for either the Charging Notice amount or for the estimates for the other periods.

No UK tax (after double tax relief for underlying tax) is expected to be payable on the future remittance of retained earnings of overseas subsidiaries.

On 3 March 2021 the UK Government announced an intention to increase the UK corporation tax rate to 25% with effect from 1 April 2023. If enacted this will impact the value of our UK deferred tax balances, and the tax charged on UK profits generated in 2023 and subsequently. We have yet to determine the full impact of these proposed changes.

The effective tax rate is calculated as a percentage of profit before tax and share of profits of Associates.

10 Earnings per share

	2020	2019
Profit attributable to equity shareholders (£m)	173.6	166.6
Weighted average shares (million)	73.7	73.7
Dilution (million)	0.2	0.2
Diluted weighted average shares (million)	73.9	73.9
Basic earnings per share	235.5p	226.2p
Diluted earnings per share	234.8p	225.5p

Basic and diluted earnings per share calculated on an adjusted profit basis are included in Note 2.

The dilution is in respect of unexercised share options and the Performance Share Plan.

11 Dividends

	2020 £m	2019 £m
Amounts paid in the year:		
Final dividend for the year ended 31st December 2019 of 78.0p (2019: 71.0p) per share	57.5	52.3
Interim dividend for the year ended 31st December 2020 of 33.5p (2019: 32.0p) per share	24.7	23.6
Total dividends paid	82.2	75.9
Amounts arising in respect of the year:		
Interim dividend for the year ended 31st December 2020 of 33.5p (2019: 32.0p) per share	24.7	23.6
Proposed final dividend for the year ended 31st December 2020 of 84.5p (2019: 78.0p) per share	62.3	57.5
Total dividends arising	87.0	81.1

The proposed dividend is subject to approval in 2021. It is therefore not included as a liability in these Financial Statements. No scrip alternative to the cash dividend is being offered in respect of the proposed final dividend for the year ended 31st December 2020.

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12 Investment in Associate

	Associate 2020 £m	Associate 2019 £m
Cost of investment	1.4	1.4
Share of equity	(1.4)	(1.2)
Total investment in Associate	–	0.2
Summarised financial information (100% of the results of the Associate):		
Revenue	2.3	4.2
(Loss)/profit for the period	(1.4)	0.6
Current assets	0.7	1.9
Non-current assets	0.6	0.2
Current and non-current liabilities	1.9	1.3

Details of the Group's Associate at 31st December 2020 and 31st December 2019 is as follows:

Name of Associate	Country of incorporation and operation	Proportion of ownership interest and voting power held	Principal activity
Econotherm (UK) Ltd	UK	26.3%	Manufacturing and selling

The Group's share of (Loss)/Profit of Associate is £(0.4)m (2019: £0.2m). The Group's share of losses in 2020 exceeded our total investment value by £0.2m. As a result, in line with IAS 28 paragraph 38, the Group only recognised a loss of £0.2m in the Consolidated Income Statement. No further future losses will be recognised in the Consolidated Income Statement going forward, and any share of profit will only be recognised once it has exceeded the cumulative unrecognised loss of £0.2m.

13 Property, plant and equipment

2020

	Freehold land and buildings £m	Leasehold land and buildings £m	Plant and machinery £m	Fixtures, fittings, tools and equipment £m	Assets under construction £m	Total £m
Cost:						
At 1st January 2020	148.1	38.4	186.7	83.5	–	456.7
Exchange adjustments	0.9	0.3	(0.3)	(0.4)	–	0.5
	149.0	38.7	186.4	83.1	–	457.2
Additions	1.9	0.1	13.5	7.4	19.1	42.0
Transfers	7.7	–	2.9	(2.4)	(9.4)	(1.2)
Disposals	(0.3)	(0.1)	(6.8)	(4.9)	0.1	(12.0)
At 31st December 2020	158.3	38.7	196.0	83.2	9.8	486.0
Depreciation:						
At 1st January 2020	31.4	8.1	109.8	56.2	–	205.5
Exchange adjustments	0.3	0.1	0.1	0.1	–	0.6
	31.7	8.2	109.9	56.3	–	206.1
Charged in year	3.5	1.4	15.9	8.1	–	28.9
Transfers	(0.1)	–	2.9	(2.8)	–	–
Disposals	–	(0.1)	(5.4)	(4.8)	–	(10.3)
At 31st December 2020	35.1	9.5	123.3	56.8	–	224.7
Net book value:						
At 31st December 2020	123.2	29.2	72.7	26.4	9.8	261.3

13 Property, plant and equipment *continued*

The total amount of transfers relates to property, plant and equipment transferred to other intangible assets (see Note 15).

2019

	Freehold land and buildings £m	Leasehold land and buildings £m	Plant and machinery £m	Fixtures, fittings, tools and equipment £m	Total £m
Cost:					
At 1st January 2019	134.1	39.0	178.5	78.8	430.4
Exchange adjustments	(4.4)	(2.0)	(6.7)	(3.3)	(16.4)
	129.7	37.0	171.8	75.5	414.0
Additions	18.3	0.9	22.3	9.4	50.9
Acquisitions	3.8	–	4.0	0.3	8.1
Transfers	–	0.7	(1.7)	1.2	0.2
Disposals	(3.7)	(0.2)	(9.7)	(2.9)	(16.5)
At 31st December 2019	148.1	38.4	186.7	83.5	456.7
Depreciation:					
At 1st January 2019	29.9	6.9	110.0	52.8	199.6
Exchange adjustments	(1.2)	(0.4)	(3.9)	(2.1)	(7.6)
	28.7	6.5	106.1	50.7	192.0
Charged in year	3.2	1.4	14.7	7.7	27.0
Transfers	–	0.3	(1.1)	0.4	(0.4)
Disposals	(0.5)	(0.1)	(9.9)	(2.6)	(13.1)
At 31st December 2019	31.4	8.1	109.8	56.2	205.5
Net book value:					
At 31st December 2019	116.7	30.3	76.9	27.3	251.2

Included in the above are assets under construction of £24.2m.

14 Leases

Right-of-use assets

2020

	Leased land and buildings £m	Leased plant and machinery £m	Leased fixtures, fittings, tools and equipment £m	Total right-of- use assets £m
Cost:				
At 1st January 2020	38.6	11.0	2.1	51.7
Exchange adjustments	(0.4)	0.3	0.1	–
	38.2	11.3	2.2	51.7
Additions	4.6	3.3	0.4	8.3
Disposals	(1.2)	(0.6)	(0.3)	(2.1)
At 31st December 2020	41.6	14.0	2.3	57.9
Depreciation:				
At 1st January 2020	6.7	3.6	0.6	10.9
Exchange adjustments	(0.2)	0.1	–	(0.1)
	6.5	3.7	0.6	10.8
Charged in the year	7.4	4.0	0.7	12.1
Transfers	–	(0.2)	0.2	–
Disposals	(0.6)	(0.5)	(0.2)	(1.3)
At 31st December 2020	13.3	7.0	1.3	21.6
Net book value:				
At 31st December 2020	28.3	7.0	1.0	36.3

Notes to the Consolidated Financial Statements

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14 Leases *continued*

The vast majority of the right-of-use asset value relates to leased property where the Group leases a number of office and warehouse sites in a number of geographical locations. The remaining leases are largely made up of leased motor vehicles, where the Group makes use of leasing cars for sales and service engineers at a number of operating company locations. The average lease term is 4.3 years (2019: 4.3 years).

2019

	Leased land and buildings £m	Leased plant and machinery £m	Leased fixtures, fittings, tools and equipment £m	Total right-of- use assets £m
Cost:				
Transition adjustment at 1st January 2019	27.2	7.0	1.9	36.1
Reclassification from long-term prepayments	5.1	–	–	5.1
Additions	7.2	4.2	0.3	11.7
Acquisitions	0.8	0.3	–	1.1
Disposals	(0.2)	(0.1)	–	(0.3)
Exchange adjustments	(1.5)	(0.4)	(0.1)	(2.0)
At 31st December 2019	38.6	11.0	2.1	51.7
Depreciation:				
Charged in the year	7.0	3.7	0.6	11.3
Disposals	(0.1)	–	–	(0.1)
Exchange adjustments	(0.2)	(0.1)	–	(0.3)
At 31st December 2019	6.7	3.6	0.6	10.9
Net book value:				
At 31st December 2019	31.9	7.4	1.5	40.8

The maturity analysis of lease liabilities is presented in Note 27.

Amounts recognised in Consolidated Income Statement

	31st December 2020 £m	31st December 2019 £m
Depreciation expense on right-of-use assets	12.1	11.3
Interest expense on lease liabilities	1.2	1.3
Expense relating to short-term leases	1.7	2.0
Expense relating to leases of low value assets	0.5	0.2
Expense relating to variable lease payments not included in the measurement of the lease liability	0.2	0.3
Income from subleases right-of-use assets	(0.1)	(0.2)
Gain on sale and leaseback transactions	–	(0.4)
Total impact on profit before tax	15.6	14.5

The total cash outflow for leases during 2020 was £15.6m (2019: £15.0m).

The following cash outflows (undiscounted) are those that the Group is potentially exposed to in future periods but are currently not reflected in the measurement of lease liabilities:

- £0.3m relating to variable lease payments not based on an index or rate (2019: £0.3m);
- £0.7m relating to optional extension periods that are not reasonably certain to be exercised as at 31st December 2020 (2019: £1.3m); and
- £8.1m relating to leases that the Group are committed, but have not commenced as at 31st December 2020 (2019: £0.7m).

15 Goodwill and other intangible assets

2020

	Acquired intangibles £m	Development costs £m	Computer software £m	Total other intangibles £m	Goodwill £m
Cost:					
At 1st January 2020	366.9	23.6	71.5	462.0	425.6
Exchange and other adjustments	1.7	0.1	0.4	2.2	3.6
	368.6	23.7	71.9	464.2	429.2
Additions	–	2.7	4.9	7.6	0.6
Transfers from property, plant and equipment	–	0.7	0.5	1.2	–
Disposals	–	–	(2.4)	(2.4)	–
At 31st December 2020	368.6	27.1	74.9	470.6	429.8
Amortisation:					
At 1st January 2020	99.2	15.7	43.2	158.1	7.9
Exchange adjustments	(0.4)	0.1	0.3	–	(0.5)
	98.8	15.8	43.5	158.1	7.4
Amortisation	26.6	1.8	6.0	34.4	–
Disposals	–	–	(2.2)	(2.2)	–
At 31st December 2020	125.4	17.6	47.3	190.3	7.4
Net book value:					
At 31st December 2020	243.2	9.5	27.6	280.3	422.4

2019

	Acquired intangibles £m	Development costs £m	Computer software £m	Total other intangibles £m	Goodwill £m
Cost:					
At 1st January 2019	320.6	21.2	66.6	408.4	371.9
Exchange and other adjustments	(13.9)	(0.2)	(1.5)	(15.6)	(16.3)
	306.7	21.0	65.1	392.8	355.6
Additions	–	3.2	8.3	11.5	–
Acquisitions	60.2	–	0.3	60.5	70.0
Transfers from property, plant and equipment	–	0.1	(0.3)	(0.2)	–
Disposals	–	(0.7)	(1.9)	(2.6)	–
At 31st December 2019	366.9	23.6	71.5	462.0	425.6
Amortisation and impairment:					
At 1st January 2019	76.2	14.8	40.2	131.2	3.9
Exchange adjustments	(3.8)	(0.2)	(1.2)	(5.2)	(0.2)
	72.4	14.6	39.0	126.0	3.7
Amortisation and impairment	26.8	1.6	5.7	34.1	4.2
Transfers from property, plant and equipment	–	0.1	0.3	0.4	–
Disposals	–	(0.6)	(1.8)	(2.4)	–
At 31st December 2019	99.2	15.7	43.2	158.1	7.9
Net book value:					
At 31st December 2019	267.7	7.9	28.3	303.9	417.7

Notes to the Consolidated Financial Statements

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15 Goodwill and other intangible assets *continued*

Acquired intangibles

The disclosure by class of acquired intangible assets is shown in the tables below.

2020

	Customer relationships £m	Brand names and trademarks £m	Manufacturing designs and core technology £m	Non-compete undertakings and other £m	Total acquired intangibles £m
Cost:					
At 1st January 2020	89.0	193.8	61.0	23.1	366.9
Exchange and other adjustments	2.4	(1.5)	0.8	–	1.7
	91.4	192.3	61.8	23.1	368.6
Acquisitions	–	–	–	–	–
At 31st December 2020	91.4	192.3	61.8	23.1	368.6
Amortisation and impairment:					
At 1st January 2020	30.9	30.6	19.2	18.5	99.2
Exchange adjustments	0.3	(0.7)	0.1	(0.1)	(0.4)
	31.2	29.9	19.3	18.4	98.8
Amortisation and impairment	6.7	10.5	5.5	3.9	26.6
At 31st December 2020	37.9	40.4	24.8	22.3	125.4
Net book value:					
At 31st December 2020	53.5	151.9	37.0	0.8	243.2

Customer relationships are amortised over their useful economic lives in line with the accounting policies disclosed in Note 1. Within this balance individually material balances relate to Thermocoax £32.0m (2019: £32.6m). The remaining amortisation period is 13.3 years.

Brand names and trademark assets are amortised over their useful economic lives in line with the accounting policies disclosed in Note 1. Within this balance individually material balances relate to Chromalox £104.2m (2019: £114.1m), Gestra £27.5m (2019: £28.4m) and Thermocoax £13.6m (2019: £13.6m). The remaining amortisation periods are 16.5 years, 11.3 years and 18.3 years respectively.

Manufacturing designs and core technology are amortised over their useful economic lives in line with the accounting policies disclosed in Note 1. Within this balance individually material balances relate to Chromalox £11.0m (2019: £12.9m) and Gestra £10.4m (2019: £10.8m). The remaining amortisation period is 11.5 years for Chromalox and 11.3 years for Gestra.

Non-compete undertakings are amortised over their useful economic lives in line with the accounting policies disclosed in Note 1. There are no individually material items within this balance.

2019

	Customer relationships £m	Brand names and trademarks £m	Manufacturing designs and core technology £m	Non-compete undertakings and other £m	Total acquired intangibles £m
Cost:					
At 1st January 2019	57.1	187.3	56.0	20.2	320.6
Exchange and other adjustments	(3.0)	(7.8)	(2.2)	(0.9)	(13.9)
	54.1	179.5	53.8	19.3	306.7
Acquisitions	34.9	14.3	7.2	3.8	60.2
At 31st December 2019	89.0	193.8	61.0	23.1	366.9
Amortisation and impairment:					
At 1st January 2019	25.1	21.3	14.2	15.6	76.2
Exchange adjustments	(1.3)	(1.1)	(0.6)	(0.8)	(3.8)
	23.8	20.2	13.6	14.8	72.4
Amortisation and impairment	7.1	10.4	5.6	3.7	26.8
At 31st December 2019	30.9	30.6	19.2	18.5	99.2
Net book value:					
At 31st December 2019	58.1	163.2	41.8	4.6	267.7

15 Goodwill and other intangible assets *continued*

Impairment

In accordance with the requirements of IAS 36 (Impairment of Assets), goodwill is allocated to the Group's cash-generating units, or groups of cash-generating units, that are expected to benefit from the synergies of the business combination that gave rise to the goodwill.

During 2019, we performed a review on the basis of identification of our individual CGUs. As a result of this review, we consolidated a number of our CGUs into groups of CGUs that represent the lowest level to which goodwill is monitored for internal management purposes, being each operating segment as disclosed in Note 3. As a result, we performed an impairment review at an operating segment CGU level, the breakdown of the goodwill value at 31st December across these is shown below:

	2020 Goodwill £m	2019 Goodwill £m
Steam Specialties	117.4	113.0
Electric Thermal Solutions	243.7	244.7
Watson-Marlow	61.3	60.0
Total goodwill	422.4	417.7

The goodwill balance has been tested for annual impairment on the following basis:

- the carrying values of goodwill have been assessed by reference to value in use. These have been estimated using cash flows based on forecast information for the next financial year which have been approved by the Board and then extended up to a further 9 years based on the most recent forecasts prepared by management. Cash flow forecasts extend beyond 5 years only for Electric Thermal Solutions, incorporating further medium term growth expected during that period which is consistent with the acquisition plan that indicated a period of greater than 5 years would be required before the newly acquired segment reaches long term expected performance;
- discount rates range from 9.8% to 11.2% (2019: 10.6% to 11.8%);
- short to medium-term growth rates vary between 3.5% and 13.7% depending on detailed forecasts (2019: 3.1% to 7.5%). The short to medium-term is defined as not more than 10 years; and
- long-term growth rates are set using IMF forecasts and vary between 1.8% and 2.5% (2019: 1.8% to 2.5%).

The key assumptions on which the impairment tests are based are the discount rates, growth rates and the forecast cash flows:

The principal value in use assumptions were as follows:

Cash-generating unit	Discount rate	Short to medium-term growth rate	Long-term growth rate
Steam Specialties	11.2%	6.0% – 8.1%	2.5%
Electric Thermal Solutions	9.8%	3.5% – 13.7%	1.8%
Watson-Marlow	10.3%	8.8% – 9.0%	2.0%

The results of the Group's impairment tests are dependent upon estimates, particularly in relation to the key assumptions described above. Sensitivity analysis to potential changes in the key assumptions has been undertaken based on the following reasonably possible change sensitivities in isolation:

- a 1.0 % increase in the discount rate applied to each operating segment;
- a range of 1.0% – 5.0% reduction in the short to medium term growth rates and a 1.0% reduction in long-term growth rates used in the cash flow projections;
- a range of 100 to 300 bps reduction in the EBIT margin used in the cash flow projections; and
- a range of 1.0% – 5.0% reduction in the short to medium term revenue growth rates and a 1.0% reduction in long term revenue growth rates, combined with a range of 0 – 240bps reduction in forecast short to medium term profit margins specifically in relation to Electric Thermal Solutions.

For each cash-generating unit, the Directors do not consider that there are any reasonably possible change sensitivities for the business that could arise in the next 12 months that would result in an impairment charge being recognised.

Notes to the Consolidated Financial Statements

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16 Deferred tax assets and liabilities

Recognised deferred tax assets and liabilities

Deferred tax assets and liabilities are attributable to the following:

	2020 Assets £m	2019 Assets £m	2020 Liabilities £m	2019 Liabilities £m	2020 Net £m	2019 Net £m
Accelerated capital allowances	0.5	0.5	(9.3)	(8.5)	(8.8)	(8.0)
Provisions	9.0	2.3	(0.2)	(0.2)	8.8	2.1
Losses	3.9	2.9	–	–	3.9	2.9
Inventory	5.9	6.4	(1.6)	(1.6)	4.3	4.8
Pensions	23.9	17.7	(1.2)	(0.9)	22.7	16.8
Other temporary differences	7.7	11.0	(67.1)	(72.7)	(59.4)	(61.7)
Tax assets/(liabilities)	50.9	40.8	(79.4)	(83.9)	(28.5)	(43.1)

Movement in deferred tax during the year 2020

	1st January 2020 £m	Recognised in income £m	Recognised in OCI £m	Recognised in equity £m	Acquisitions £m	31st December 2020 £m
Accelerated capital allowances	(8.0)	(0.9)	–	0.1	–	(8.8)
Provisions	2.1	6.9	0.3	(0.5)	–	8.8
Losses	2.9	(1.1)	2.1	–	–	3.9
Inventory	4.8	(0.3)	(0.2)	–	–	4.3
Pensions	16.8	(2.5)	8.3	0.1	–	22.7
Other temporary differences	(61.7)	3.4	(0.1)	(1.0)	–	(59.4)
Group total	(43.1)	5.5	10.4	(1.3)	–	(28.5)

Movement in deferred tax during the year 2019

	1st January 2019 £m	Recognised in income £m	Recognised in OCI £m	Recognised in equity £m	Acquisitions £m	31st December 2019 £m
Accelerated capital allowances	(6.8)	(1.5)	0.1	0.2	–	(8.0)
Provisions	2.4	0.5	0.2	(1.0)	–	2.1
Losses	3.0	0.1	(0.1)	(0.1)	–	2.9
Inventory	4.4	0.2	(0.2)	0.4	–	4.8
Pensions	18.8	(0.5)	(1.5)	–	–	16.8
Other temporary differences	(57.3)	8.0	(0.7)	4.7	(16.4)	(61.7)
Group total	(35.5)	6.8	(2.2)	4.2	(16.4)	(43.1)

At the Balance Sheet date, the Group has deductible temporary differences, unused tax losses and unused tax creditors of £13.7m (2019: £12.8m) available for offset against future profits. A deferred tax asset has been recognised in respect of £3.9m (2019: £2.9m).

No deferred tax asset has been recognised in respect of the remaining £9.8m (2019: £9.9m) as it is not considered probable that there will be future taxable profits available against which the relevant deduction can be offset. The losses may be carried forward indefinitely.

Deferred tax of £8.3m recognised in the Consolidated Statement of Comprehensive Income (page 164) associated with the measurement of defined benefit obligations comprises £8.2m relating to remeasurement gain and £0.1m relating to exchange movements.

Other temporary differences mostly consist of deferred tax liabilities recognised on acquired intangibles from acquisitions.

17 Inventories

	2020 £m	2019 £m
Raw materials, consumables and components	70.7	72.2
Work in progress	25.2	25.5
Finished goods and goods for resale	84.2	88.2
Total inventories	180.1	185.9

The write-down of inventories recognised as an expense during the year in respect of continuing operations was £5.5m (2019: £0.7m). This comprises a cost of £6.5m (2019: £5.1m) to write-down inventory to net realisable value reduced by £1.0m (2019: £4.4m) for reversal of previous write-down reassessed as a result of customer demand.

The value of inventories expected to be recovered after more than 12 months is £12.3m (2019: £13.4m).

There is no material difference between the Statement of Financial Position value of inventories and their replacement cost. None of the inventory has been pledged as security.

18 Other current assets

	2020 £m	2019 £m
Other receivables	16.4	16.9
Contract assets	2.8	5.8
Prepayments	12.6	12.6
Total other current assets	31.8	35.3

Contract assets relate to revenue recognised that has not yet been invoiced to the customer.

19 Trade and other payables

	2020 £m	2019 £m
Trade payables	45.6	57.9
Contract liabilities	11.8	8.7
Social security	6.7	5.6
Other payables	32.6	37.8
Accruals	63.5	64.8
Total trade and other payables	160.2	174.8

Contract liabilities relate to advance payments received from customers that have not yet been recognised as revenue.

£8.2m of the contract liabilities at 31st December 2019 was recognised as revenue during 2020 (2019: £8.3m).

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20 Provisions

	Product warranty £m	Legal, contractual and other £m	Total £m
2020			
At 1st January 2020	1.5	3.3	4.8
Additional provision in the year	0.8	4.9	5.7
Utilised or released during the year	(0.4)	(1.9)	(2.3)
Exchange adjustments	0.1	(0.2)	(0.1)
At 31st December 2020	2.0	6.1	8.1
	Product warranty £m	Legal, contractual and other £m	Total £m
2019			
At 1st January 2019	3.6	5.1	8.7
Additional provision in the year	0.4	2.0	2.4
Utilised or released during the year	(2.6)	(3.5)	(6.1)
Acquisition of subsidiary	0.2	–	0.2
Exchange adjustments	(0.1)	(0.3)	(0.4)
At 31st December 2019	1.5	3.3	4.8
		2020 £m	2019 £m
Current provisions		6.1	3.5
Non-current provisions		2.0	1.3
Total provisions		8.1	4.8

Product warranty

Product warranty provisions reflect commitments made to customers on the sale of goods in the ordinary course of business. These are expected to be incurred in the next three years.

Legal, contractual and other

Legal, contractual and other provisions mainly comprise amounts provided against open legal and contractual disputes arising from trade and employment. These costs are based on past experience of similar items and other known factors and represent management's best estimate of the likely outcome. The Group has taken action to enforce its rights and protect its intellectual property rights around the world.

Reflecting the inherent uncertainty within many legal proceedings, the timing and amount of the outflows could differ significantly from the amount provided. Management does not expect that the outcome of such proceedings, either individually or in aggregate, will have a material adverse effect on the Group's financial condition or results of operations. Of the total legal, contractual and other provisions at 31st December 2020 £4.5m (2019: £2.7m) has been included within current and £1.6m within non-current provisions (2019: £0.6m).

21 Called up share capital and reserves

	2020 £m	2019 £m
Ordinary shares of 26 12/13p (2019: 26 12/13p) each:		
Authorised 111,428,571 (2019: 111,428,571)	30.0	30.0
Allotted, called up and fully paid 73,766,048 (2019: 73,736,888)	19.8	19.8

In 2020, 69,823 shares with a nominal value of £18,799 were issued in connection with the Group's Employee Share Schemes with external consideration of £3.8m received by the Group.

At 31st December 2020, 60,038 shares were held in an Employee Benefit Trust and available for use in connection with the Group's Employee Share Schemes.

104 senior employees of the Group have been granted options on Ordinary shares under the Share Option Scheme and Performance Share Plan (details in Note 23).

Other reserves in the Consolidated Statement of Changes in Equity on pages 164 to 165 are made up as follows:

	1st January 2020 £m	Change in year £m	31st December 2020 £m
Translation reserve	(14.7)	(12.9)	(27.6)
Net investment hedge reserve	5.5	(11.6)	(6.1)
Cash flow hedges reserve	3.3	(0.7)	2.6
Capital redemption reserve	1.8	–	1.8
Employee Benefit Trust reserve	(6.5)	(0.3)	(6.8)
Total other reserves	(10.6)	(25.5)	(36.1)

	1st January 2019 £m	Change in year £m	31st December 2019 £m
Translation reserve	30.3	(45.0)	(14.7)
Net investment hedge reserve	(7.4)	12.9	5.5
Cash flow hedges reserve	–	3.3	3.3
Capital redemption reserve	1.8	–	1.8
Employee Benefit Trust reserve	(2.5)	(4.0)	(6.5)
Total other reserves	22.2	(32.8)	(10.6)

Translation reserve

The foreign currency translation reserve is used to record exchange differences arising from the translation of the Financial Statements of foreign subsidiaries. On disposal accumulated exchange differences are recycled to the Income Statement.

Net investment hedge reserve

The reserve records the cumulative gain or loss on hedging instruments designated in net investment hedges. Together with the translation reserve, these are the foreign currency translation reserves of the Group.

Cash flow hedges reserve

The reserve records the cumulative net change in the fair value of forward exchange contracts where they are designated as effective cash flow hedge relationships.

Capital redemption reserve

This reserve records the historical repurchase of the Group's own shares.

Employee Benefit Trust reserve

The Group has an Employee Benefit Trust which is used to purchase, hold and issue shares in connection with the Group's employee share schemes. The shares held in Trust are recorded in this separate reserve.

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22 Capital commitments and contingent liabilities

	2020 £m	2019 £m
Capital expenditure contracted for but not provided	7.3	8.5

All capital commitments are related to property, plant and equipment and computer software. The Group has no material contingent liabilities at 31st December 2020 (no material contingent liabilities existed at 31st December 2019), but does have a non-material contingent liability in relation to tax estimated at approximately £8.6m (2019: £8.3m). See Note 9 for further details.

23 Employee benefits

Retirement benefit obligations

The Group operates a wide range of retirement benefit arrangements, which are established in accordance with local conditions and practices within the countries concerned. These include funded defined contribution and funded and unfunded defined benefit schemes.

Defined contribution arrangements

The majority of the retirement benefit arrangements operated by the Group are of a defined contribution structure, where the employer contribution and resulting Income Statement charge is fixed at a set level or is a set percentage of employees' pay. Contributions made to defined contribution schemes and charged to the Income Statement totalled £15.2m (2019: £14.1m). In the UK, following the closure of the defined benefit schemes to new entrants, the main scheme for new employees is a defined contribution scheme.

Defined benefit arrangements

The Group operates several funded defined benefit retirement schemes where the benefits are based on employees' length of service. Whilst the Group's primary schemes are in the UK, it also operates other material benefit schemes in the USA as well as less material schemes elsewhere. In funded arrangements, the assets of defined benefit schemes are held in separate trustee-administered funds or similar structures in the countries concerned.

UK defined benefit arrangements

The defined benefit schemes in the UK account for 49% (2019: 34%) of the Group's net liability for defined retirement benefit schemes. Spirax-Sarco operates three UK schemes: the Spirax-Sarco Employees Pension Fund, the Spirax-Sarco Executives' Retirement Benefits Scheme and the Watson-Marlow Pension Fund. These are all final salary pension schemes and are closed to new members. With effect from 30th June 2020, the Spirax-Sarco Employees Pension Fund and the Watson-Marlow Pension Fund were closed to future accrual with active members becoming deferred members at this date. This curtailment was recognised as a past service credit of £7.7m for the Spirax-Sarco Employees Pension Fund and £2.0m for the Watson-Marlow Pension Fund, both recognised in the Consolidated Income Statement.

There is a mix of different inflation-dependent pension increases (in payment and deferment) which vary from member to member according to their membership history and which scheme they are a member of.

All three schemes have been set up under UK law and are governed by a Trustee committee, which is responsible for the scheme's investments, administration and management. A funding valuation is carried out for the Trustees of each scheme every three years by an independent firm of actuaries. Depending on the outcome of that valuation a schedule of future contributions is negotiated with Spirax-Sarco. Further information on the contribution commitments is shown in the Financial Review on page 55.

During 2020 triennial actuarial valuations, as at 31st December 2019, were undertaken for the Spirax-Sarco Employees Pension Fund and the Spirax-Sarco Executives' Retirement Benefits scheme. Preliminary results have generated experience gains of £5.2m recognised in Other Comprehensive Income.

US defined benefit schemes

The Group operates a pension scheme in the USA, which is closed to new entrants and frozen to future accrual. The pension scheme defines the pension in terms of the highest average pensionable pay for any five consecutive years prior to retirement. No pension increases (in payment and deferment) are offered by this scheme. It also operates a post-retirement medical plan in the USA, which is unfunded, as is typical for these plans.

Canada defined benefit scheme

The Group operates a funded pension scheme in Canada which was closed to future accrual with effect from 30th September 2020, with active members becoming deferred at this date. This curtailment was recognised as a past service credit of £1.1m in the Consolidated Income Statement.

23 Employee benefits *continued*

Principal risks

The pension schemes create a number of risk exposures. Annual increase in benefits are, to a varying extent from scheme to scheme, dependent on inflation so the main uncertainties affecting the level of benefits payable are future inflation levels (including the impact of inflation on future salary increases) and the actual longevity of the membership. Benefits payable will also be influenced by a range of other factors including member decisions on matters such as when to retire and the possibility to draw benefits in different forms. A key risk is that additional contributions are required if the investment returns fall short of those anticipated when setting the contributions to the pension schemes. All pension schemes are regulated by the relevant jurisdictions. These include extensive legislation and regulatory mechanisms that are subject to change and may impact on the Group's pension schemes. The IAS 19 liability measurement known as Defined Benefit Obligation (DBO) and the Service Cost are sensitive to the actuarial assumptions made on a range of demographic and financial matters that are used to project the expected benefit payments, the most important of these assumptions being the future inflation levels and the assumptions made about life expectation. The DBO and Service Cost are also very sensitive to the IAS 19 discount rate, which determines the discounted value of the projected benefit payments. The discount rate depends on market yields on high-quality corporate bonds. Investment strategies are set with funding rather than IAS 19 considerations in mind and do not seek to provide a specific hedge against the IAS 19 measurement of DBO. As a result the difference between the market value of the assets and the IAS 19 DBO may be volatile. Further information on the investment strategy for the UK schemes can be found in the Financial Review on pages 54 to 55.

Sensitivity analysis to changes in discount rate and inflation are included on page 198.

The financial assumptions used at 31st December were:

	Assumptions weighted by value of liabilities % per annum			
	UK pensions		Overseas pensions and medical	
	2020 %	2019 %	2020 %	2019 %
Rate of increase in salaries	2.4	2.4	2.6	2.7
Rate of increase in pensions	2.8	2.8	1.8	1.8
Rate of price inflation	2.9	2.9	1.8	1.8
Discount rate	1.3	2.1	2.0	2.7
Medical trend rate	n/a	n/a	8.0	5.0

The mortality assumptions for the material defined benefit schemes at 31st December 2020 and 31st December 2019 were:

Spirax-Sarco Employees Pension Fund	At 31st December 2020: 100% of SAPS 3, with CMI 2019 projections with a long-term 1.25% pa and an initial addition parameter of 0.25%. At 31st December 2019: 97% of SAPS S2 base table, with 2018 CMI Core Projection model from 2007, with a long-term trend of 1.25% p.a.
Spirax-Sarco Executives' Retirement Benefits Scheme	At 31st December 2020: 84/87% (male/female) of SAPS S3 light, CMI 2019 projections with a long-term trend 1.25% and an initial addition parameter of 0.25%. At 31st December 2019: 85% of SAPS S2 light base table for males and 96% of SAPS S2 base table for females, with 2018 CMI Core Projection model from 2007, with a long-term trend of 1.25% p.a.
Watson-Marlow Pension Fund	At 31st December 2020: 96% of SAPS S2, CMI 2019 projections with a long-term trend of 1.25% pa and an initial addition parameter of 0.25%. At 31st December 2019: 96% of SAPS S2 base table, with 2018 CMI Core Projection model from 2007, subject to a long-term trend of 1.25% p.a.
US Pension Scheme	At 31st December 2020: SOA Pri-2012 Amount-Weighted Blue Collar mortality tables with Mortality Improvement Scale MP2020. At 31st December 2019: SOA Pri-2012 Amount Weighted Blue Collar mortality tables projected generationally with Mortality Improvement Scale MP2019.

The assumptions used by the actuary are the best estimates chosen from a range of possible actuarial assumptions which, due to the timescale covered, may not necessarily be borne out in practice.

Notes to the Consolidated Financial Statements

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23 Employee benefits *continued*

The amounts recognised in the Consolidated Statement of Financial Position are determined as follows:

	UK pensions		Overseas pensions and medical		Total	
	2020 £m	2019 £m	2020 £m	2019 £m	2020 £m	2019 £m
Fair value of schemes' assets	474.7	433.7	57.0	54.1	531.7	487.8
Present value of funded schemes' liabilities	(522.8)	(458.2)	(79.9)	(77.4)	(602.7)	(535.6)
Deficit in the funded schemes	(48.1)	(24.5)	(22.9)	(23.3)	(71.0)	(47.8)
Present value of unfunded schemes' liabilities	–	–	(27.6)	(23.5)	(27.6)	(23.5)
Retirement benefit liability recognised in the Consolidated Statement of Financial Position	(48.1)	(24.5)	(50.5)	(46.8)	(98.6)	(71.3)
Related deferred tax asset	9.1	4.3	13.6	12.5	22.7	16.8
Net pension liability	(39.0)	(20.2)	(36.9)	(34.3)	(75.9)	(54.5)

Fair value of scheme assets

	UK pensions		Overseas pensions and medical		Total	
	2020 £m	2019 £m	2020 £m	2019 £m	2020 £m	2019 £m
Equities	118.3	107.3	32.6	31.6	150.9	138.9
Bonds	310.3	297.0	16.7	16.1	327.0	313.1
Other	46.1	29.4	7.7	6.4	53.8	35.8
Total market value in aggregate	474.7	433.7	57.0	54.1	531.7	487.8

At 31st December 2020, £94.3m (2019: £98.2m) of scheme assets have a quoted market price in an active market of which £42.6m (2019: £47.4m) relates to UK pensions and £51.7m (2019: £50.8m) relates to overseas pensions and medical.

The actual return on plan assets was an increase of £56.4 million (2019: a increase of £61.4 million).

The movements in the defined benefit obligation recognised in the Consolidated Statement of Financial Position during the year were:

	UK pensions		Overseas pensions and medical		Total	
	2020 £m	2019 £m	2020 £m	2019 £m	2020 £m	2019 £m
Defined benefit obligation at beginning of year	(458.2)	(428.3)	(100.9)	(97.8)	(559.1)	(526.1)
Current service cost	(3.6)	(6.2)	(0.7)	(0.7)	(4.3)	(6.9)
Past service credit – Amendments	–	–	–	0.5	–	0.5
Past service credit – Curtailments	9.3	–	1.2	–	10.5	–
Interest cost	(8.7)	(11.2)	(2.7)	(3.4)	(11.4)	(14.6)
Administration costs	–	–	(0.6)	(0.7)	(0.6)	(0.7)
Contributions by members	(0.1)	(0.2)	–	–	(0.1)	(0.2)
Remeasurement (loss)/gain	(88.3)	(27.9)	(9.8)	(12.1)	(98.1)	(40.0)
Actual benefit payments	15.3	15.6	4.8	9.1	20.1	24.7
Settlement gain	–	–	–	0.3	–	0.3
Acquisitions and disposals	–	–	–	(0.3)	–	(0.3)
Experience gain/(loss)	11.5	–	(0.1)	–	11.4	–
Currency gain/(loss)	–	–	1.3	4.2	1.3	4.2
Defined benefit obligation at end of year	(522.8)	(458.2)	(107.5)	(100.9)	(630.3)	(559.1)

23 Employee benefits *continued*

The movements in the fair value of plan assets during the year were:

	UK pensions		Overseas pensions and medical		Total	
	2020 £m	2019 £m	2020 £m	2019 £m	2020 £m	2019 £m
Value of assets at beginning of year	433.7	387.4	54.1	53.6	487.8	441.0
Expected return on assets	8.2	10.3	1.7	2.1	9.9	12.4
Remeasurement gain	41.6	42.3	4.9	6.7	46.5	49.0
Contributions paid by employer	7.2	9.7	2.8	2.9	10.0	12.6
Contributions paid by members	0.1	0.2	–	–	0.1	0.2
Actual benefit payments	(15.3)	(15.6)	(4.8)	(9.2)	(20.1)	(24.8)
Administration costs	(0.8)	(0.6)	–	–	(0.8)	(0.6)
Currency loss	–	–	(1.7)	(2.0)	(1.7)	(2.0)
Value of assets at end of year	474.7	433.7	57.0	54.1	531.7	487.8

The estimated employer contributions to be made in 2020 are £6.9m.

The history of experience adjustments is as follows:

	2020 £m	2019 £m	2018 £m	2017 £m	2016 £m
Defined benefit obligation at end of year	(630.3)	(559.1)	(526.1)	(543.0)	(520.3)
Fair value of schemes' assets	531.7	487.8	441.0	457.4	426.1
Retirement benefit liability recognised in the Statement of Financial Position	(98.6)	(71.3)	(85.1)	(85.6)	(94.2)
Experience adjustment on schemes' liabilities	11.4	–	(0.6)	(8.5)	1.6
As a percentage of schemes' liabilities	1.8%	0.0%	0.1%	1.6%	0.3%
Experience adjustment on schemes' assets	46.5	49.0	(27.3)	29.9	66.0
As a percentage of schemes' assets	8.7%	10.0%	6.2%	6.5%	15.5%

The expense recognised in the Group Income Statement was as follows:

	UK pensions		Overseas pensions and medical		Total	
	2020 £m	2019 £m	2020 £m	2019 £m	2020 £m	2019 £m
Current service cost	(3.6)	(6.2)	(0.7)	(0.7)	(4.3)	(6.9)
Administration costs	(0.8)	(0.6)	(0.6)	(0.7)	(1.4)	(1.3)
Past service credit – Amendments	–	–	–	0.5	–	0.5
Past service credit – Curtailment	9.2	–	1.2	–	10.4	–
Settlement gain	–	–	–	0.3	–	0.3
Net interest on schemes' liabilities	(0.5)	(0.9)	(1.0)	(1.3)	(1.5)	(2.2)
Total expense recognised in Income Statement	4.3	(7.7)	(1.1)	(1.9)	3.2	(9.6)

The expense is recognised in the following line items in the Consolidated Income Statement:

	2020 £m	2019 £m
Operating costs	(6.1)	(7.4)
Adjustments – closure of DB schemes	10.8	–
Net financing expense	(1.5)	(2.2)
Total expense recognised in Income Statement	3.2	(9.6)

The gain or loss recognised in the Statement of Comprehensive Income (OCI) was as follows:

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23 Employee benefits *continued*

	UK pensions		Overseas pensions and medical		Total	
	2020 £m	2019 £m	2020 £m	2019 £m	2020 £m	2019 £m
Remeasurement effects recognised in OCI:						
Due to experience on DBO	11.5	—	(0.1)	—	11.4	—
Due to demographic assumption changes in DBO	(8.6)	4.1	0.5	0.4	(8.1)	4.5
Due to financial assumption changes in DBO	(79.7)	(32.0)	(10.3)	(12.5)	(90.0)	(44.5)
Return on assets	41.6	42.3	4.9	6.7	46.5	49.0
Total remeasurement (loss)/gain recognised in OCI	(35.2)	14.4	(5.0)	(5.4)	(40.2)	9.0
Deferred tax on remeasurement (loss)/gain and change in rate recognised in OCI	6.7	(2.4)	1.5	1.0	8.2	(1.4)
Cumulative loss recognised in OCI at beginning of year	(39.3)	(51.3)	(26.8)	(22.4)	(66.1)	(73.7)
Cumulative loss recognised in OCI at end of year	(67.8)	(39.3)	(30.3)	(26.8)	(98.1)	(66.1)

Sensitivity analysis

The effect on the defined benefit obligation at 31st December 2020 of an increase or decrease in key assumptions is as follows:

	UK pensions £m	Overseas pensions and medical £m	Total £m
(Decrease)/increase in pension deficit:			
Discount rate assumption being 0.25% higher	(23.9)	(3.7)	(27.6)
Discount rate assumption being 0.25% lower	25.1	4.0	29.1
Inflation assumption being 0.25% higher	18.0	0.9	18.9
Inflation assumption being 0.25% lower	(17.5)	(0.8)	(18.3)
Mortality assumption life expectancy at age 65 being one year higher	23.8	3.8	27.6

The average age of active participants in the UK schemes at 31st December 2020 was 53 years (2019: 52 years) and in the overseas schemes 48 years (2019: 48 years).

Cash payments to the pension scheme greater or less than the expense to operating profit

	2020 £m	2019 £m
Defined benefit arrangements	4.7	(7.4)
Defined contribution arrangements	(15.2)	(14.1)
Total expense recognised in operating costs	(10.5)	(21.5)
Defined benefit arrangements	10.0	12.6
Defined contribution arrangements	15.2	14.1
Total contributions paid by employer	25.2	26.7
Cash payments to the pension scheme greater than the expense to operating profit	14.7	5.2

23 Employee benefits *continued*

Share-based payments

Disclosures of the share-based payments offered to employees are set out below. More detail on each scheme is given in the Annual Report on Remuneration 2020 on pages 118 to 148. The charge to the Income Statement in respect of share-based payments is made up as follows:

	2020 £m	2019 £m
Performance Share Plan	5.8	5.1
Employee Share Ownership Plan	1.2	1.1
Total expense recognised in Income Statement	7.0	6.2

Share option scheme

The Group operates equity-settled share option schemes for employees, although no grants have been made since 2011 because awards have been made using the Group's Performance Share Plan instead. Awards were determined by the Remuneration Committee whose objective was to align the interests of employees with those of shareholders by giving an incentive linked to added shareholder value. Options are subject to performance conditions, which if met make the options exercisable between the third and tenth anniversary of the date of grant. The performance condition is an increase in earnings per share (EPS) of more than 9% greater than the increase in the UK Retail Price Index to be met over the three-year period from 1st January prior to the date of the grant. If the condition is not met at the end of the three-year period the option will lapse.

The share options granted have been measured using the Present Economic Value (PEV) valuation methodology.

The number and weighted average exercise prices of share options are as follows:

Option (exercise price)	Outstanding at start of year	Granted during year	Exercised during year	Lapsed during year	Outstanding at end of year
2010 grant (1,366.0p)	7,000	–	7,000	–	–
2011 grant (1,873.0p)	33,901	–	12,401	6,500	15,000
	40,901	–	19,401	6,500	15,000
Weighted average exercise price	£17.86		£16.90	£18.73	£18.73
Weighted average contractual life remaining	1.0				0.2

Performance conditions in respect of all exercisable shares have been met. The number of shares exercisable at 31st December 2020 is 15,000 (2019: 40,901). The average share price during the period was £100.93 (2019: £75.65).

Performance Share Plan

Awards under the Performance Share Plan are made to Executive Directors and other senior managers and take the form of contingent rights to acquire shares, subject to the satisfaction of a performance target. To the extent that they vest, awards may be satisfied in cash, in shares or an option over shares. The performance criteria is split into two separate parts. 40% of the award is based on a TSR measure where the performance target is based on the Company's total shareholder return (TSR) relative to the TSR of other companies included in the FTSE All-Share Industrial Engineering Sector over a three-year performance period where awards will vest on a sliding scale. All shares within an award will vest if the Company's TSR is at or above the upper quartile. 25% will vest if the TSR is at the median and the number of shares that will vest will be calculated pro-rata on a straight-line basis between 25% and 100% if the Company's TSR falls between the median and the upper quartile. No shares will vest if the Company's TSR is below the median. The second part, amounting to 60% of the award, is subject to achievement of a target based on aggregate EPS over a three-year performance period. 25% will vest if the compound growth in EPS is equal to the growth in global industrial production (IP) plus 2% as published by CHR Economics, and 100% will vest if the compound growth in EPS is equal to or exceeds the growth in global IP plus 8%, there is pro-rata vesting for actual growth between these rates.

Shares awarded under the Performance Share Plan have been valued using the Monte Carlo simulation valuation methodology. The relevant disclosures in respect of the Performance Share Plan grants are set out below.

	2016 Grant	2017 Grant	2018 Grant	2019 Grant	2020 Grant
Grant date	5th April	26th May	4th April	15th May	12th March
Mid market share price at grant date	3,550.0p	5,273.0p	5,560.0p	8,161.0p	7,775.0p
Number of employees	141	128	134	133	104
Shares under scheme	152,440	137,001	145,041	112,159	140,934
Vesting period	3 years	3 years	3 years	3 years	3 years
Probability of vesting	70.8%	73.1%	73.5%	74.1%	74.3%
Fair value	2,513.4p	3,854.5p	4,084.4p	6,048.9p	5,779.2p

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continued

23 Employee benefits *continued*

Employee Share Ownership Plan

UK employees are eligible to participate in the Employee Share Ownership Plan (ESOP). The aim of the ESOP is to encourage increased shareholding in the Company by all UK employees and so there are no performance conditions. Employees are invited to join the ESOP when an offer is made each year. Individuals save for 12 months during the accumulation period and subscribe for shares at the lower of the price at the beginning and the end of the accumulation period under HMRC rules. The Company provides a matching share for each share purchased by the individual.

Shares issued under the ESOP have been measured using the Present Economic Value (PEV) valuation methodology. The relevant disclosures in respect of the Employee Share Ownership Plans are set out below.

	2016 Grant	2017 Grant	2018 Grant	2019 Grant	2020 Grant
Grant date	1st October	1st October	1st October	1st October	1st October
Exercise price	4,477.3p	5,496.7p	7,240.0p	7,835.0p	11,102.0p
Number of employees	1,040	1,229	1,294	1,318	1,373
Shares under scheme	22,173	22,411	16,687	16,820	12,480
Vesting period	3 years	3 years	3 years	3 years	3 years
Expected volatility	21%	21%	19%	21%	25%
Risk free interest rate	0.1%	0.4%	0.8%	0.5%	0.1%
Expected dividend yield	2.5%	2.3%	2.0%	1.8%	1.5%
Fair value	4,696.7p	5,799.0p	7,623.7p	8,305.1p	11,956.9p

The accumulation period for the 2020 ESOP ends in September 2021, therefore some figures are projections.

24 Analysis of changes in net debt, including changes in liabilities arising from financing activities

2020

	At 1st January 2020 £m	Cash flow £m	Acquired debt* £m	Exchange movement £m	At 31st December 2020 £m
Current portion of long-term borrowings	(34.3)				(0.6)
Non-current portion of long-term borrowings	(429.2)				(452.2)
Short-term borrowings	–				–
Total borrowings	(463.5)				(452.8)
Comprising:					
Borrowings	(463.5)	36.7	–	(26.0)	(452.8)
Changes in liabilities arising from financing	(463.5)	36.7	–	(26.0)	(452.8)
Cash at bank^	330.6	(84.4)	–	–	246.2
Bank overdrafts^	(162.3)	140.0	–	0.1	(22.2)
Net cash and cash equivalents	168.3	55.6	–	0.1	224.0
Net debt	(295.2)	92.3	–	(25.9)	(228.8)
Lease liabilities	(38.9)	12.2	(7.1)	(0.3)	(34.1)
Net debt and lease liabilities	(334.1)	104.5	(7.1)	(26.2)	(262.9)

* Debt acquired includes both debt acquired due to acquisition, and debt recognised on the balance sheet due to entry into new leases under IFRS 16.

^ Prior period comparatives for Cash and cash equivalents and Bank overdrafts have been adjusted to reflect a reclassification to meet the presentational requirements of IAS 32, with further detail given within Note 1. This had no impact on the net assets of the Group.

The cash flow for borrowings net total of £36.7m consists of £138.3m of new borrowings and £175.0m of repaid borrowings. This includes repayments of £32.0m and €96.2m (£85.1m) against a revolving credit facility, repayments of US\$25.8m (£20.0m) on the US\$200.0m term loan, repayments of €41.7m (£36.8m) on the €50.0m term loan, £32.0m of new drawings against a revolving credit facility and €120.0m (£106.1m) of new drawings on a €120.0m Private Placement.

At 31st December 2020, total lease liabilities consist of £10.3m (2019: £11.1m) short-term and £23.8m (2019: £27.8m) long-term.

See Note 27 for further information on net debt and lease liabilities.

24 Analysis of changes in net debt, including changes in liabilities arising from financing activities *continued*

2019

	At 1st January 2019 £m	Cash flow £m	Acquired debt* £m	Exchange movement £m	Reclassification £m	At 31st December 2019 £m
Current portion of long-term borrowings	(41.5)					(34.3)
Non-current portion of long-term borrowings	(365.3)					(429.2)
Short-term borrowings	(15.7)					–
Total borrowings	(422.5)					(463.5)
Comprising:						
Borrowings	(422.2)	(49.6)	(18.2)	26.5	–	(463.5)
Finance leases	(0.3)	–	–	–	0.3	–
Changes in liabilities arising from financing	(422.5)	(49.6)	(18.2)	26.5	0.3	(463.5)
Cash at bank [^]	324.6	(5.7)	–	(12.9)	24.6	330.6
Bank overdrafts [^]	(137.9)	0.2	–	–	(24.6)	(162.3)
Net cash and cash equivalents	186.7	(5.5)	–	(12.9)	–	168.3
Net debt	(235.8)	(55.1)	(18.2)	13.6	0.3	(295.2)
Lease liabilities (including IFRS 16 transition adjustment)	(39.0)	11.2	(12.6)	1.8	(0.3)	(38.9)
Net debt and lease liabilities	(274.8)	(43.9)	(30.8)	15.4	–	(334.1)

[^] Prior period comparatives for Cash and cash equivalents and Bank overdrafts have been adjusted to reflect a reclassification to meet the presentational requirements of IAS 32, with further detail given within Note 1. This had no impact on the net assets of the Group.

25 Related party transactions

Transactions with Directors are disclosed separately in Note 8 and are shown in the Annual Report on Remuneration 2020 on pages 118 to 148. There were no other related party transactions in either 2019 or 2020.

26 Purchase and disposal of businesses

2020

During the first quarter of 2020 the deferred consideration payable for the acquisition of Qonqave, a small German pre-revenue company, within the Watson-Marlow Fluid Technology business in 2018 was paid, for a value of €5.8m (£4.8m).

During the period the fair value of the assets acquired as part of the acquisition of Thermocoax Developpement and its related group companies was reassessed. The outcome of this reassessment was an increase to goodwill of £0.6m.

On 5th March 2020, we completed the sale of ProTrace Engineering, a small, non-core electrical engineering services business in Canada to the existing management team, for a nominal value of \$1. The total impact of this in the Consolidated Income Statement was a cost of £0.4m which has been shown as an adjusting item as disclosed in Note 2, included within restructuring costs.

Notes to the Consolidated Financial Statements

continued

26 Purchase and disposal of businesses *continued*

2019

The fair value accounting for the acquisition of Thermocoax Developpement is shown below:

	Fair value £m
Non-current assets:	
Property, plant and equipment	8.1
Right-of-use assets	1.1
Acquired intangibles	59.3
Software and other intangibles	0.3
Deferred tax assets	0.5
	69.3
Current assets:	
Inventories	15.6
Trade receivables	8.5
Other current assets	3.6
Cash and cash equivalents	4.6
	32.3
Total assets	101.6
Current liabilities:	
Trade payables	4.2
Other payables and accruals	6.5
Provisions	0.2
Short-term borrowings	18.2
Short-term lease liabilities	0.3
Current tax payable	2.0
	31.4
Non-current liabilities:	
Long-term lease liabilities	0.8
Deferred tax liabilities	17.2
Long-term payables	0.5
Post-retirement benefit plans	0.3
	18.8
Total liabilities	50.2
Total net assets	51.4
Goodwill	70.0
Total	121.4
Satisfied by:	
Cash paid	121.4
Deferred consideration	–
Total consideration	121.4
Reconciliation to acquisition of businesses net of cash acquired in the Consolidated Statement of Cash Flows (page 166)	
Cash paid for the Thermocoax business and debt repaid on the acquisition date	139.6
Debt repaid on acquisition date	(18.2)
Cash paid for the Thermocoax business	121.4
Less cash acquired in the Thermocoax business	(4.6)
Cash paid for acquired intangibles from distributors	1.1
Acquisition of businesses net of cash acquired	117.9

26 Purchase and disposal of businesses *continued*

1. On a debt-free, cash-free basis the cash outflow for acquisitions was £135.0m consisting of £121.4m paid to the sellers, £18.2m of debt repaid on the acquisition date less cash acquired of £4.6m.
2. The acquisition of 100% of the equity in Thermocoax Developpement and all of its group companies (Thermocoax) was completed on the 13th May 2019. The acquisition method of accounting has been used. Consideration of £121.4m was paid on completion.

Separately identified intangibles are recorded as part of the provisional fair value adjustment. The acquired intangibles relate to customer relationships, brand names, trademarks, manufacturing designs and core technology. The goodwill recognised represents the skilled workforce acquired and the opportunity to achieve synergies from being part of a larger Group. Goodwill arising is not expected to be tax deductible.

Due to their contractual dates, the fair value of receivables acquired approximate to the gross contractual amounts receivable. The amount of gross contractual receivables not expected to be recovered is immaterial.

The acquisition has generated £27.9m of revenue and £5.4m of adjusted pre-tax profit since acquisition. Had the acquisition been made on the 1st January 2019, the Thermocoax revenue and adjusted pre-tax profit would have been approximately £42m and £8m respectively.

Thermocoax is headquartered near Paris, France and has four manufacturing facilities in Normandy, France, one in Georgia, USA and a further facility in Heidelberg, Germany. Thermocoax is a leading designer and manufacturer of highly engineered electrical thermal solutions for critical applications in high added value industries. Thermocoax will enhance and add significantly to the Spirax-Sarco Engineering plc electrical process heating business in delivering thermal energy solutions to customers.

3. In addition to the acquired intangibles recognised for the acquisition of Thermocoax, £0.9m of acquired intangibles were recognised during the period for the acquisition of intangibles from distributors. Of this £0.7m was paid in the period with £0.2m deferred. In addition deferred consideration of £0.4m was paid during 2019 for acquired intangibles recognised prior to 2019.
4. £2.5m of acquisition costs were incurred during the period.
5. During the period the deferred consideration payable for the acquisition of a small German pre-revenue company within the Watson-Marlow Fluid Technology business was reassessed. The result of this reassessment was that deferred consideration of €5.8m remained appropriate and that no changes were required. Deferred consideration of €5.8m (£5.2m) was paid in the first quarter of 2020.

27 Derivatives and other financial instruments

The Group does not enter into significant derivative transactions. The Group's principal financial instruments comprise loans, cash and short-term deposits. The main purpose of these financial instruments is to raise finance for the Group's operations. The Group has various other financial instruments such as trade debtors and trade creditors, which arise directly from its operations. It is, and has been throughout the period under review, the Group's policy that no trading in financial instruments shall be undertaken.

The main risks arising from the Group's financial instruments are credit risk, interest rate risk, liquidity risk and foreign currency risk. The Board reviews and agrees policies for managing each of these risks and they are summarised below.

Prior period comparatives for Cash and cash equivalents and Bank overdrafts, where disclosed within this note, have been adjusted to reflect a reclassification to meet the presentational requirements of IAS 32, with further detail given within Note 1. This had no impact on the net assets of the Group. Those elements of Note 27 impacted by the prior period reclassification have been identified by marking them with an asterisk where applicable within the Note.

Credit risk

The Group sells products and services to customers around the world and its customer base is extremely varied in size and industry sector. The Group operates credit control policies to assess customers' credit ratings and provides for any debt that is identified as non-collectable.

Interest rate risk

The Group's policy is to hold a mixture of fixed and floating rate debt, with a preference to floating rate when the Group's interest cover is high and leverage is low. When new debt facilities are entered into the Group assesses if this should be fixed or floating depending on the specific circumstances at the time. In addition the Group aims to achieve a spread of maturity dates in order to avoid the concentration of funding requirements at any one time. The ratio of fixed to floating rate debt and debt maturity profile is kept under review by the Group CFO in conjunction with the Board.

Liquidity risk

The Group's objective is to maintain a balance between continuity of funding and flexibility through the use of overdrafts, loans, facilities and finance leases as appropriate.

Foreign currency risk

The Group has operations around the world and therefore its Consolidated Statement of Financial Position can be affected significantly by movements in the rate of exchange between sterling and various other currencies particularly the US dollar and euro. The Group seeks to mitigate the effect of this structural currency exposure by borrowing in these currencies where appropriate while maintaining a low cost of debt. In addition the Group employs Net Investment Hedge Accounting where appropriate to mitigate these exposures, with such hedges being designated in both 2020 and 2019. The loss on net investment hedges during 2020 included in the Consolidated Statement of Comprehensive income was £11.6m (2019: £12.9m gain). This is included within other reserves in the Consolidated Statement of Changes in Equity (see Note 21).

Notes to the Consolidated Financial Statements

continued

27 Derivatives and other financial instruments *continued*

The Group also has transactional currency exposures principally as a result of trading between Group companies. Such exposures arise from sales or purchases by an operating unit in currencies other than the unit's functional currency. The Group operates a programme to manage this risk on a Group-wide net basis, through the entering into of both forward contracts and non-deliverable forward contracts with a range of bank counter-parties.

Fair values of financial assets and financial liabilities

Fair values of financial assets and liabilities at 31st December 2020 are not materially different from book values due to their size or the fact that they were at short-term rates of interest. Fair values have been assessed as follows:

- Derivatives**

Forward exchange contracts are marked to market by discounting the future contracted cash flows using readily available market data.

- Interest-bearing loans and borrowings**

Fair value is calculated based on discounted expected future principal and interest cash flows.

- Lease liabilities**

The fair value is estimated as the present value of future cash flows, discounted at the incremental borrowing rate for the related geographical location unless the rate implicit in the lease is readily determinable.

- Trade and other receivables/payables**

For receivables/payables with a remaining life of less than one year, the notional amount is deemed to reflect the fair value.

The following table compares amounts and fair values of the Group's financial assets and liabilities:

	2020 Carrying value £m	2020 Fair value £m	2019* Carrying value £m	2019* Fair value £m
Financial assets:				
Cash and cash equivalents	246.2	246.2	330.6	330.6
Trade, other receivables and contract assets	245.5	245.5	263.4	263.4
Total financial assets	491.7	491.7	594.0	594.0
	2020 Carrying value £m	2020 Fair value £m	2019 Carrying value £m	2019 Fair value £m
Financial liabilities:				
Loans	452.8	464.1	463.5	463.5
Lease liabilities	34.1	34.1	38.9	38.9
Bank overdrafts	22.2	22.2	162.3	162.3
Trade payables	45.6	45.6	57.9	57.9
Other payables and contract liabilities	44.4	44.4	46.5	46.5
Total financial liabilities	599.1	610.4	769.1	769.1

* Full details of the prior period reclassification are outlined in Note 27 on page 203.

There are no other assets or liabilities measured at fair value on a recurring or non-recurring basis for which fair value is disclosed.

Derivative financial instruments are measured at fair value. Fair value of derivative financial instruments are calculated based on discounted cash flow analysis using appropriate market information for the duration of the instruments.

Financial instruments fair value disclosure

Fair value measurements are classified into three levels, depending on the degree to which the fair value is observable:

- Level 1 fair value measurements are those derived from quoted prices in active markets for identical assets and liabilities;
- Level 2 fair value measurements are those derived from other observable inputs for the asset or liability; and
- Level 3 fair value measurements are those derived from valuation techniques using inputs that are not based on observable market data.

We consider that the derivative financial instruments fall into Level 2.

27 Derivatives and other financial instruments *continued*

Interest rate risk profile of financial liabilities

The interest rate profile of the financial liabilities of the Group as at 31st December was as follows:

	Total £m	Fixed rate financial liabilities £m	Floating rate financial liabilities £m	Financial liabilities on which no interest is paid £m
2020				
Euro	484.4	459.7	0.9	23.8
US dollar	22.5	11.2	–	11.3
Sterling	24.4	1.9	–	22.5
Renminbi	28.7	7.0	–	21.7
Other	39.1	20.3	1.3	17.5
Group total	599.1	500.1	2.2	96.8

	Total £m	Fixed rate financial liabilities £m	Floating rate financial liabilities £m	Financial liabilities on which no interest is paid £m
2019*				
Euro	485.8	199.6	253.0	33.2
US dollar	50.7	14.6	19.6	16.5
Sterling	178.3	2.5	162.1	13.7
Renminbi	18.6	1.5	–	17.1
Other	35.7	13.6	–	22.1
Group total	769.1	231.8	434.7	102.6

Terms and debt repayment schedule

The terms and conditions of outstanding loans were as follows:

	Currency	Nominal interest rate	Year of maturity	2020 Carrying value £m	2019* Carrying value £m
Unsecured private placement – €225.0m	€	1.1%	2023	201.8	191.0
Unsecured bank facility – €160.0m	€	0.7%	2022	143.1	135.7
Unsecured private placement – €120.0m	€	2.4%	2026	107.7	–
Unsecured bank facility – £50m revolving credit facility	€	0.5%	2021	–	48.3
Unsecured bank facility – £41.7m	€	0.7%	2022	–	35.2
Unsecured bank facility – £110m revolving credit facility	€	0.5%	2021	–	33.7
Unsecured bank facility – \$25.8m	\$	2.6%	2020	–	19.6
Unsecured bank facility	€	0.9%	2020	–	0.2
Unsecured bank facility	£	0.0%	2022	9.2	162.1
Unsecured bank facility	SEK	0.0%	2022	6.2	–
Unsecured bank facility	CNY	3.5%	2021	5.6	–
Unsecured bank facility	€	0.0%	2022	0.9	–
Unsecured bank facility	€	1.4%	2021	0.3	–
Unsecured bank facility	PLN	0.0%	2023	0.2	–
Total outstanding loans				475.0	625.8

* Full details of the prior period reclassification are outlined in Note 27 on page 203.

The weighted average interest rate paid during the year was 1.2% (2019: 1.4%).

Notes to the Consolidated Financial Statements

continued

27 Derivatives and other financial instruments *continued*

Interest rate risk profile of financial assets

The interest rate profile of the financial assets of the Group as at 31st December was as follows:

	Total £m	Fixed rate financial assets £m	Floating rate financial assets £m	Financial assets on which no interest is earned £m
2020				
Sterling	66.1	–	24.6	41.5
Euro	112.6	–	8.1	104.5
US dollar	90.2	–	12.7	77.5
Renminbi	62.6	3.8	24.3	34.5
Other	160.2	6.5	20.0	133.7
Group total	491.7	10.3	89.7	391.7
	Total £m	Fixed rate financial assets £m	Floating rate financial assets £m	Financial assets on which no interest is earned £m
2019*				
Sterling	191.2	–	162.3	28.9
Euro	115.9	1.4	16.6	97.9
US dollar	98.4	0.1	16.7	81.6
Renminbi	42.0	–	11.9	30.1
Other	146.5	5.3	10.5	130.7
Group total	594.0	6.8	218.0	369.2

* Full details of the prior period reclassification are outlined in Note 27 on page 203.

Financial assets on which no interest is earned comprise trade and other receivables and cash at bank.

Floating and fixed rate financial assets comprise cash at bank or cash placed on deposit.

Currency exposures

As explained on page 203, the Group's objectives in managing the currency exposures arising from its net investment overseas (in other words, its structural currency exposures) are to maintain a low cost of debt while partially hedging against currency depreciation. All gains and losses arising from these structural currency exposures are recognised in the Consolidated Statement of Comprehensive Income. In addition the Group employs Net Investment Hedge Accounting in order to mitigate these impacts where appropriate.

Transactional (or non-structural) exposures give rise to net currency gains and losses that are recognised in the Consolidated Income Statement. Such exposures include the monetary assets and monetary liabilities in the Consolidated Statement of Financial Position that are not denominated in the operating (or functional) currency of the operating unit involved. At 31st December 2020 the currency exposures in respect of the euro was a net monetary liability of £297.1m (2019: £184.6m net monetary liability) and in respect of the US dollar a net monetary asset of £17.5m (2019: net monetary liability £0.2m).

At 31st December 2020, the percentage of debt to net assets, excluding debt was 34% (2019: 30%) for the euro, 1% (2019: 2%) for the US dollar and 1% (2019: nil) for the Chinese renminbi.

27 Derivatives and other financial instruments *continued*

Maturity of financial liabilities

The Group's financial liabilities at 31st December mature in the following periods:

	Trade, other payables and contract liabilities £m	Overdrafts £m	Short-term borrowings £m	Lease liabilities £m	Long-term borrowings £m	Total £m
2020						
In six months or less, or on demand	87.3	22.2	–	6.1	3.1	118.7
In more than six months but no more than twelve	2.7	–	–	5.5	3.1	11.3
In more than one year but no more than two	–	–	–	9.4	148.2	157.6
In more than two years but no more than three	–	–	–	6.7	206.0	212.7
In more than three years but no more than four	–	–	–	3.7	2.5	6.2
In more than four years but no more than five	–	–	–	2.1	2.5	4.6
In more than five years	–	–	–	4.2	108.7	112.9
Total contractual cash flows	90.0	22.2	–	37.7	474.1	624.0
Statement of Financial Position values	90.0	22.2	–	34.1	452.8	599.1
	Trade and other payables £m	Overdrafts £m	Short-term borrowings £m	Lease liabilities £m	Long-term borrowings £m	Total £m
2019*						
In six months or less, or on demand	98.3	162.3	–	6.5	21.4	288.5
In more than six months but no more than twelve	6.0	–	–	5.7	16.0	27.7
In more than one year but no more than two	0.1	–	–	9.6	234.1	243.8
In more than two years but no more than three	–	–	–	7.0	9.0	16.0
In more than three years but no more than four	–	–	–	5.1	192.8	197.9
In more than four years but no more than five	–	–	–	2.4	–	2.4
In more than five years	–	–	–	5.7	–	5.7
Total contractual cash flows	104.4	162.3	–	42.0	473.3	782.0
Statement of Financial Position values	104.4	162.3	–	38.9	463.5	769.1

* Full details of the prior period reclassification are outlined in Note 27 on page 203.

The Group did not employ any supply chain or similar forms of financing during 2020 or 2019.

Cash flow hedges

The Group uses forward currency contracts to manage its exposure to movements in foreign exchange rates. The forward contracts are designated as hedging instruments in a cash flow hedging relationship. At 31st December 2020 the Group had contracts outstanding to economically hedge or to purchase £37.8m (2019: £30.0m), and €24.5m (2019: €11.3m) with US dollars, £78.2m (2019: £53.8m) with euros, £10.0m (2019: £12.1m), and €7.5m (2019: €8.2m) with Chinese renminbi, £10.2m (2019: £8.4m) and €4.5m (2019: €4.7m) with Korean won and £7.3m (2019: £4.2m) with Singapore dollar. The fair values at the end of the reporting period were an asset of £2.6m (2019: £3.3m asset). The fair value of cash flow hedges falls into the Level 2 category of the fair value hierarchy in accordance with IFRS 7.

The fair value of derivative financial instruments is estimated by discounting the future contracted cash flow using readily available market data.

Notes to the Consolidated Financial Statements

continued

27 Derivatives and other financial instruments *continued*

The contractual cash flows on forward currency contracts at the reporting date are shown below, classified by maturity. The cash flows shown are on a gross basis and are not discounted.

	Less than 6 months £m	6 to 12 months £m	More than 12 months £m	Total £m
2020				
Contracted cash in/(out):				
Sterling	39.9	37.7	33.2	110.8
Euro	(20.6)	(12.5)	(10.4)	(43.5)
US dollar	(17.3)	(16.9)	(15.5)	(49.7)
Other	(0.9)	(7.3)	(6.5)	(14.7)
Total contractual cash flows	1.1	1.0	0.8	2.9
	Less than 6 months £m	6 to 12 months £m	More than 12 months £m	Total £m
2019				
Contracted cash in/(out):				
Sterling	7.9	6.4	0.2	14.5
Euro	(1.2)	(1.5)	–	(2.7)
US dollar	(3.1)	(2.9)	–	(6.0)
Korean won	–	–	–	–
Other	(2.4)	–	–	(2.4)
Total contractual cash flows	1.2	2.0	0.2	3.4

It is anticipated that the cash flows will take place at the same time as the corresponding forward contract matures. At this time the amount deferred in equity will be reclassified to profit or loss.

All forecast transactions which have been subject to hedge accounting during the year have occurred or are still expected to occur.

A loss on derivative financial instruments of £0.7m (2019: £3.3m gain) was recognised in other comprehensive income during the period.

No amount (2019: £nil) was removed from equity during the period and included in the initial cost or other carrying amount of a non-financial asset or non-financial liability whose acquisition or incurrence was a hedged highly probable forecast transaction.

As at 31st December 2020 no ineffectiveness has been recognised in profit or loss arising from hedging foreign currency transactions.

Borrowing facilities

The Group has various borrowing facilities available to it. The undrawn committed facilities available at 31st December in respect of which all conditions precedent had been met at that date were as follows:

	2020 £m	2019 £m
Expiring in one year or less	–	–
Expiring in more than one year but no more than two years	–	78.5
Expiring in more than two years but no more than three years	350.0	–
Expiring in more than three years	–	–
Total Group undrawn committed facilities	350.0	78.5

At 31st December 2020, the Group had available £350.0m (2019: £78.5m) of undrawn committed borrowing facilities in respect of its £350.0m pound sterling revolving credit facility, of which all conditions precedent had been met. These facilities expire on 7th May 2023.

27 Derivatives and other financial instruments *continued*

Sensitivity analysis

In managing interest rate and currency risks, the Group aims to reduce the impact of short-term fluctuations on the Group's earnings. Over the longer term, however, permanent changes in foreign exchange and interest rates would have an impact on consolidated earnings. At the year end borrowings totalled £475.0m (2019: £625.8m). At 31st December 2020, it is estimated that a general increase of one percentage point in interest rates would decrease the Group's profit after tax and equity by approximately £0.7m (2019: £2.6m).

For the year ended 31st December 2020, it is estimated that a decrease of five percentage points in the value of sterling weighted in relation to the Group's profit and trading flows would have increased the Group's profit before tax by approximately £12.5m (2019: £13.0m). The effect can be very different between years due to the weighting of different currency movements. Forward exchange contracts have been included in this calculation.

The credit risk profile of trade receivables

The ageing of trade receivables at the reporting date was:

	Gross 2020 £m	Impairment 2020 £m	Net 2020 £m	Gross 2019 £m	Impairment 2019 £m	Net 2019 £m
Not past due date	167.7	(3.3)	164.4	167.4	(1.6)	165.8
0–30 days past due date	35.9	(0.2)	35.7	40.6	(0.8)	39.8
31–90 days past due date	19.1	(0.8)	18.3	22.2	(0.3)	21.9
91 days to one year past due date	13.1	(5.2)	7.9	16.3	(3.1)	13.2
More than one year	8.3	(8.3)	–	9.0	(9.0)	–
Group total	244.1	(17.8)	226.3	255.5	(14.8)	240.7

Other than those disclosed above no other impairment losses on receivables and contract assets arising from contracts with customers have been recognised. Other than trade receivables there are no financial assets that are past their due date at 31st December 2020.

Payment terms across the Group vary dependent on the geographic location of each operating company. Payment is typically due between 20 and 90 days after the invoice is issued.

All contracts with customers do not contain a significant financing component.

The movement in the allowance for impairment in respect of trade receivables during the year was as follows:

	2020 £m	2019 £m
Balance at 1st January	14.8	9.8
Additional impairment	8.7	8.6
Amounts written off as uncollectable	(3.8)	(1.2)
Amounts recovered	(0.9)	(0.6)
Impairment losses reversed	(0.9)	(1.1)
Exchange differences	(0.1)	(0.7)
Balance at 31st December	17.8	14.8

Company Financial Statements

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Company Statement of Financial Position

at 31st December 2020

	Notes	2020 £m	2019 £m
Assets			
Non-current assets			
Property, plant and equipment	11	6.2	6.9
Loans to subsidiaries	3, 9	309.9	210.1
Investment in subsidiaries	2	737.1	662.0
Deferred tax assets	6	0.0	0.7
Post-retirement benefits	7	5.6	5.6
		1,058.8	885.3
Current assets			
Due from subsidiaries*	9	1.5	1.5
Other current assets	4	6.4	6.5
Cash and cash equivalents*		9.6	159.7
		17.5	167.7
Total assets		1,076.3	1,053.0
Equity and liabilities			
Current liabilities			
Trade and other payables	5	2.1	3.6
Current portion of long-term borrowings	10	0.9	20.2
Short-term borrowings		6.2	–
		9.2	23.8
Net current assets		8.3	143.9
Non-current liabilities			
Long-term borrowings	10	308.6	190.4
Deferred tax liabilities	6	1.1	0.9
Due to subsidiaries*	9	8.2	9.7
		317.9	201.0
Total liabilities		327.1	224.8
Net assets		749.2	828.2
Equity			
Share capital	8	19.8	19.8
Share premium account		84.8	81.0
Other reserves	8	16.2	11.8
Retained earnings		628.4	715.6
Equity shareholders' funds		749.2	828.2
Total equity		749.2	828.2
Total equity and liabilities		1,076.3	1,053.0

* The prior period comparatives for Cash and cash equivalents, amounts due from subsidiaries and amounts due to subsidiaries have been adjusted to reflect a reclassification to meet the presentational requirements of FRS101, with further detail given within Note 1. This had no impact on the net assets of the Company.

The loss before dividends received was £14.8m (2019: £12.7m). Dividends from subsidiary undertakings of £23.6m (2019: £322.0m) are excluded from this amount.

These Financial Statements of Spirax-Sarco Engineering plc, company number 00596337 were approved by the Board of Directors and authorised for issue on 9th March 2021 and signed on its behalf by:

N.J. Anderson N.B. Patel Directors

Company Statement of Changes in Equity

for the year ended 31st December 2020

	Share capital £m	Share premium account £m	Other reserves £m	Retained earnings £m	Total equity £m
Balance at 1st January 2020	19.8	81.0	11.8	715.6	828.2
Profit for the year	–	–	–	8.8	8.8
Other comprehensive income:					
Transfer between reserves	–	–	3.3	(3.3)	–
Cash flow hedges net of tax	–	–	(0.7)	–	(0.7)
Remeasurement loss on post-retirement benefits	–	–	–	–	–
Deferred tax on remeasurement loss on post-retirement benefits	–	–	–	–	–
Total other comprehensive income for the year	–	–	2.6	(3.3)	(0.7)
Total comprehensive income for the year	–	–	2.6	5.5	8.1
Contributions by and distributions to owners of the Company:					
Dividends paid	–	–	–	(82.2)	(82.2)
Equity settled share plans net of tax	–	–	–	(10.5)	(10.5)
Issue of share capital	–	3.8	–	–	3.8
Employee Benefit Trust shares	–	–	(0.3)	–	(0.3)
Investment in subsidiaries in relation to share options granted	–	–	2.1	–	2.1
Balance at 31st December 2020	19.8	84.8	16.2	628.4	749.2

For the year ended 31st December 2019

	Share capital £m	Share premium account £m	Other reserves £m	Retained earnings £m	Total equity £m
Balance at 1st January 2019	19.8	77.8	13.6	487.6	598.8
Profit for the year	–	–	–	309.3	309.3
Other comprehensive income:					
Remeasurement loss on post-retirement benefits	–	–	–	1.9	1.9
Deferred tax on remeasurement loss on post-retirement benefits	–	–	–	(0.3)	(0.3)
Total other comprehensive income for the year	–	–	–	1.6	1.6
Total comprehensive income for the year	–	–	–	310.9	310.9
Contributions by and distributions to owners of the Company:					
Dividends paid	–	–	–	(75.9)	(75.9)
Equity settled share plans net of tax	–	–	–	(7.0)	(7.0)
Issue of share capital	–	3.2	–	–	3.2
Employee Benefit Trust shares	–	–	(4.0)	–	(4.0)
Investment in subsidiaries in relation to share options granted	–	–	2.2	–	2.2
Balance at 31st December 2019	19.8	81.0	11.8	715.6	828.2

Other reserves represent the Company's share-based payments, capital redemption and Employee Benefit Trust reserves (see Note 8).

The Notes on pages 213 to 219 form an integral part of the Financial Statements.

Notes to the Company Financial Statements

1 Accounting policies

The separate Financial Statements of the Company are presented as required by the Companies Act 2006. The Company meets the definition of a qualifying entity under FRS 100. Accordingly the Company has adopted FRS 101 (Reduced Disclosure Framework). As permitted by FRS 101, the Company has taken advantage of the disclosure exemptions available under that standard in relation to share-based payments, financial instruments and the presentation of a Cash Flow Statement. Where relevant, equivalent disclosures have been given in the Consolidated Financial Statements.

Under section 408 of the Companies Act 2006, the Company is exempt from the requirement to present its own Income Statement. As permitted by the audit fee disclosure regulations, disclosure of non-audit fees information is not included in respect of the Company.

The Company's accounting policies are the same as those set out in Note 1 of the Consolidated Financial Statements, except as noted below.

The Directors have concluded that no critical judgements or key sources of estimation uncertainty have been made in the process of applying the Company's accounting policies.

Investments in subsidiaries are stated at cost less, where appropriate, provisions for impairment.

Loans to or from other Group undertakings and all other payables and receivables are initially recorded at fair value, which is generally the proceeds received. They are then subsequently carried at amortised cost.

Reclassification of prior period balances

The Company participates in a Group cash pooling arrangement. Historically the related cash and overdraft balances have been presented as amounts due from and to subsidiaries in the Statement of Financial Position. During the period, it was determined that the company's legal rights and obligations were with the bank and not with the subsidiary companies. Therefore, the correct classification under FRS101 is to present these balances as either Cash and cash equivalents, or bank overdraft. As a result, for presentational purposes, amounts have been reclassified in the comparative year with the impact being an increase to Cash & cash equivalents of £158.3m, a decrease in amounts due from subsidiaries of £153.4m and an increase in amounts due to subsidiaries of £4.9m. This change had no impact on the net assets of the Company.

2 Investments in subsidiaries

	2020 £m	2019 £m
Cost:		
At 1st January	662.0	445.8
Share options issued to subsidiary company employees	2.1	2.2
Additions	73.0	214.0
At 31st December	737.1	662.0

Investments are stated at cost less provisions for any impairment in value.

Additions in the year relate to a subscription of £56.0m for additional shares in Spirax-Sarco Limited and a subscription of £17.0m for additional shares in Watson-Marlow Limited.

Details relating to subsidiary undertakings are given on pages 220 to 224. Except where stated all classes of shares were 100% owned by the Group at 31st December 2020. The country of incorporation of the principal Group companies is the same as the country of operation with the exception of companies operating in the United Kingdom which are incorporated in Great Britain. All operate in steam, electrical thermal energy solutions, fluid path technologies or peristaltic pumping markets except those companies identified as a holding company on pages 220 to 224.

Notes to the Company Financial Statements

continued

3 Loans to subsidiaries

	2020 £m	2019 £m
Cost:		
At 1st January	210.1	285.6
Advances	108.0	1.6
Interest	3.8	–
Repayments	(23.6)	(64.5)
Exchange adjustment	11.6	(12.6)
At 31st December	309.9	210.1

The terms and conditions of loans to subsidiaries at 31st December 2020 were as follows:

	Currency	Nominal interest rate	Year of maturity	2020 £m	2019 £m
Spirax-Sarco Overseas Limited	€	1.10%	2023	202.1	190.6
Spirax-Sarco Overseas Limited	€	2.36%	2026	107.8	–
Spirax-Sarco America Investments Limited	\$	2.20%	2020	–	19.5
Total loans to subsidiaries				309.9	210.1
Due within one year				1.1	19.5
Due after more than one year				308.8	190.6

4 Other current assets

	2020 £m	2019 £m
Prepayments and accrued income	6.4	6.5
Total other current assets	6.4	6.5

5 Trade and other payables

	2020 £m	2019 £m
Accruals	2.1	3.6
Total trade and other payables	2.1	3.6

Trade and other payables are due within one year.

6 Deferred tax assets and liabilities

Movement in deferred tax during the year 2020

	1st January 2020 £m	Recognised in income £m	Recognised in OCI £m	Recognised in equity £m	31st December 2020 £m
Other temporary differences (asset)	0.7	(0.7)	–	–	–
Pensions (liability)	(0.9)	(0.2)	–	–	(1.1)
Company total	(0.2)	(0.9)	–	–	(1.1)

Movement in deferred tax during the year 2019

	1st January 2019 £m	Recognised in income £m	Recognised in OCI £m	Recognised in equity £m	31st December 2019 £m
Other temporary differences (asset)	–	0.7	–	–	0.7
Pensions (liability)	(0.6)	–	(0.3)	–	(0.9)
Company total	(0.6)	0.7	(0.3)	–	(0.2)

7 Employee benefits

Pension plans

The Company is accounting for pension costs in accordance with International Accounting Standard 19.

The disclosures shown here are in respect of the Company's defined benefit obligations. Other plans operated by the Company were defined contribution plans.

The total expense relating to the Company's defined contribution pension plans in the current year was £0.6m (2019: £0.7m).

At 31st December 2020 the post-retirement mortality assumptions in respect of the Company Defined Benefit Scheme follows 84%/87% (male/female) of SAPS S3 light, CMI 2019 projections with a long term trend of 1.25% p.a. At 31st December 2019 the post-retirement mortality assumptions in respect of the Company Defined Benefit Scheme follows 85%/96% (male/female) of SAPS S2, CMI 2018 projections with a long term trend of 1.25% p.a. These assumptions are regularly reviewed in light of scheme-specific experience and more widely available statistics.

The financial assumptions used at 31st December were:

	Weighted-average assumptions used to define the benefit obligations	
	2020 %	2019 %
Rate of increase in salaries	2.4	2.4
Rate of increase in pensions	2.8	2.8
Rate of price inflation	2.9	2.9
Discount rate	1.3	2.1

The assumptions used by the actuary are the best estimates chosen from a range of possible actuarial assumptions, which due to the timescale covered, may not necessarily be borne out in practice.

Fair value of scheme assets:

	2020 £m	2019 £m
Equities	2.6	9.2
Bonds	48.0	47.9
Other	10.2	2.4
Total market value in aggregate	60.8	59.5

£1.3m (2019: £1.5m) of scheme assets have a quoted market price in an active market.

The actual return on plan assets was a gain of £3.9m (2019: £5.5m).

The amounts recognised in the Company Statement of Financial Position are determined as follows:

	2020 £m	2019 £m
Fair value of scheme's assets	60.8	59.5
Present value of funded scheme's liabilities	(55.2)	(53.9)
Retirement benefit asset recognised in the Statement of Financial Position	5.6	5.6
Related deferred tax	(1.1)	(0.9)
Net pension asset	4.5	4.7

Notes to the Company Financial Statements

continued

7 Employee benefits *continued*

The movements in the Defined Benefit Obligation (DBO) recognised in the Statement of Financial Position during the year were:

	2020 £m	2019 £m
Defined benefit obligation at beginning of year	(53.9)	(52.7)
Current service cost	–	–
Interest cost	(1.2)	(1.4)
Contributions from members	–	–
Remeasurement (loss)/gain	(2.6)	(2.2)
Actual benefit payments	2.5	2.4
Experience loss	–	–
Defined benefit obligation at end of year	(55.2)	(53.9)

The movements in the fair value of plan assets during the year were:

	2020 £m	2019 £m
Value of assets at beginning of year	59.5	56.4
Expected return on assets	1.2	1.4
Remeasurement gain/(loss)	2.6	4.1
Contributions paid by employer	–	–
Contributions from members	–	–
Actual benefit payments	(2.5)	(2.4)
Value of assets at end of year	60.8	59.5

The estimated employer contributions to be made in 2021 are £nil.

The history of experience adjustments is as follows:

	2020 £m	2019 £m	2018 £m	2017 £m	2016 £m
Defined benefit obligation at end of year	(55.2)	(53.9)	(52.7)	(55.7)	(54.1)
Fair value of scheme's assets	60.8	59.5	56.4	60.0	58.8
Retirement benefit recognised in the Statement of Financial Position	5.6	5.6	3.7	4.3	4.7
Experience adjustment on scheme's liabilities	(5.0)	–	(0.3)	(1.2)	0.5
As a percentage of scheme's liabilities	9.1%	0.0%	0.1%	2.2%	0.9%
Experience adjustment on scheme's assets	2.6	4.1	(2.4)	2.2	7.6
As a percentage of scheme's assets	4.3%	6.9%	4.3%	3.7%	13.0%

The expense recognised in the Company Income Statement was as follows:

	2020 £m	2019 £m
Current service cost	(0.2)	–
Net interest on scheme's assets and liabilities	0.1	–
Total expense recognised in Income Statement	(0.1)	–

7 Employee benefits *continued*

Statement of Comprehensive Income (OCI)

	2020 £m	2019 £m
Remeasurement effects recognised in OCI:		
Due to experience on DBO	5.0	–
Due to demographic assumption changes in DBO	(2.3)	0.5
Due to financial assumption changes in DBO	(5.3)	(2.7)
Return on assets	2.6	4.1
Total remeasurement loss recognised in OCI	0.0	1.9
Deferred tax on remeasurement amount recognised in OCI	–	(0.3)
Cumulative loss recognised in OCI at beginning of year	(10.1)	(11.7)
Cumulative loss recognised in OCI at end of year	(10.1)	(10.1)

Sensitivity analysis

The effect on the defined benefit obligation at 31st December 2020 of an increase or decrease in key assumptions is as follows:

Increase/(decrease) in pension defined benefit obligation	£m
Discount rate assumption being 0.25% higher	(1.6)
Discount rate assumption being 0.25% lower	1.6
Inflation assumption being 0.25% higher	1.1
Inflation assumption being 0.25% lower	(1.1)
Mortality assumption life expectancy at age 65 being one year higher	3.1

Share-based payments

Disclosures of the share-based payments offered to employees of the Company are set out below. The description and operation of each scheme is the same as outlined in the Group disclosure.

Share Option Scheme

As at 31st December 2020 the number of shares outstanding were nil, due to performance conditions in respect of all exercisable shares being met. No options have been granted since 2011.

Performance Share Plan

The relevant disclosures in respect of the Performance Share Plan grants are set out below.

	2016 Grant	2017 Grant	2018 Grant	2019 Grant	2020 Grant
Grant date	5th April	26th May	4th April	15th May	12th March
Mid market share price at grant date	3,550.0p	5,256.0p	5,560.0p	8,161.0p	7,775.0p
Number of employees	13	12	12	12	19
Shares under scheme	69,890	62,356	60,899	60,626	82,607
Vesting period	3 years	3 years	3 years	3 years	3 years
Probability of vesting	70.8%	73.1%	73.5%	74.1%	74.3%
Fair value	2,513.4p	3,842.1p	4,084.4p	6,048.9p	5,779.2p

Notes to the Company Financial Statements

continued

8 Called up share capital and reserves

	2020 £m	2019 £m
Ordinary shares of 26 ¹² / ₁₃ p (2019: 26 ¹² / ₁₃ p) each		
Authorised 111,428,571 (2019: 111,428,571)	30.0	30.0
Allotted, called up and fully paid 73,766,048 (2019: 73,736,888)	19.8	19.8

69,823 shares with a nominal value of £18,799 were issued in connection with the Group's Employee Share Schemes for a consideration of £3.8m received by the Company.

In 2020 the Parent Company purchased 138,000 shares representing 0.19% of called up share capital with a nominal value of £37,154 for a consideration of £14,507,783. The shares were placed in an Employee Benefit Trust (EBT) to be used in connection with the Group's Employee Share Scheme.

At 31st December 2020 60,038 shares were held in an Employee Benefit Trust and available for use in connection with the Group's Employee Share Schemes.

19 senior employees of the Company have been granted options on Ordinary shares under the Share Option Scheme and Performance Share Plan (details in Note 7).

Other reserves in the Company Statement of Changes in Equity on page 212 are made up as follows:

	1st January 2020 £m	Change in year £m	31st December 2020 £m
Share-based payments reserve	16.5	2.1	18.6
Cash flow hedges reserve	–	2.6	2.6
Capital redemption reserve	1.8	–	1.8
Employee Benefit Trust reserve	(6.5)	(0.3)	(6.8)
Total other reserves	11.8	4.4	16.2

The change in cash flow hedge reserve includes a £3.3m credit transferred from retained earnings.

Share-based payments reserve

This reserve records the Company's share based payment charge that is recognised in reserves.

Cash flow hedges reserve

This reserve records the Company's cumulative net change in the fair value of forward exchange contracts where they are designated as effective cash flow hedge relationships.

Capital redemption reserve

This reserve records the historical repurchase of the Company's own shares.

Employee Benefit Trust reserve

The Company has an Employee Benefit Trust which is used to purchase, hold and issue shares in connection with the Group's employee share schemes. The shares held in Trust are recorded in this separate reserve.

9 Related party transactions

	2020 £m	2019 £m
Dividends received from subsidiaries	23.6	322.0
Loans due from subsidiaries at 31st December	309.9	210.1
Amounts due from subsidiaries at 31st December*	1.5	1.5
Amounts due to subsidiaries at 31st December*	8.2	9.7

* The prior period comparatives for amounts due from subsidiaries and amounts due to subsidiaries have been adjusted to reflect a reclassification to meet the presentational requirements of FRS101, with further detail given within Note 1. This had no impact on the net assets of the Company.

10 Financial instruments

The terms and conditions of outstanding loans at 31st December 2020 are as follows:

	Currency	Nominal interest rate	Year of maturity	Carrying value £m
Unsecured private placement – €225.0m	€	1.1%	2023	201.8
Unsecured private placement – €120.0m	€	2.4%	2026	107.7
Total outstanding loans				309.5
Current portion of long-term borrowings due before 31st December 2021				0.9
Long-term borrowings payable after 31st December 2021				308.6
Total outstanding loans				309.5

11 Other information

Dividends

Dividends paid by the Company are disclosed in Note 11 of the Consolidated Financial Statements.

Property, plant and equipment

The Company holds freehold property with a cost of £9.4m (2019: £9.3m), accumulated depreciation of £3.2m (2019: £2.4m) and a net book value of £6.2m (2019: £6.9m).

Employees

The total number of employees of the Company at 31st December 2020 was 85 (2019: 99).

Directors' remuneration

The remuneration of the Directors of the Company is shown in the Annual Report on Remuneration 2020 on pages 118 to 148.

Auditor's remuneration

Auditor's remuneration in respect of the Company's annual audit has been disclosed on a consolidated basis in the Company's Consolidated Financial Statements as required by Section 494(4)(a) of the Companies Act 2006.

Contingent liabilities and capital commitments

The Company has no contingent liabilities or capital commitments at 31st December 2020 (2019: £nil).

Our global operations

Steam Specialties

EMEA

Country/Territory	Company Name	Registered Office address
Belgium	Spirax Sarco NV	Industrielaan 5, B-9052 Zwijnaarde, Belgium
Czech Republic	Spirax Sarco spol sro	Pražská 1455, 102 00 Praha, Hostivar, Czech Republic
Egypt	Spirax Sarco Egypt	19 Farid Street, Heliopolis, Cairo, Egypt
	Spirax Sarco Energy Solutions LLC (H)	19 Farid Street, Heliopolis, Cairo, Egypt
Finland	Spirax Oy	Niittytie 25 A 24, 01300 Vantaa, Helsinki, Finland
France	Spirax Sarco SAS	Zone Industrielle des Bruyeres 8 Avenue le Verrier, 78190 Trappes, France
	Spirax-Sarco France HoldCo SAS (H)	23 Route de Château-Thierry, 02200 Noyant-et-Aconin, Soissons, France
	Gestra France SAS	Zone Industrielle des Bruyeres 8 Avenue Le Verrier 78190 Trappes, France
Germany	Spirax Sarco GmbH Regelapparate	Reichenastr. 210, 78467 Konstanz, Germany
	Spirax-Sarco Germany Holdings GmbH (H)	Reichenastr. 210, 78467, Konstanz, Germany
	Gestra AG	Muenchener Str. 77, 28215, Bremen, Germany
	Gestra HoldCo GmbH (H)	Muenchener Str. 77, 28215, Bremen, Germany
Hungary	Spirax-Sarco Kft	1103 Budapest Koér utca 2/A, Hungary
Ireland	Spirax-Sarco (Americas) Financing Unlimited (H)	Unit 1013, Gateway Business Park, New Mallow Road, Cork, T23 WK35, Ireland
	Spirax-Sarco (EMEA) Financing Unlimited (H)	Unit 1013, Gateway Business Park, New Mallow Road, Cork, T23 WK35, Ireland
Italy	Spirax Sarco Srl	Via Per Cinisello 18, 20834 Nova Milanese, Italy
	Colima Srl	Via Mestre 11, 20063 Cernusco Sul Naviglio, Milano, Italy
	Italgestra Srl	Via Per Cinisello 18, 20834 Nova Milanese, Italy
Kenya	Spirax Sarco East Africa Ltd	Clifton Park, Mombasa Road, Nairobi, Kenya
Morocco	Spirax Sarco Maghreb	Secteur 3, Lot 146, Rue Arfoud, Bureaux 5 et 6, commerce 2-12000 Temara, Morocco
Netherlands	Spirax-Sarco Netherlands BV	Industrieweg 130A, 3044 AT, Rotterdam, Netherlands
	Spirax-Sarco Engineering BV (H)	Industrieweg 130A, 3044 AT, Rotterdam, Netherlands
	Spirax-Sarco Investments BV (H)	Industrieweg 130A, 3044 AT, Rotterdam, Netherlands
	Spirax-Sarco Netherlands Holdings Coöperative WA (H)	Sluisstraat 7, 7491 GA Delden, Delden, Netherlands
Norway	Spirax Sarco AS	Vestvollveien 14A, N-2019 Skedsmokorset, Norway
Poland	Spirax Sarco Sp Zoo	Jutrzenki 98, 02-230, Warszawa, Poland
	Gestra Polonia Sp Zoo	ul Schuberta 104, PL 80-172, Gdansk, Poland
Portugal	Spirax Sarco Equipamentos Ind Lda	Rua Quinta do Pinheiro, No 8 & 8A, 2794-058 Carnaxide, Portugal
	Gestra Portugal, Lda	Avenida Dr Antunes Guimaraes, Numero 1159, Porto 4100-082, Portugal
Romania	Spirax-Sarco SRL	2-4 Traian Street, Cluj-Napoca Municipality, Cluj County, Romania
Russia	Spirax-Sarco Engineering LLC*	198188, Russian Federation, St. Petersburg, Vozrozhdeniya Street, The House 20a, lit.A. Russian Federation
South Africa	Spirax Sarco Investments (Pty) Ltd (H)	Corner Brine Avenue and Horn Street, Chloorkop Ext 23, Gauteng 1624, South Africa
	Spirax Sarco South Africa (Pty) Ltd	Corner Brine Avenue and Horn Street, Chloorkop Ext 23, Gauteng 1624, South Africa
Spain	Spirax-Sarco SAU	C/ Sant Josep, 130 08980 Sant Feliu de Llobregat, Barcelona, Spain
	Especialidades Hydra SLU	C/ Sant Josep, 130 08980 Sant Feliu de Llobregat, Barcelona, Spain
	Spirax-Sarco Engineering SLU (H)	C/ Sant Josep, 130 08980 Sant Feliu de Llobregat, Barcelona, Spain
	Gestra Espanola SA	Calle Luis Cabrera 86-88, 28002, Madrid, Spain
Sweden	Spirax Sarco AB	Telefonvägen 30, SE-126 37 Hagersten, Sweden
Switzerland	Spirax Sarco AG	Gustav-Maurer-Strasse 9, 8702 Zollikon, Switzerland
Turkey	Spirax Sarco Valf Sanayi ve Ticaret A.Ş.	Serifali Mevkii, Edep Sok No 27, 34775 Yukari Dudullu - Ümraniye, Istanbul, Turkey
United Arab Emirates	Spirax-Sarco Engineering Middle East (FZC)	Saif Desk Q1-05-005/A, PO Box 514361, Sharjah, United Arab Emirates
United Kingdom	Spirax-Sarco Ltd*	Charlton House, Cirencester Road, Cheltenham, Gloucestershire GL53 8ER, United Kingdom
	V.C.E. Ltd	Block 2, Unit 5 Threave Court, Castlehill Industrial Estate, Carlisle ML8 5UF
	Spirax-Sarco America Ltd (H)	Charlton House, Cirencester Road, Cheltenham, Gloucestershire GL53 8ER, United Kingdom
	Spirax-Sarco America Investments Ltd* (H)	Charlton House, Cirencester Road, Cheltenham, Gloucestershire GL53 8ER, United Kingdom
	Spirax-Sarco Investments Ltd* (H)	Charlton House, Cirencester Road, Cheltenham, Gloucestershire GL53 8ER, United Kingdom
	Spirax-Sarco Overseas Ltd* (H)	Charlton House, Cirencester Road, Cheltenham, Gloucestershire GL53 8ER, United Kingdom
	Gestra Holdings Ltd* (H)	Charlton House, Cirencester Road, Cheltenham, Gloucestershire GL53 8ER, United Kingdom
	Gestra UK Ltd	Charlton House, Cirencester Road, Cheltenham, Gloucestershire GL53 8ER, United Kingdom

Steam Specialties continued

Asia Pacific

Country/Territory	Company Name	Registered Office address
Australia	Spirax Sarco Pty Ltd	14 Forge St., Blacktown, NSW 2148, Australia
China	Spirax-Sarco Engineering (China) Ltd	No 800 XinJun Ring Road, Pujiang Hi Tech Park, Shanghai, China
	Spirax Sarco Trading (Shanghai) Co Ltd	No 800 XinJun Ring Road, Pujiang Hi Tech Park, Shanghai, China
	Gestra (Shanghai) Fluid Control Technology Co Ltd	Room 333 3rd Floor of 4th Area Building 1, No.2001 North Yanggao Road China (Shanghai) Free Trade Pilot Zone, Shanghai, China
Hong Kong	Spirax Sarco Hong Kong Co Ltd	Unit 1507, 15th Floor, Prosperity Center, 25 Chin Yip Street, Kwun Tong, Kowloon, Hong Kong
India	Spirax-Sarco India Private Ltd	Plot No. 6, Central Avenue, Mahindra World City, Chengalpattu Taluk, Kancheepuram District 603004, India
Indonesia	PT Spirax Sarco Indonesia	Kawasan Infinia Park Blok C99, Jl. Dr Sahardjo No. 45, Manggarai Tebet, Jakarta Selatan 12850, Indonesia
Malaysia	Spirax Sarco Sdn Bhd	No 10, Temasya 18, Jalan Pelukis U1/46A, 40150 Shah Alam, Selangor, Malaysia
	Spirax Sarco Investment Limited (H)	6th Floor, Akademi Etiqa, No23 Jalan Melaka, 50100 Kuala Lumpur, Malaysia
Myanmar	Spirax Sarco Ltd	No. 1206, 12th Floor, Sakura Tower, 339 Bogyoke Aung San Road, Kyauktada Township, Yangon, Myanmar
New Zealand	Spirax Sarco Ltd	6 Nandina Avenue, East Tamaki, Auckland 2013, New Zealand
Philippines	Spirax-Sarco Philippines Inc	2308 Natividad Building, Chino Roces Avenue Extension, Makati City, Philippines
Singapore	Spirax Sarco Pte Ltd	21 Changi South Avenue 2, #01-01 Singapore 486630, Singapore
	Gestra Singapore Pte Ltd	21 Changi South Avenue 2, #01-01 Singapore 486630, Singapore
South Korea	Spirax Sarco Korea Ltd	Steam People House, 99 Sadangro 30gil, Dongjak-gu, Seoul, Republic of Korea
Taiwan	Spirax Sarco Co Ltd	6F-3, No. 12, Lane 270, Sec. 3, Pei Shen Road, Shen Keng District, New Taipei City 22205, Taiwan
Thailand	Spirax Sarco (Thailand) Ltd	38 Krungthepkreeta Road, Khlong Song Ton Nun, Lat Krabang, Bangkok 10520, Thailand
Vietnam	Spirax Sarco Vietnam Co Ltd	4th Floor, 180 Nguyen Van Troi Street, Ward 8, Phu Nhuan District, Ho Chi Minh City, Vietnam

Americas

Country/Territory	Company Name	Registered Office address
Argentina	Spirax Sarco SA	Av. del Libertador 498, 12th Floor, Buenos Aires C1001ABR, Argentina
Brazil	Spirax Sarco Ind e Com Ltda	Avenida Manoel Lages do Chão, 268, Bairro Portão, Cotia, São Paulo, 06705-050, Brazil
	Spirax-Sarco Servicos de Engenharia Ltda	Avenida Manoel Lages do Chão, 268, Bairro Portão, Cotia, São Paulo, 06705-050, Brazil
	Hiter Controls Engenharia Ltda	Av. Jerome Case, No 2600, Hangers B19, B20 and B21, Éden, Sorocaba, São Paulo, 18087 220, Brazil
Canada	Spirax Sarco Canada Ltd	383 Applewood Crescent, Concord, ON L4K 4J3, Canada
Chile	Spirax-Sarco Chile Ltda	Las Garzas 930, Galpón E, Quilicura, Santiago de Chile, Chile
	Inversiones Spirax-Sarco Chile Ltda (H)	Las Garzas 930, Galpón D, Quilicura, Santiago de Chile, Chile
Colombia	Spirax Sarco Colombia SAS	Carretera Panamericana No 3-150, Jamundi, Valle del Cauca, Cali, Colombia
Mexico	Spirax Sarco Mexicana, SAPI DE CV	Boulevard Alianza 30B, Parque Industrial CPA, Ciénega de Flores Nuevo León, CP 65550, Mexico
Peru	Spirax Sarco Peru SAC	Av. Guillermo Dansey 2124, Lima, Lima, Perú
United States	Spirax Sarco Inc	1150 Northpoint Blvd., Blythewood, SC 29016, United States
	Sarco International Corp (H)	2711 Centerville Road, Suite 400, Wilmington, DE 19808, United States
	Spirax Sarco Investments, Inc (H)	251 Little Falls Drive, Wilmington, DE 19808-1674, United States
	Gestra USA, Inc	1150 Northpoint Blvd., Blythewood, SC 29016, United States

Our global operations *continued*

Electric Thermal Solutions

Country/Territory	Company Name	Registered Office address
Brazil	Chromalox Engenharia Ltda	Avenida Manoel Lages do Chão, 268, Bairro Portão, Cotia, São Paulo, 06705-050, Brazil
Canada	Canadian Heat Acquisition Corp (H)	7051 68th Ave NW, Edmonton, Alberta, T6B 3E3, Canada
China	Chromalox Precision Heat Control (Shanghai) Co Ltd	88 Taigu Road, Suite A2, 4th Floor - Fenggu Building, Shanghai, 200131, China
	Chromalox Precision Heat Control (Suzhou) Co Ltd	T02, No 1801, Pangjin Road, Pangjin Industrial Park, Wujiang, Suzhou, 215200, China
	Thermocoax (Chengdu) Co Ltd	No.11 Fujiang Road, Shuangliu Park, Jiaelong Industry Port, Chengdu, Sichuan, China
France	Etirex SAS	23 Route de Chauteau Thierry, Noyant-et-Aconin, Soissons, Cedex, F-02203, France
	Thermocoax Développement SAS	40 Boulevard Henri Sellier, 92150 Suresnes, France
	Thermocoax SAS	Usine de Planquignon, Athis-de-l'Orne, 61430 Athis-Val de Rouvre, France
Germany	Chromalox Isopad GmbH	Englerstraße 11, 69126 Heidelberg, Germany
Hong Kong	Chromalox Hong Kong Holdings Ltd (H)	33/F, Shui On Centre, Nos 6-8 Harbour Road, Wanchai, Hong Kong
India	Chromalox India Precision Heat & Control Private Limited	1st Floor, 6 Unicom House, A-3 Commercial Complex, New Delhi, Janakpuri, 110058, India
Mexico	ELW Industrial S. de R. L. de C.V.	Carretera Nacional, K.M. 8.5, Modulo Industrial de America, Lote #5, Nuevo Laredo, Tamaulipas, 88277, Mexico
Singapore	Chromalox Precision Heat and Control (Singapore) Pte Ltd	No 11 Woodlands Close, #05-34, Singapore, 737854, Singapore
Thailand	Chromalox (Asia Pacific) Ltd	383/2, The Village Business Centre, Unit D16-A, Moo 12, Sukhumvit Road, Nongprue, Banglamung, Chon Buri, 20151, Thailand
United Arab Emirates	Chromalox Gulf DWC, LLC	PO Box 390012, Office No: E-2-0226, Business Park, Dubai Aviation City, United Arab Emirates
United Kingdom	Chromalox (UK) Ltd	AMP House, 2nd Floor, Dingwall Road, Croydon, Surrey, CR0 2LX, United Kingdom
	Thermocoax UK Ltd	Tower House, Lucy Tower Street, Lincoln, LN1 1XW, United Kingdom
United States	Chromalox, Inc.	2711 Centerville Rd., Suite 400, Wilmington, DE 19808, United States
	Heat Acquisition Corp (H)	2711 Centerville Rd., Suite 400, Wilmington, DE 19808, United States
	Thermocoax, Inc	Corporation Trust Center, 1209 Orange Street, City of Wilmington, County of New Castle, Delaware, United States

Watson-Marlow Fluid Technology Group

Country/Territory	Company Name	Registered Office address
Australia	Watson-Marlow Pty Ltd	Unit 15, 19-26 Durian Place, Wetherill Park, NSW 2164, Australia
Austria	Watson-Marlow Austria GmbH	Rathaus Viertel 3/1 OG/TOP 311, Guntramsdorf A 2353, Wien, Austria
Belgium	Watson-Marlow NV	Industriepark 5, B-9052 Zwijnaarde, Belgium
Brazil	Watson-Marlow Bredel Ind e Com de Bombas Ltda	Alameda Oceania, 63, Polo Empresarial Tamboré, Santana de Parnaíba, São Paulo, CEP 06543-308, Brazil
Canada	Watson-Marlow Canada Inc	383 Applewood Crescent, Concord, ON L4K 4J3, Canada
Chile	Watson-Marlow Bombas Chile Ltda	Las Garzas 930, Galpón E, Quilicura, Santiago de Chile, Chile
Colombia	Watson-Marlow Colombia SAS	Carretera Panamericana No 3-150, Jamundi, Valle del Cauca, Cali, Colombia
Czech Republic	Watson-Marlow sro	Pražská 1455/18a, 102 00 Praha 10, Czech Republic
Denmark	Watson-Marlow Flexicon A/S	Frejasvej 2, 4100 Ringsted, Denmark
Finland	Watson-Marlow Finland Oy	Niittytie 25 A 24, 01300 Vantaa, Helsinki, Finland
France	Watson-Marlow SAS	9 Route De Galluis, Zi Les Croix, 78940 La Queue Lez Yvelines, France
Germany	Watson-Marlow GmbH	Kurt-Alder-Str. 1, 41569 Rommerskirchen, Germany
	Qonqave GmbH	Stadtplatz 11-13, 73249 Wernau Neckar, Germany
Hungary	Watson-Marlow Kft	2/A Koer utca, Budapest 1103, Hungary
India	Watson-Marlow India Private Ltd	S No 81/7, Opp JSPM College, Pune-Mumbai Bypass Road, Tathawade, Pune, Maharashtra, 411 033, India
Ireland	Watson-Marlow Ltd	Unit 1013, Gateway Business Park, New Mallow Rd., Cork, Ireland
Italy	Watson-Marlow Srl	Via Padana Superiore 74/D, 25080 Mazzano, Brescia, Italy
Japan	Watson-Marlow Co Ltd	4-23-21 Ukima Kita-ku, Tokyo 115-0051, Japan
Malaysia	Watson-Marlow SDN BHD	6th Floor, Akademi Etiqa No. 23 Jalan Melaka, 50100 Kuala Lumpur W.P., Malaysia
Mexico	Watson-Marlow S de RL de CV	Boulevard Alianza 30B, Parque Industrial CPA, Ciénega de Flores Nuevo León, CP 65550, Mexico
Netherlands	Watson-Marlow BV	Oslo 9, 2993LD Barendrecht, Netherlands
	Watson-Marlow Bredel BV	Sluisstraat 7, 7491 GA, Delden, Netherlands
	Watson-Marlow Bredel Holdings BV (H)	Industrieweg 130A, 3044 AT, Rotterdam, Netherlands
	Watson-Marlow Bredel Holdings II BV (H)	Sluisstraat 7, 7491 GA, Delden, Netherlands
New Zealand	Watson-Marlow Ltd	Unit F, 6 Polaris Place, East Tamaki, Auckland 2013, New Zealand
Norway	Watson-Marlow Norge AS	Vestvollveien 14A, 2019 Skedsmokorset, Norway
Philippines	Watson-Marlow Inc	10th Floor EGI Rufino Plaza, Sen. Gil Puyat Avenue, Corner Taft Avenue, Barangay, 38 Pasay City, Fourth District, Philippines
Poland	Watson-Marlow Sp Zoo	Ul. Fosa 25, 02-768 Warszawa, Poland
Russia	Watson-Marlow LLC*	Room 19, Premises I, Shosse Entuziastov, 34, Moscow, 105118, Russian Federation
Singapore	Watson-Marlow Pte Ltd	421 Tagore Industrial Avenue, #01-13, Singapore 787805, Singapore
South Africa	Watson-Marlow Bredel SA (Pty) Ltd	Unit 6 Cradleview Industrial Park, Cnr Beyers Naude Drive & Johan Street, Laser Park, South Africa
Sweden	W-M Alitea AB	Hammarby Fabriksväg 29-31, SE-120 30 Stockholm, Sweden
Spain	Watson-Marlow SLU	Tuset, 20 3 - 08006, Barcelona, Spain
Taiwan	Watson-Marlow Co Ltd	No.9 Lane 270 Sec. Beishen Road, Shenkeng District, New Taipei City 222, Taiwan
United Arab Emirates	Watson Marlow FZCO	Office Number FZJOA2005, Jafza One, Jebel Ali Free Zone, Dubai, United Arab Emirates
United Kingdom	Aflex Hose Ltd	Dyson Wood Way, Bradley, Huddersfield, HD2 1GZ, United Kingdom
	BioPure Technology Ltd	Bickland Water Road, Falmouth, Cornwall, TR11 4RU, United Kingdom
	Watson-Marlow Ltd*	Bickland Water Road, Falmouth, Cornwall, TR11 4RU, United Kingdom
United States	ASEPCO	1161 Cadillac Ct, Milpitas, CA 95035, United States
	Watson Marlow Inc	37 Upton Technology Park, Wilmington, MA 01887, United States
	Watson-Marlow Flow Smart Inc	1675 South State St., Suite B, Dover, DE 19901 United States

Our global operations *continued*

Dormant companies

Country/Territory	Company Name	Registered Office address
Canada	Canadian Heat Holding Corp	6600-100 King Street W., 1 First Canadian Place, Toronto, Ontario, M5X 1B6, Canada
France	Heat Holding France SAS	23 Route de Château-Thierry, 02200 Noyant-et-Aconin, Soissons, France
United Kingdom	Gervase Instruments Ltd*	Charlton House, Cirencester Road, Cheltenham, Gloucestershire GL53 8ER, United Kingdom
	Heat Holding (UK) Limited	AMP House, 2nd Floor, Dingwall Road, Croydon, Surrey, CR0 2LX, United Kingdom
	SARCO Ltd*	Charlton House, Cirencester Road, Cheltenham, Gloucestershire GL53 8ER, United Kingdom
	Sarco Thermostats Ltd	Charlton House, Cirencester Road, Cheltenham, Gloucestershire GL53 8ER, United Kingdom
	Spirax Manufacturing Co Ltd	Charlton House, Cirencester Road, Cheltenham, Gloucestershire GL53 8ER, United Kingdom
	Spirax-Sarco Europe Ltd*	Charlton House, Cirencester Road, Cheltenham, Gloucestershire GL53 8ER, United Kingdom
	Spirax-Sarco International Ltd*	Charlton House, Cirencester Road, Cheltenham, Gloucestershire GL53 8ER, United Kingdom
United States	Electronic Control Systems, Inc.	103 Gamma Drive, Pittsburgh, PA 15238, United States
	Heat Asset Acquisition Corp.	2711 Centerville Rd., Suite 400, Wilmington, DE19808, United States
	Mexican Heat Holding Corp.	c/o RA PO Box 20380, Carson City, Nevada, 89706, United States
	Mexican Heat Holding, LLC	160 Greentree Dr., Suite 101, Dover, Delaware, 19904, United States
	Ogden Manufacturing Co.	2711 Centerville Rd., Suite 400, Wilmington, DE19808, United States

The global operations listed on pages 220 to 224 are registered companies.

In addition to these operations we have a number of other operating units, including an Associate company; a company that is part owned with a third-party trust; branches of Spirax Sarco steam or Watson-Marlow companies; and several Watson-Marlow businesses that operate via Spirax Sarco steam business companies.

Notes

1. All subsidiaries in the tables on pages 220 to 224 are indirect subsidiaries of Spirax-Sarco Engineering plc, unless indicated*. All subsidiaries listed are 100% owned by the Group, except as follows:

Company	% owned by the Group
Spirax Sarco Egypt	98.867%
Spirax Sarco Energy Solutions LLC, Egypt	98.992%
Spirax Sarco Korea Ltd	97.5%
Spirax-Sarco Philippines Inc	99.998%
Spirax Sarco Services South Africa (Pty) Ltd	48.51%. (51.49% is owned by a third-party trust, The Tomorrow Trust). The Group has control of the company and exposure, or rights, to variable returns from its investment in the investee.
Spirax Sarco (Thailand) Ltd	99.995%

2. In addition to the subsidiaries in the tables on pages 220 to 224, we have the following operations:

Steam Specialties (Spirax Sarco):

Country	Operating as a branch of
Cambodia	Spirax Sarco Pte Ltd, Singapore
Denmark	Spirax-Sarco Limited, UK
Ghana	Spirax-Sarco Limited, UK
Greece	Spirax-Sarco Limited, UK
Ireland	Spirax-Sarco Limited, UK
Japan	Spirax-Sarco Limited, UK
Pakistan	Spirax-Sarco Limited, UK
Sri Lanka	Spirax-Sarco India Private Ltd, India
United Arab Emirates	Spirax-Sarco Limited, UK

Watson-Marlow Fluid Technology Group:

Country	Operating as a branch of
Serbia	Watson-Marlow Austria GmbH
Switzerland	Watson-Marlow Limited, UK
	Operating via
Argentina	Spirax Sarco SA, Argentina
China	Spirax-Sarco Engineering (China) Ltd
South Korea	Spirax Sarco Korea Ltd
Indonesia	PT Spirax-Sarco Indonesia
Thailand	Spirax Sarco (Thailand) Ltd
Vietnam	Spirax Sarco Vietnam Co Ltd

This complete list of our global operations, including subsidiaries, forms part of the audited Financial Statements. For more information see Note 2 in the Company Financial Statements.

3. UK registered subsidiaries exempt from audit:

BioPure Technology Ltd (company no. 03665190), Chromalox (UK) Ltd (company no. 04325451), Gestra UK Ltd (company no. 10639879), Spirax-Sarco America Ltd (company no. 07829847), Spirax-Sarco Investments Ltd (company no. 00100995), Spirax-Sarco Overseas Ltd (company no. 01472201), V.C.E Ltd (company no. SC126116), Gestra Holdings Ltd (company no. 11612492), Spirax-Sarco America Investments Ltd (company no. 11639451) and Heat Holding (UK) Limited (company no. 04325456) qualify to take the statutory audit exemption as set out within section 479A of the Companies Act 2006 for the period ended 31st December 2020. Spirax-Sarco Engineering plc will guarantee the debts and liabilities of the companies claiming the statutory audit exemption at the balance sheet date in accordance with section 479C of the Companies Act 2006.

Key

- * Direct subsidiary owned by Spirax-Sarco Engineering plc
- (H) Holding company

Officers and advisers

Secretary and registered office

A.J. Robson
Group General Counsel and Company Secretary
Spirax-Sarco Engineering plc
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Gloucestershire GL53 8ER

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Web: www.spiraxsarcoengineering.com

Auditor

Deloitte LLP

Financial advisers

Rothschild
J.P. Morgan Securities plc (J.P. Morgan Cazenove)

Financial PR

Citigate Dewe Rogerson

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HSBC Bank PLC
BNP Paribas
Citibank, N.A.
Crédit Industriel et Commercial
UniCredit Bank AG
Wells Fargo Bank, N.A.

Corporate brokers

J.P. Morgan Securities plc (J.P. Morgan Cazenove)
Morgan Stanley & Co International plc

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* Lines open 8.30 am to 5.30 pm, Monday to Friday, excluding public holidays in England and Wales

Website: www.shareview.co.uk

Solicitors

Baker & McKenzie LLP

Important dates

Annual General Meeting	12th May 2021
2021 Half Year Results	11th August 2021

Final dividend**

Ordinary shares quoted ex-dividend	22nd April 2021
Record date for final dividend	23rd April 2021
Final dividend payable	21st May 2021

** Subject to shareholder approval at the AGM.



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