Water Pumps for scrubber applications

IRONPUMP

world class water pumps

Meet regulations with IRON Pump

Restrictions, regulations and amendments from the maritime authorities daily create challenges for international shipowners and charters. The sulphur emission legislation is no exception and the use of Scrubbers, or Exhaust Gas Cleaner system (EGCs) provides a reliable and adequate solution to this challenge.

Scrubber Pumps

The installation of EGCs often differs from other regular onboard systems. The largest part of the systems are installed as retro-fit in vessels often not designed or built with extra space for additional installations.

The challenges
Location of the pumps and tank etc. varies from vessel to vessel. To obtain the highest efficiency and the best overall solution, every option must be thoroughly analysed. Moving a pump from one deck to another, for instance, may change the power requirement significantly. This may not only have an impact on the system acquisition cost but also on the total cost of ownership.

Installing quality pumps and selecting the best division of capacity for the various pumps running in parallel, not only ensures optimal capacity regulation, but also facilitates the installation and ease of handling and service in the years ahead.

No application is alike.
Far from all vessel duty patterns are the same and to ensure the best selection and combination of the pump package, every project must be analysed in detail. With more than 500 pumps installed in scrubber plants, IRON Pump has accumulated valuable know-how to design water pumps specifically for scrubber systems.

Close co-operation with EGC system providers has led to detailed insight into EGC system controls and the challenges of frequency controller programming when dividing the total pump work between two or more pumps.

Optimal selection
We have made it easy to get best value for money when buying pumps for scrubber applications.

Our optimised pumps for scrubbers are presented in this brochure and our online pump-selector offers a full pump configuration including all relevant technical documents. Please go to ironpump.com for access.

"Pumping seawater and chemicals through a scrubbing system requires an efficient pumping system, configured to that exact purpose. High temperatures and harsh elements ask for world class water pumps.

Ebbe Hecht-Hansen
IRON Pump A/S

Vertical spacer coupled in-line top pull out pump

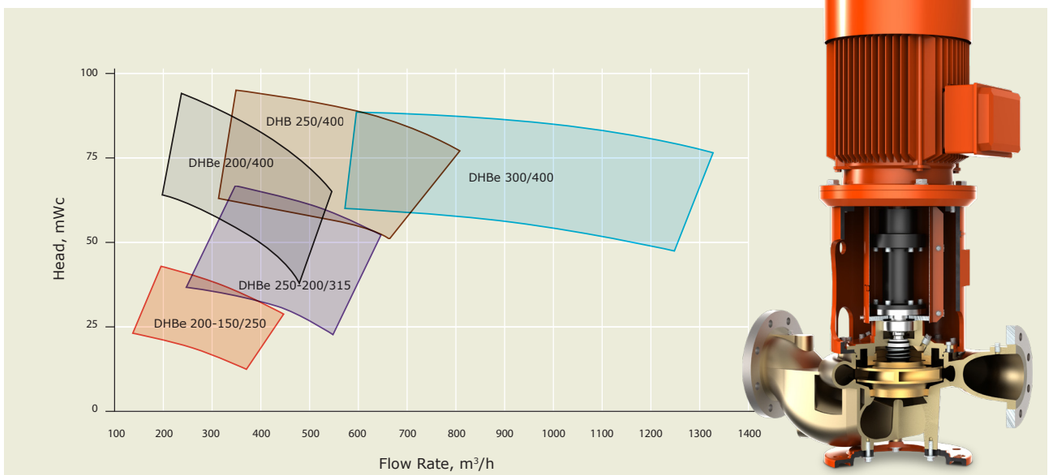
Water pumps for scrubber systems

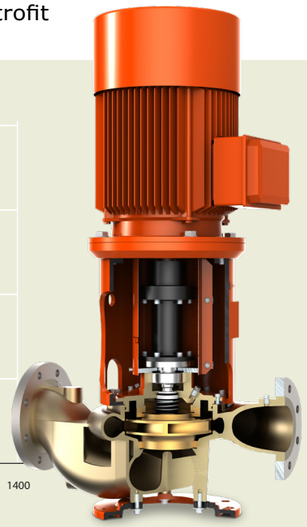
The DHBe is based on IRON Pump's DHB series, merging the new ECO design for casing and impeller with a tried and tested pump solution that has been in the market for over 15 years.

The DHBe pump is made for easy serviceability aboard vessels, allowing for the rotating element and cover to be removed without removal of pipe connections or drive. Being equipped with a dedicated bearing for axial loads reduces the strain on the electrical motor, allowing this pump type to handle medium duty operations and work at higher speeds.

An affordable, service friendly, high quality, all purpose pump.

- ECO design compliant
- Lightweight
- CE certified/marked
- Stock pump
- Suitable for retrofit





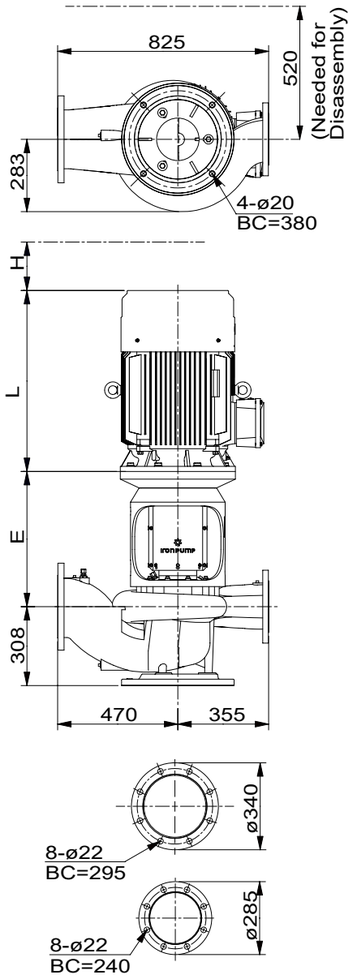
Application:
For medium duty operation, with fresh or sea water, high and low temperatures.

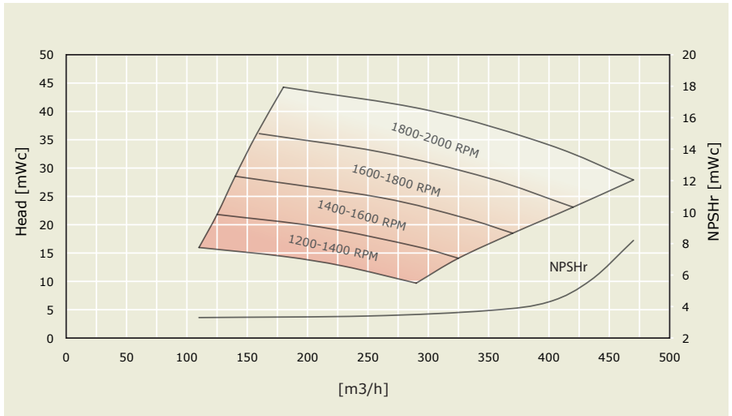
Type description:
Vertical spacer coupled in-line top pull out pump.

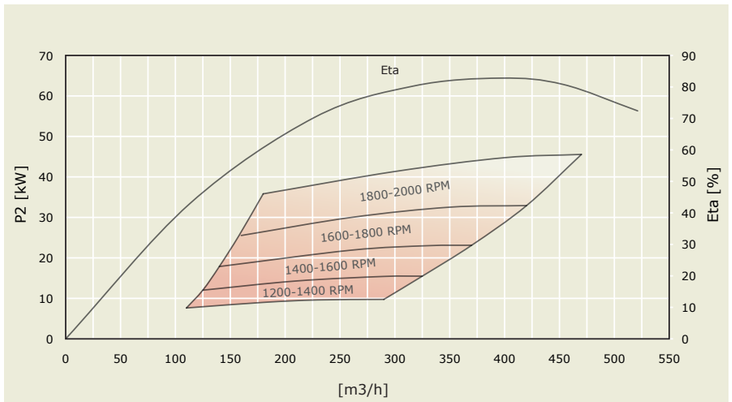
Options:
Pump casing is available in cast iron or seaworthy bronze. Flanges are available in all industrial standards, ANSI, DIN and JIS.

Accessories:
Priming system, pressure- and vacuum gauges,
venting device, class approval.

MODEL DHBe 200-150/250



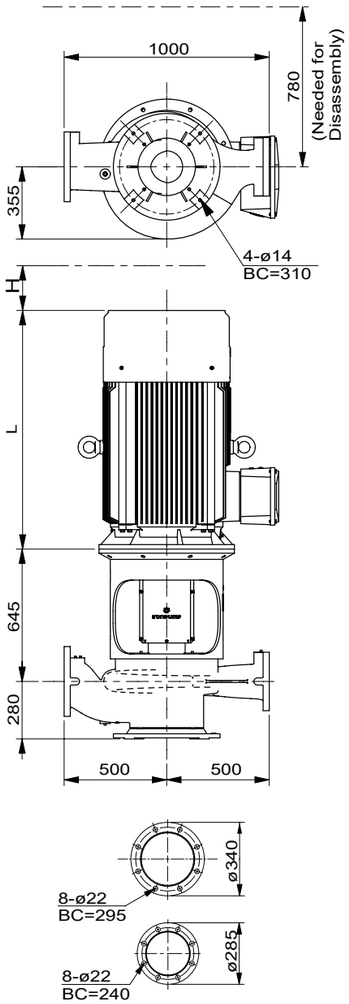


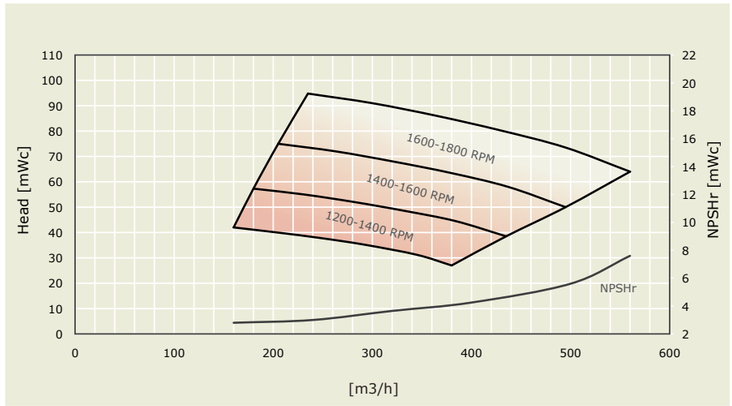


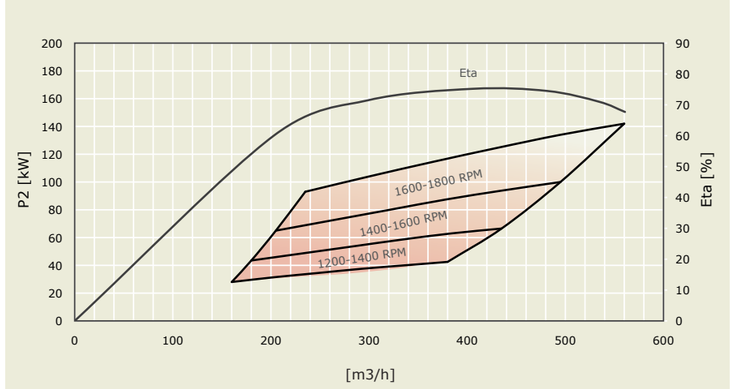
Motor type IE2 / 4 pol Marine	400V 60Hz S1-45°C			400V 50Hz S1-40°C			Effic. (%) 1/2 load	Pf. cos	IM J(kgm²)	E, mm.	L, mm.	H, mm.	Motor weight, kg	Pump weight, kg
	P2, kW	Speed, PRM	I_n, A	P2, kW	Speed, PRM	I_n, A								
HMC2-180M-4	21,5	1760	36	18,5	1470	34	91	0,86	0,146	498,5	543	160	204	228
HMC2-180L-4	25,6		42	22		41	91,3		0,166		616		215	
HMC2-200L-4	34,9		57	30		54			0,275		660		243	
HMC2-225M-4	52	1770	85	45	1475	81	91,3		0,492	528,5	703	190	328	

Water pumps for scrubber systems

MODEL DHBe 200-150/400







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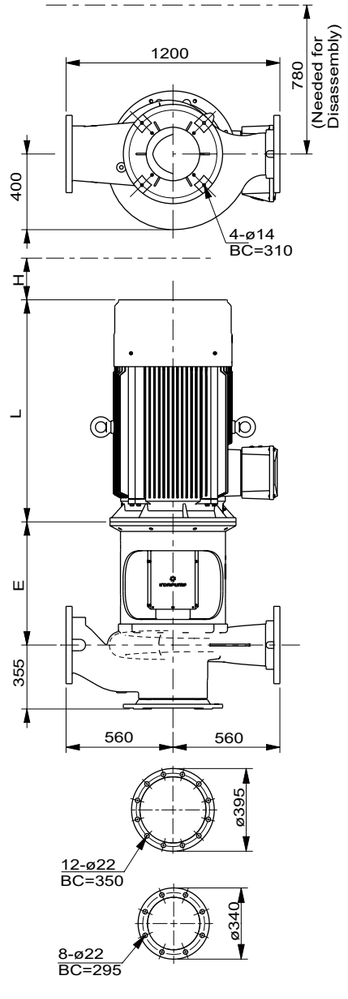
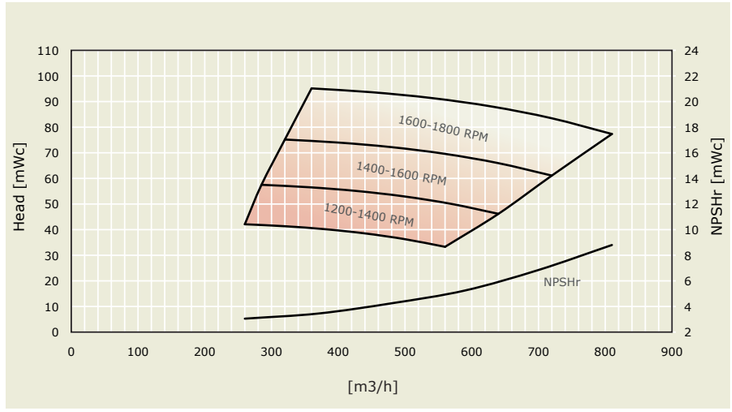
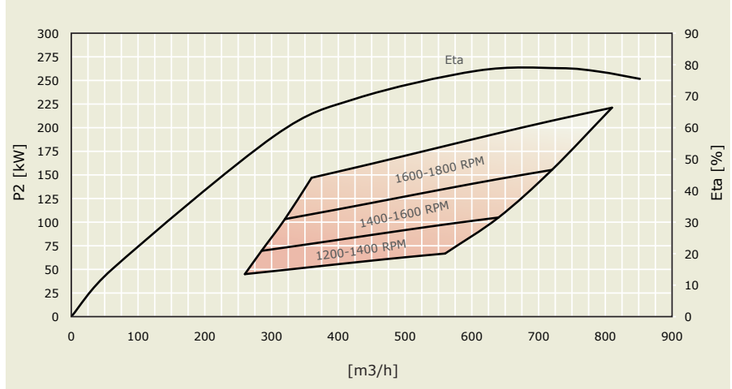
	P2, kW	Speed, PRM	I_n, A	P2, kW	Speed, PRM	I_n, A								
HMC2-250M-4	64	1775	103	55	1480	99	91,5	0,86	0,693	615	770	190	452	408
HMC2-280S-4	87		139	75		130	92,4	0,88	1,18		820		592	
HMC2-315M-4	153		239	132		228	94,3	0,90	3,8	645	1165	220	930	

MODEL DHBe 250-200/400







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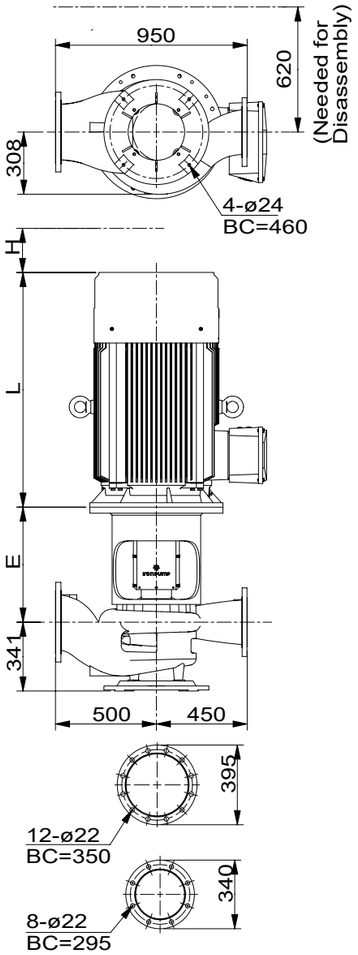
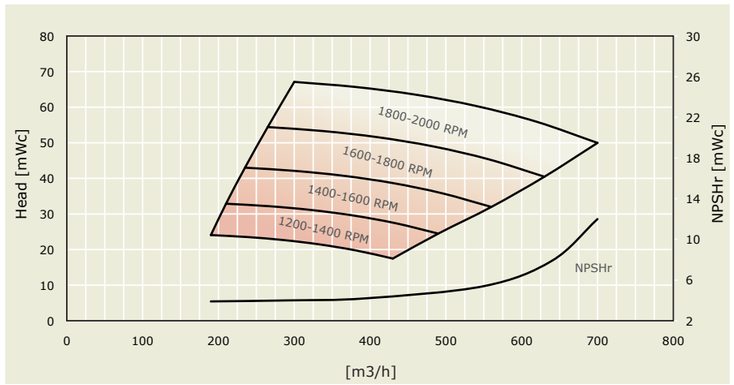
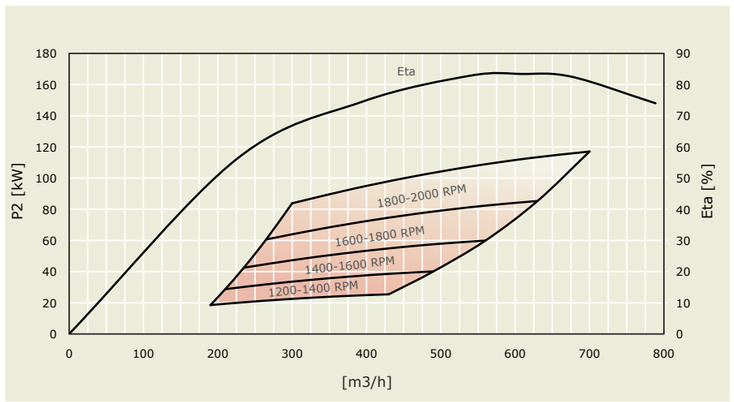
	P2, kW	Speed, PRM	I_n, A	P2, kW	Speed, PRM	I_n, A								
HMC2-280M-4	104	1775	166	90	1480	156	92,7	0,88	1,53	615	892	190	672	458
HMC2-315L1-4	186		287	160		273	94,7	0,89	4,37	645	1165	220	1000	
HMC2-315L2-4	232		357	200		341	94,8		5,37				1080	

Water pumps for scrubber systems

MODEL DHBe 250-200/315







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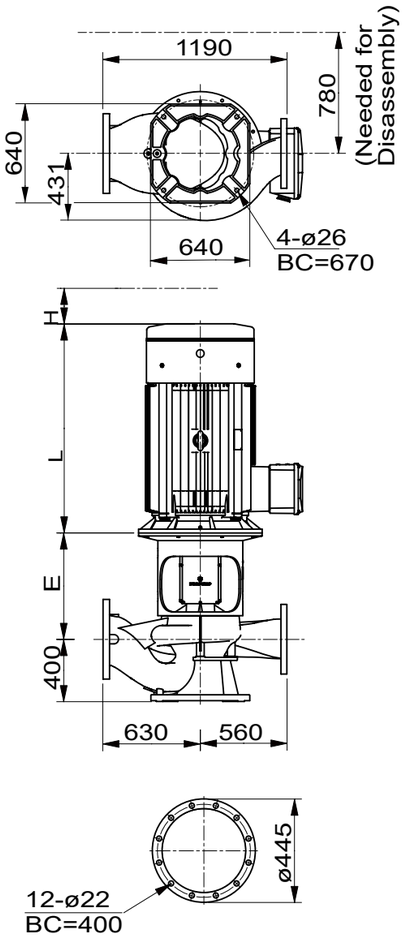
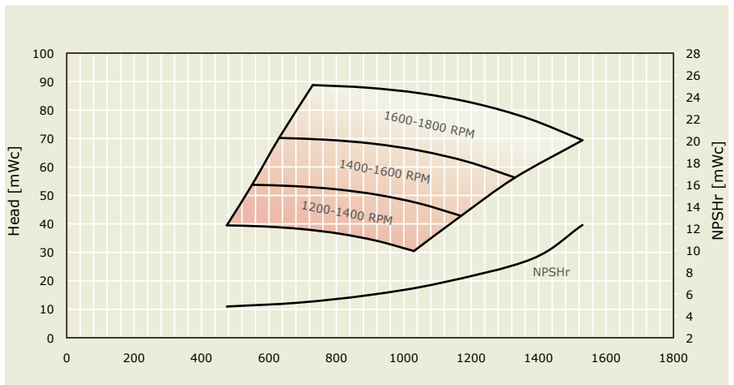
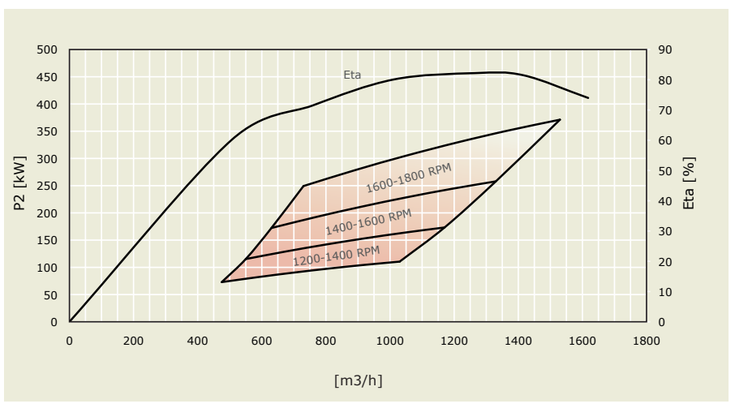
	P2, kW	Speed, PRM	I_n, A	P2, kW	Speed, PRM	I_n, A								
HMC2-225S-4	43	1770	70	37	1475	67	90,9	0,86	0,426	542	678	190	305	310
HMC2-250M-4	64	1775	103	55	1480	99	91,5		0,693		770		452	
HMC2-280S-4	87		139	75		130	92,4	0,88	1,18		820		592	
HMC2-315S-4	128		200	110		191	94,7		3,27	572	1055	220	840	

MODEL DHBe 300-250/400







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	P2, kW	Speed, PRM	I_n, A	P2, kW	Speed, PRM	I_n, A								
HMC2-315L2-4	232	1775	357	200	1480	341	94,8	0,89	5,37	685	1165	220	1080	500
HMC2-355M-4	291		443	250		425		0,9	8,51		1376		1650	
HMC2-355L-4	366		559	315		535			10,8				1830	

Manufactured in Denmark

IRONPUMP
world class water pumps

ELLEHAMMER
A part of IRON Pump A/S

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