

Sorting systems for waste & metal recycling

We help you make the
most of material recovery





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Transforming Resource Recovery

Solutions to improve recycling efficiency



Innovation

WE HELP UNLOCK YOUR BUSINESS'S POTENTIAL.

At TOMRA, our recycling consultants take a comprehensive and data-driven approach to **material processing and sorting**. Whether in the early phases of planning a facility or choosing the best sorting technology for your specific needs, we go the extra mile to ensure long-term success.



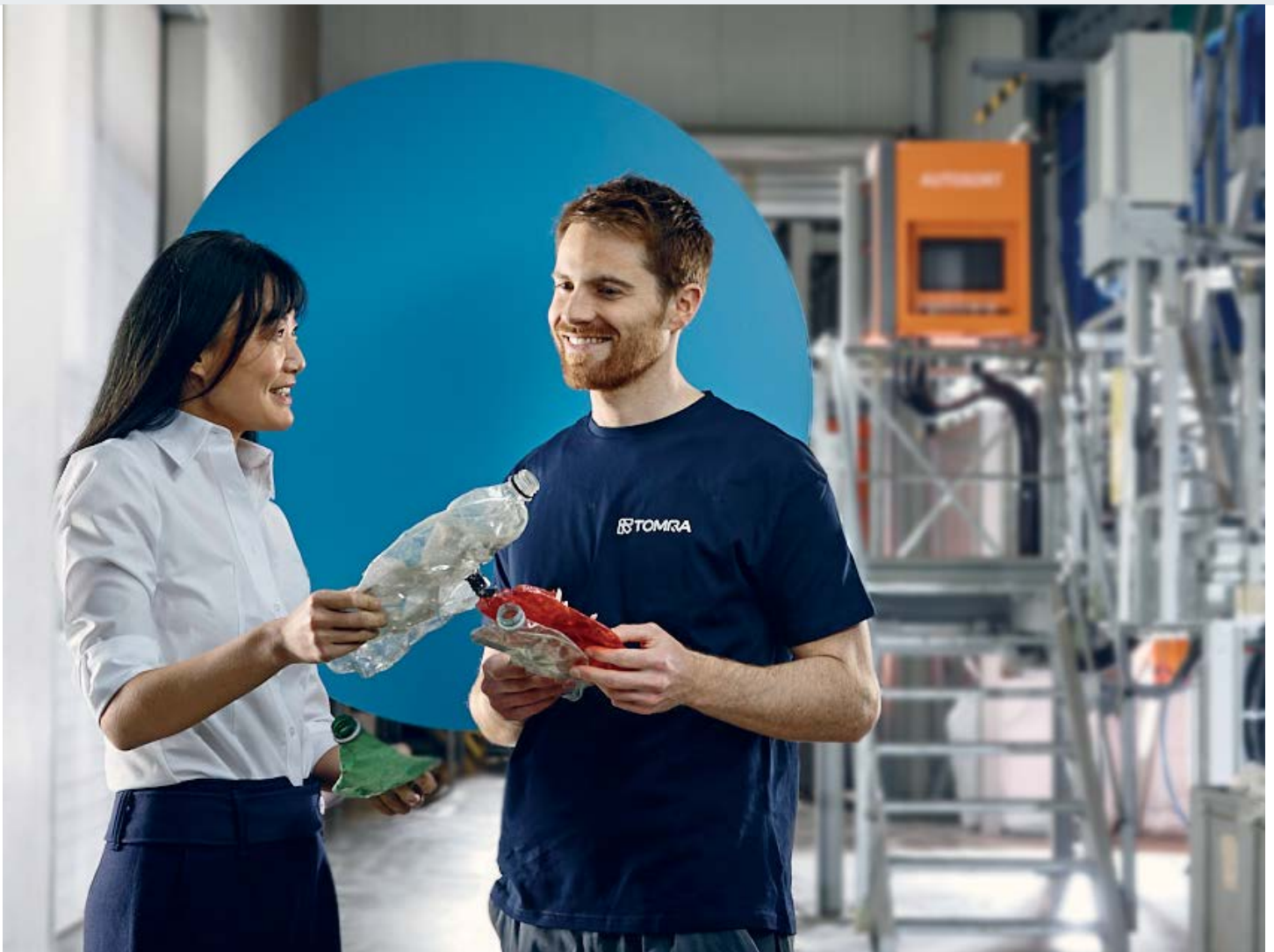
Passion

Do you want to **create new revenue streams**? Boost purity levels on existing sorting lines? Thanks to our long-standing experience with sorting facilities and recyclers around the world, you will benefit from unsurpassed expertise in waste and metal recycling.



Responsibility

Gain a competitive advantage and a reliable partner: with our extensive know-how, advanced sorting technology and dedicated service, we work with you to continually optimize and improve performance.



AI-powered sorting systems

DISRUPTIVE INNOVATION THAT DELIVERS EVEN MORE VALUE.

We invest heavily into the latest developments in artificial intelligence for waste and metal sorting. From deep learning software to data analysis and predictive maintenance, our AI-powered sorting systems provide recyclers with cutting-edge methods to monitor and improve their operations in real time.

Additionally, TOMRA further strengthened its position in AI with a 25 percent stake in the waste analysis start-up PolyPerception. The strategic alliance enables operators to optimize the entire process and material flow, including the ability to automate compliance for food-grade plastic recycling.

TOMRA's deep learning software offers a wide and ever-growing application ecosystem to enable operators to create new material streams and access data for valuable decision-making. Our in-house team of software engineers and recycling experts train the artificial neural networks to identify hard-to-classify objects that traditional optical sorting equipment cannot detect.



GAINnext™ Applications

Food-grade plastic packaging

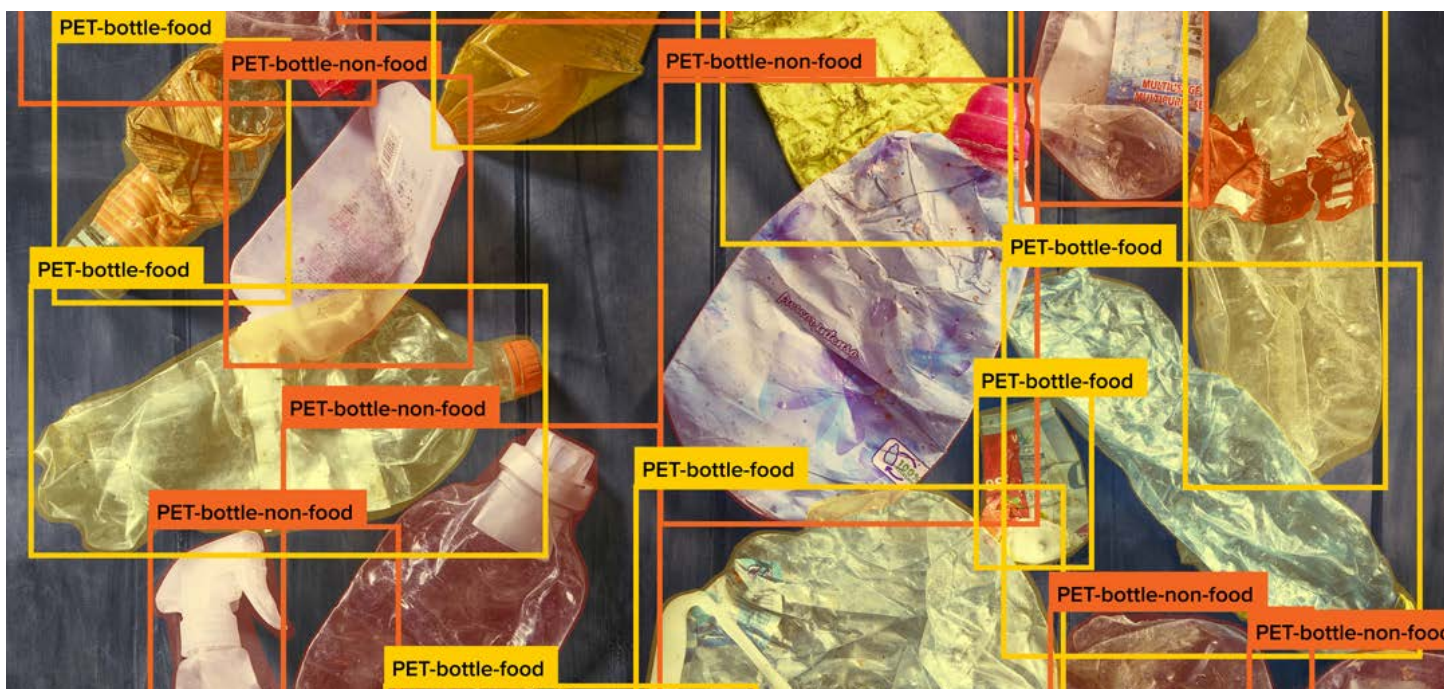
PET cleaner

Deinking / Paper Cleaner

Wood A vs B, C&D

UBC cleaner

More applications in development



Introducing our newest innovations



GAINnext™

AI-POWERED DEEP LEARNING TECHNOLOGY

Process multiple material streams on a single sorting line. Utilizing visual classification, GAINnext™ identifies thousands of objects in milliseconds, offering high-throughput processing with up to 2000 ejections per minute, depending on the application.

FEATURES:

- Deep learning technology
- High-resolution color camera
- Software upgradability
- TOMRA Insight (option)
- Waste Analyzer (option)



AUTOSORT™ *PULSE*

DYNAMIC LIBS SOLUTION FOR ALUMINUM ALLOYS

Recover high-quality aluminum scrap at high throughput – even with painted, coated or dusty materials. Its laser-induced breakdown spectroscopy (LIBS) technology is uniquely dynamic, offering various scanning modes for higher precision sorting and long-term operational flexibility.

FEATURES:

- Dynamic laser system
- 3D object scanning
- Single-point focus mode
- AI-based object singulation
- TOMRA Insight (option)



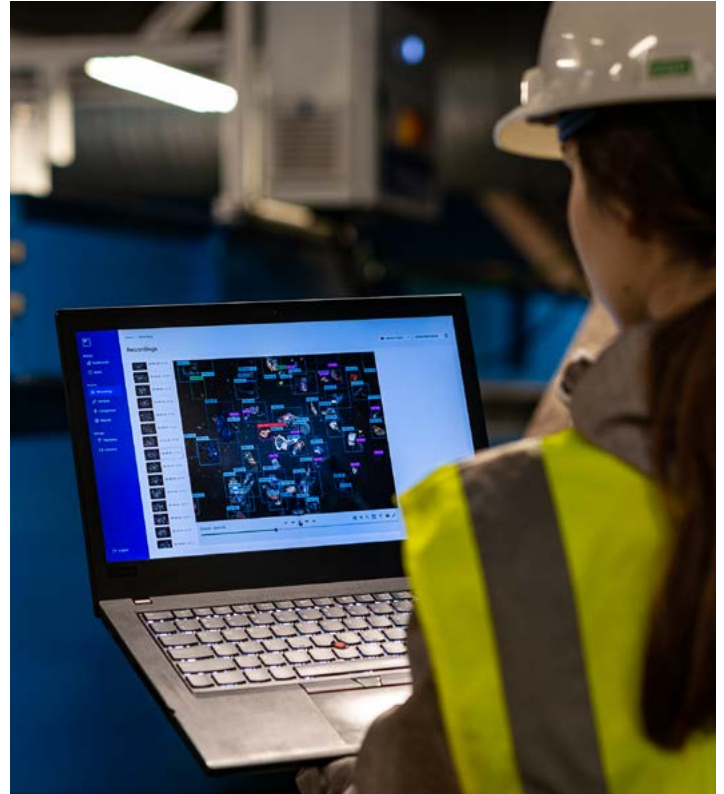
INNOSORT™ *FLAKE*

SIMULTANEOUS COLOR AND POLYMER FLAKE SORTING

The world's most flexible polymer and color optical flake sorter. The high-throughput flake sorting system makes it possible to separate all types of polymers, colors and both transparent and opaque flakes simultaneously.

FEATURES:

- Advanced NIR Spectrometer
- Enhanced dual full color cameras
- Long-life LED with active cooling
- Adjustable color background
- TOMRA Insight (option)



Waste Analyzer

AI WASTE ANALYTICS PLATFORM POWERED BY POLYPERCEPTION

Increase sorting performance through the power of actionable data. By leveraging the PolyPerception Platform to automate the monitoring and compliance of material recovery, the AI-powered waste analysis transfers learnings to sorting systems.

FEATURES:

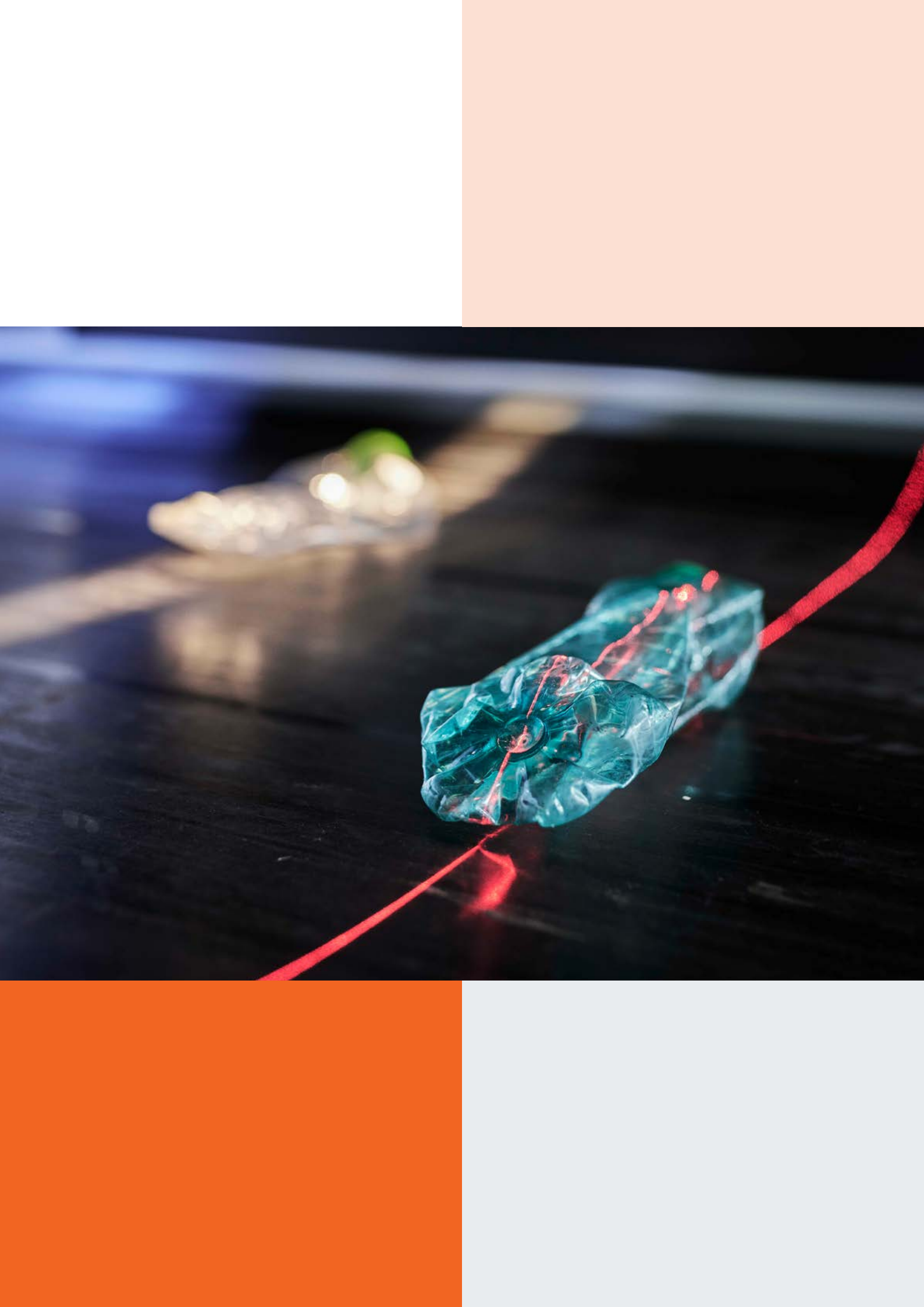
- Computer vision
- Multi-object tracking
- AI object classification
- Deep learning analysis
- Integrates with sorting system

Waste Recycling

Profit from valuable commodities in waste

Automate the recovery of recyclable materials from waste. Together with you, we develop tailor-made solutions to meet your recycling and business goals.





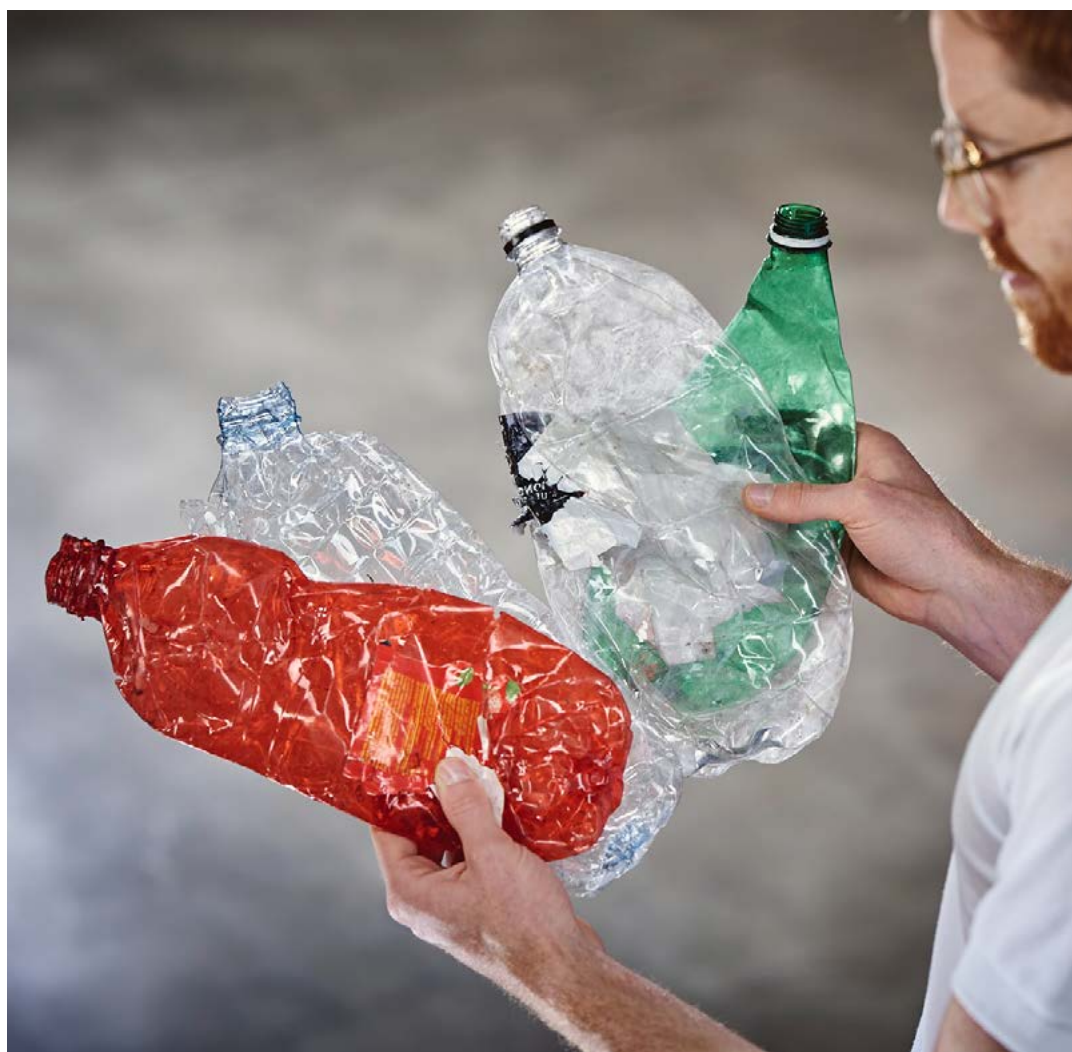
Disruptive innovation for market disruption

STRATEGIES FOR CREATING NEW OPPORTUNITIES IN PLASTIC RECYCLING

Market disruption requires businesses to adapt, innovate and find new ways to deliver value. The plastic recycling industry has faced monumental challenges recently – from cheap imports of recycled plastic to stagnating demand for recyclates.

With a competent and collaborative partner like TOMRA at your side, we help you embrace technology and digital transformation as a key strategy for seizing new opportunities.

[FIND OUT MORE](#)





Food vs non-food grade plastics

GAINNEXT™ FOR FOOD-GRADE PLASTIC PACKAGING

- Over 95% purity levels (PET, HDPE, PP)
- Sorts multiple materials on one sorting line
- Create new revenue opportunities
- Meets future legislative targets in EU/UK



BOOST RECOVERY AND PURITY LEVELS IN PLASTICS



SORT CARBON BLACK PLASTICS BY POLYMER TYPE WITH AUTOSORT™ BLACK

Why sort a few when you can sort it all?

EXPLORE STATE-OF-THE-ART SORTING PROCESSES FOR FLAKE RECYCLING

Quality is everything when it comes to sorting flakes that will be transformed into recycled plastic content. With the right equipment and optimized processes, recyclers can create high-purity, homogenous fractions for multiple commodities – at the same time.

Ask our flake sorting and plastic recycling experts how we can help optimize your sorting lines to deliver maximum value. We'd be delighted to share our insights from around the world with you.

[FIND OUT MORE](#)



High purity
results - even
from contaminated
streams.

TRANSFORM MIXED PLASTICS
INTO VALUABLE COMMODITIES



INNOSORT™ *FLAKE*

- Easy configuration for multiple plastic applications
- Polymer sorting (PET, PP, PE and more!)
- Unrivalled color sorting and grouping
- Turns mixed input into high-quality fractions

**SORT WHITE OPAQUE,
NATURAL, TRANSPARENT
AND TRANSLUCENT FLAKES**

Impurities, MDF & Co.

OVERCOMING COMMON CHALLENGES IN WASTE WOOD RECYCLING

Mixed waste wood and MDF have been notoriously difficult to sort and recycle – until now. Composite materials coated and painted wood chips can now all be detected and sorted instantly thanks to AI-powered sorting systems.

Tap into new opportunities by recovering untreated wood and other premium wood grades from waste. Our wood recycling and material recovery experts would be delighted to share their expertise.

[FIND OUT MORE](#)



A(l) deeper look at wood chips

GAINNEXT™ FOR WASTE WOOD

- Deep learning to sort various materials
- Identifies engineered wood composites
- High-purity recovery of solid wood
- Sorts MDF for cascading use in packaging



RECOVERS PREMIUM WOOD GRADES FOR SECONDARY RAW MATERIALS



SEPARATES MDF FOR SPECIALIZED RECYCLING APPLICATIONS

Re-thinking the deinking process

TACKLE SOME OF THE TOUGHEST CHALLENGES IN PAPER RECYCLING

The decline in newspaper and magazine volume is not the only challenge the paper recycling industry faces. A rise in paper- and cardboard-based packaging is making wastepaper streams more complex than ever before.

Learn how deep learning technology can identify hard-to-classify objects and reduce the need for manual sorting in deinking/paper cleaner. We help you recover the highest grades of paper – ask us how!

[FIND OUT MORE](#)

Pizza boxes, egg cartons and more

**REDUCE THE NEED FOR
MANUAL QUALITY CHECKS**

GAINNEXT™ FOR DEINKING / PAPER CLEANER

- Removes hard-to-classify materials
- Improves sorting of cardboard-based packaging
- Identifies envelopes and other undesired materials
- Separates greyboard from material stream



**HIGHER ACCURACY SORTING
OF PAPER, NEWSPAPER
AND MAGAZINES**

Conquering the opaque challenge

LEARN HOW DEEP LEARNING TAKES PET PURITY RATES EVEN HIGHER

As demand for high-quality rPET rises, the volume of materials to be processed also increases. Even when packaging waste is sorted by polymer, hard-to-classify materials like opaque bottles, textiles and multilayered foils can create undesired challenges downstream.

Embracing new AI-powered technologies provides you more flexibility and the opportunity to create new revenue streams.

[FIND OUT MORE](#)



Boost hit rates on problematic materials

PET CLEANER WITH GAINNEXT™

- Recovers value light blue and transparent PET
- Flexibly select colors for classification stream
- Removes hard-to-classify materials
- Calculates optimal ejection trajectory



EFFICIENTLY SORT WHITE OPAQUE AND COLOR PACKAGING WITH HIGH ACCURACY



AI-POWERED SOLUTIONS TO IMPROVE DOWNSTREAM RECYCLING PROCESSES

Bye, bye material blockages

SPEEDING UP THE RECOVERY AND RECYCLING OF PLASTIC FILMS

Over a third of all plastic packaging waste is film. On traditional conveyor belts with covers, films can lead to costly and time-consuming material blockages.

To overcome this challenge and simultaneously accelerate recycling rates of plastic films, the in-house engineers at TOMRA developed a solution using laminar air flow to stabilize lightweight objects. Our material recovery experts can help you find the ideal setup for sorting valuable mono-material films.

[FIND OUT MORE](#)



Keep material flowing with open conveyor system

**EFFICIENTLY REMOVE
MULTILAYERED, BLENDED AND
MIXED-MATERIAL PLASTICS**



AUTOSORT™ *SPEEDAIR*

- Belt speeds up to 6 m/s
- Stabilizes lightweight objects with air flow
- High accuracy sorting of polymers
- Bundle solution or add-on device

**INTELLIGENT SORTING
OF LIGHTWEIGHT PLASTIC
PACKAGING**

Finding an easier way to process mixed waste

THERE IS NO SUCH THING AS 'DIRTY' WASTE WITH THE RIGHT APPROACH

Around the world, increasingly more governments are encouraging municipalities to transform waste into secondary resources. As a pioneer in sustainable waste management, TOMRA consultants can advise on processes to increase the recovery of recyclable materials from mixed waste.

What's more, our data-driven technology offers waste management companies and processing plants platforms to analyze, monitor and report on waste streams.

Contact us today to find out more!

[FIND OUT MORE](#)

**WASTE MANAGEMENT
& RECYCLING EXPERTISE**



Transforming food waste for good

UNLOCK THE VALUE OF BIOWASTE

The average global household produces 74kg of food waste per capita every year.¹ Unlocking value from biowaste requires a holistic approach to collection, sorting and recycling organic waste.

As a leader in accelerating the transition to a circular economy, TOMRA consultants are well versed in how municipalities can improve biowaste recycling programs that mitigate methane and greenhouse gas emissions.

1) Source: [Statista. 2021.](#)

FIND OUT MORE

ACHIEVE HIGH PURITY COMPOST
& ORGANIC FEEDSTOCK

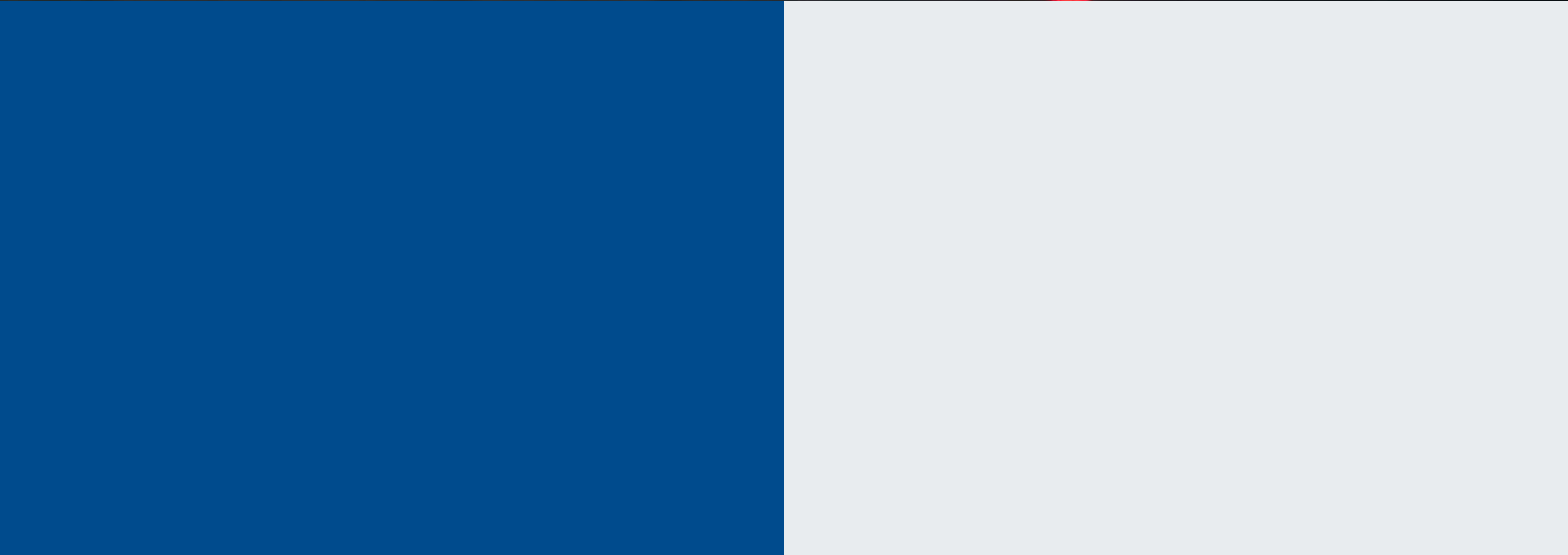
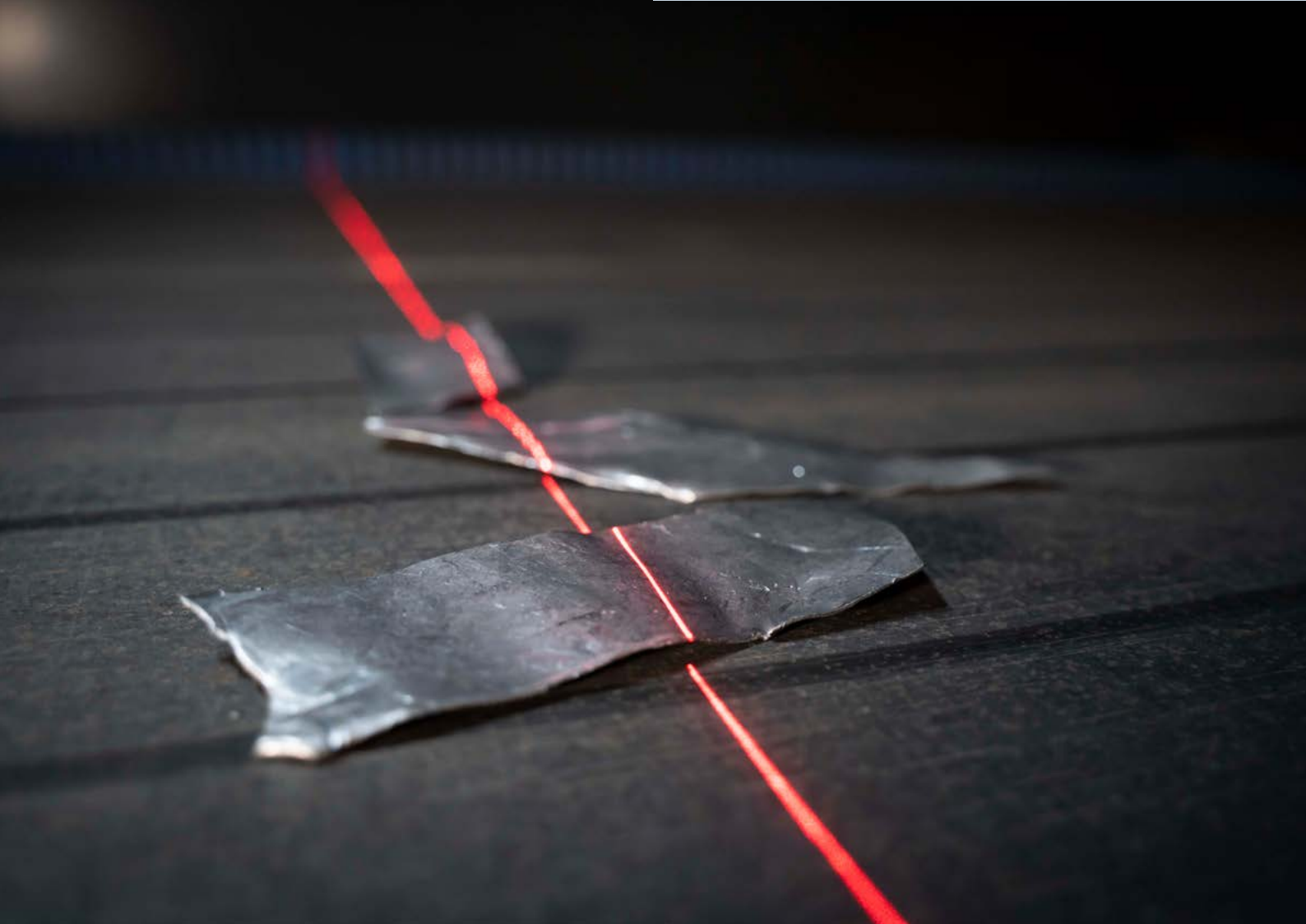


Metal Recycling

Transform scrap metal into pure profit

Make the most out of every gram of metal recovery. Together with you, we find solutions to maximize purity of valuable metals with high throughput.



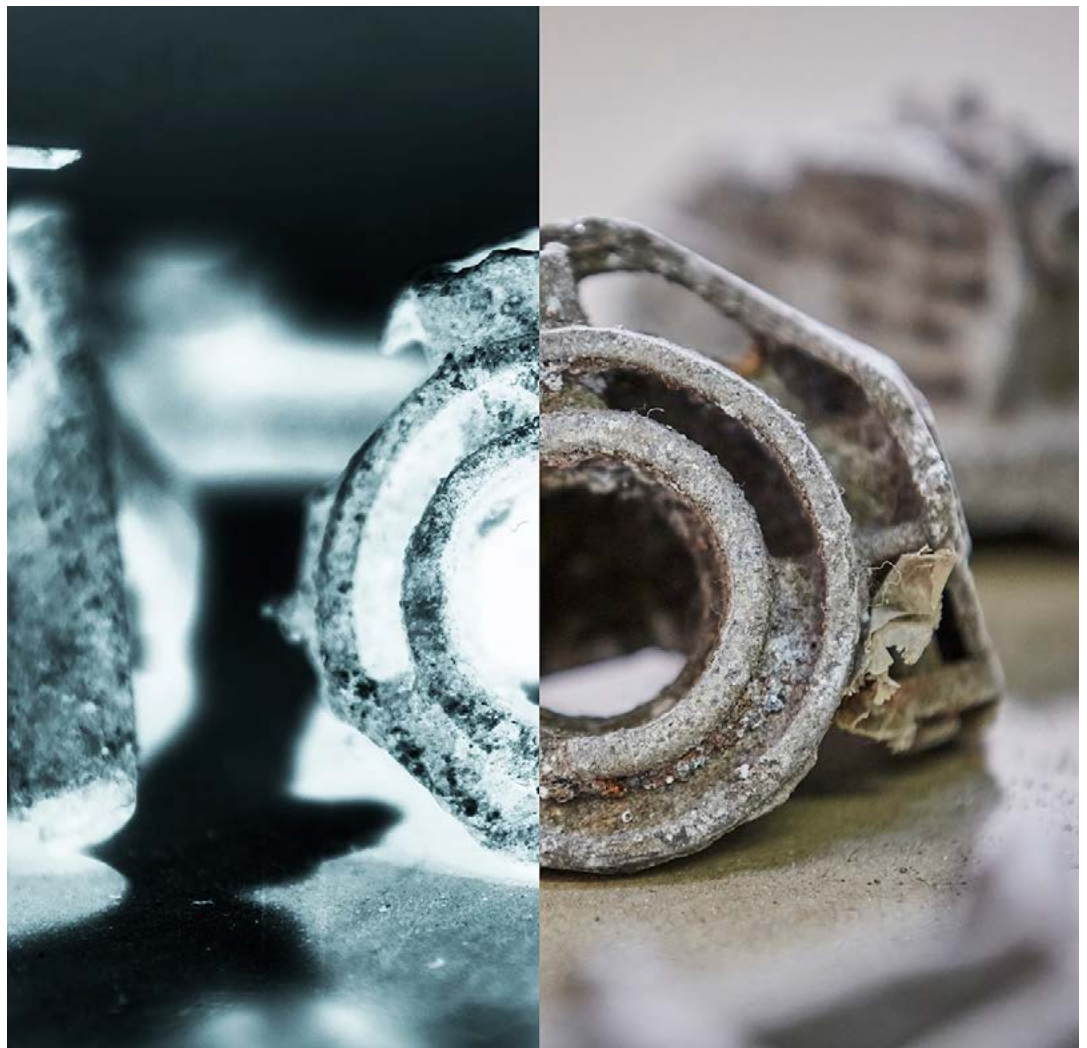


Removing magnesium and superlights

INNOVATION THAT DRIVES HIGHER PURITY FROM MIXED ALUMINUM FRACTIONS

Sorting high-quality fractions of aluminum for recycling requires the removal of magnesium, rubber, plastics and aluminum compounds. Not every sensor-based sorting technology offers multi-density channels that make the recovery of low magnesium twitch possible.

Benefit from high-grade purification of aluminum scrap. With decades of combined experience, the metal recycling experts at TOMRA can help you find the ideal solutions to create furnace-ready aluminum.

[FIND OUT MORE](#)



Furnace-ready aluminum

X-TRACT™ FOR METAL

- High throughput sorting up to 3.8 m/s
- Up to 1000W x-ray power supply
- Enhanced software intelligence
- Exceptional sorting of aluminum fines



**FASTER & HIGHER
THROUGHPUT
OF MIXED ALUMINUM**



**EFFORTLESSLY HANDLE
COMPOSITE MATERIALS &
OVERLAPPING OBJECTS**

High throughput sorting of aluminum by alloy

ENABLING LOW-CARBON ALUMINUM

5xxx and 6xxx series aluminum alloys are extremely valuable resources that are often downgraded when processing scrap. Sorting aluminum by alloys enables the industry's net-zero transition.

Achieve purity levels of 95% and higher. The metal recycling experts at TOMRA would be delighted to explain how our technology can enable low-carbon aluminum.

[FIND OUT MORE](#)



Leading the way to green aluminum

AUTOSORT™ *PULSE*

- Dynamic LIBS technology
- Bulk infeed system
- 3D object scanning
- AI-based object singulation



ALLOY-BASED ALUMINUM FOR DIRECT REMELTING



ELIMINATES NEED TO
DOWNGRADE VALUABLE
MATERIALS

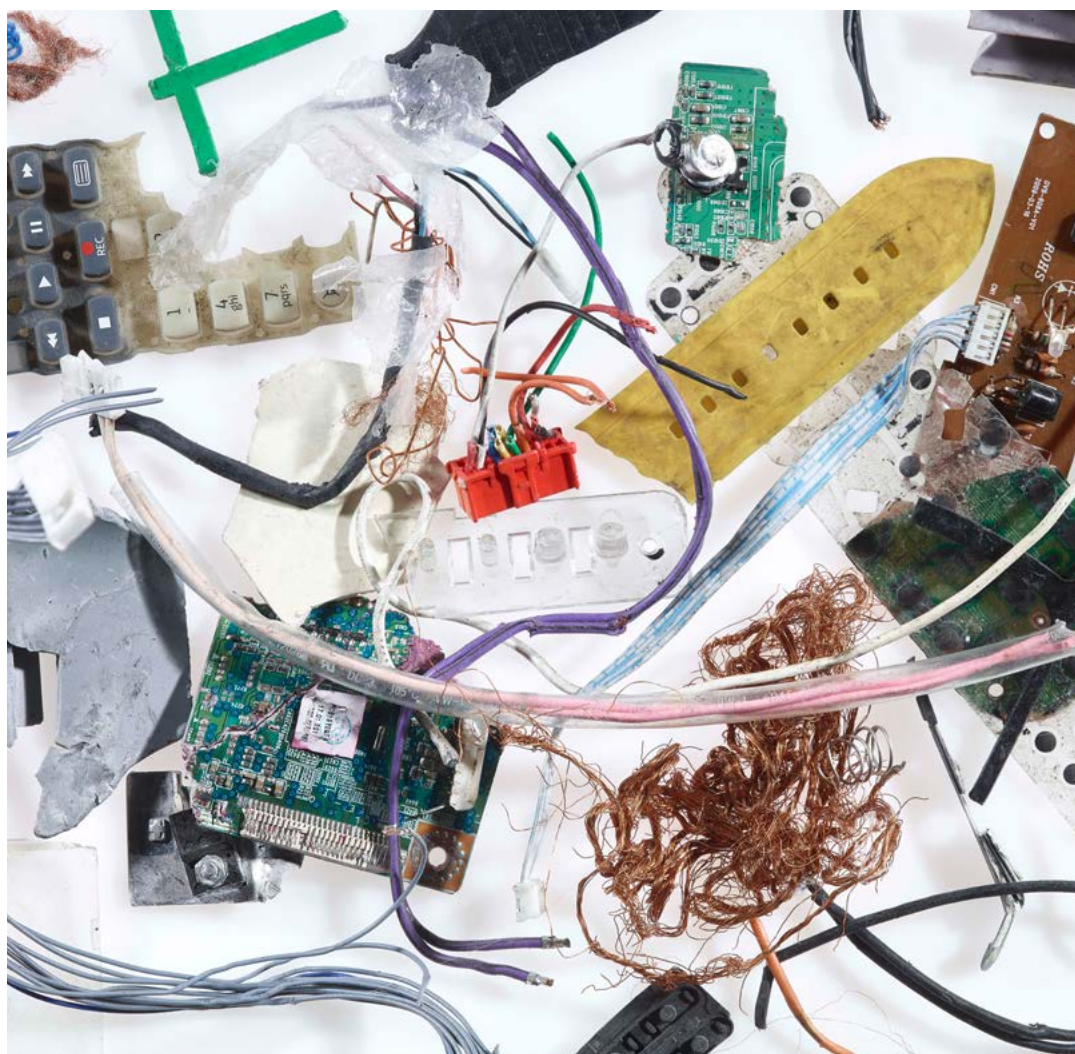
Faster recovery of copper wires

AUTOMATED SORTING OF ELECTRONIC WASTE FOR A PROFITABLE RETURN ON INVESTMENT

Insulated copper wires (ICW) are challenging to sort due to their polymer and rubber coatings, but they represent a high-value revenue stream for electronic recyclers. Our high-precision sensors offer exceptional detection of all types and grain sizes of copper objects.

With TOMRA experts by your side, you can harness the power of spectral and electromagnetic sensors to recover ICW and other high value materials.

[FIND OUT MORE](#)



Making the most of printed circuit boards



SOLUTIONS TO RECOVER VALUABLE PRECIOUS METALS

Recycling printed circuit boards (PCBs) have proven to yield more precious metals like copper and gold than one ton of mined ore. Ask us how you can recover high-quality PCB fractions to meet market demands!



Boosting the recovery of stainless steel

STRATEGIES FOR MULTIPLE SENSOR-BASED SORTING TECHNOLOGIES FOR ZURIK

Achieving the highest quality products from downstream sorting of stainless steel and copper wires requires a well-designed approach and a combination of technologies. At TOMRA, we work with you to find the best solutions to integrate into your operation.

[FIND OUT MORE](#)

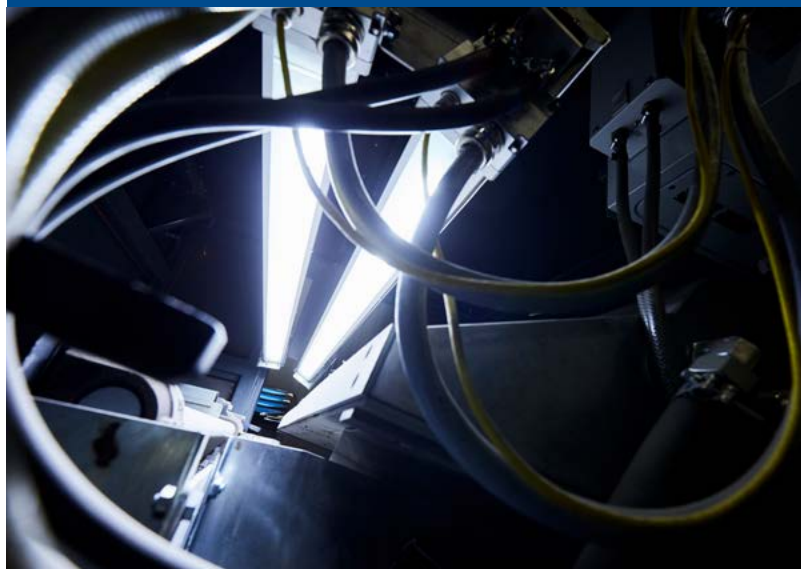


Designed and developed by TOMRA

IN-HOUSE DEVELOPMENT TO CONNECT OUR EXPERTISE WITH YOURS

One of the greatest benefits of working with us is that we know our machines and software inside and out – because we design and build them ourselves. Every sorting system is meticulously crafted with our customers' success in mind. Quality and performance are a must, not an option.

When you partner with TOMRA, you partner with our entire team. From application engineers to service technicians and software developers – we work together with you to deliver outstanding results over the lifetime of your machine.





AUTOSORT™

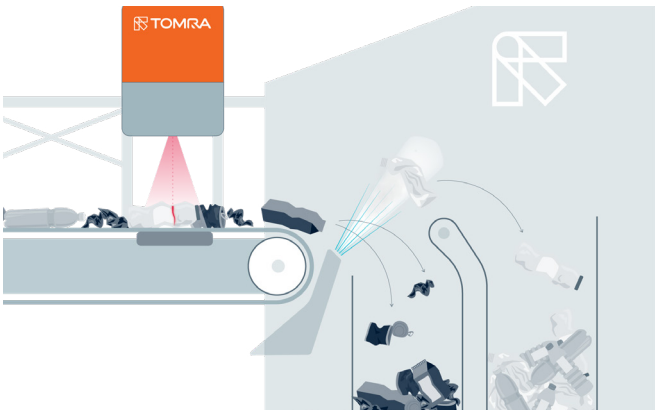
The most powerful multifunctional sorting system worldwide



AUTOSORT™

The world-renowned AUTOSORT™ delivers exceptional performance and purity rates across numerous applications. The all-rounder sorting system combines a variety of groundbreaking innovations.

Designed for maximum operational efficiency, the system's integrated illumination setup offers up to 80% energy savings compared to other lighting solutions. With its flexible sensor configuration, real-time calibration and connectivity capabilities, AUTOSORT™ is a future-proof solution enabling long-term sorting success.



BENEFITS AND FEATURES

- FLYING BEAM™ illumination technology
- Enhanced material detection with SHARP EYE™
- DEEP LAISER™ object-based recognition (optional)
- High system availability thanks to continuous calibration
- Belt speed sensor
- Various track sorting options
- Wide ambient temperature options

TECHNICAL DATA

Type	1000	1400	2000	2400	2800
Low-mounted system L/W/H [mm]	555 / 1562 / 615	555 / 1567 / 615	555 / 2292 / 615	555 / 2651 / 615	555 / 3011 / 615
High-mounted system L/W/H [mm]	555 / 857 / 615	555 / 857 / 615	555 / 1876 / 615	555 / 2346 / 615	555 / 2346 / 615
Control unit [kg]	110	110	110	110	110
Scanner unit, high mount [kg]	120	120	180	230	240
Scanner unit, low mount [kg]	72	72	108	120	120
Power consumption* [kW]	1.1	1.5	1.9	2.4	2.5

*Varies based on configuration. Data does not include conveyor belt.

Valves TS200 / TS450 / TS1500

Nozzles 6.25mm / 12.5mm / 25mm

FIND OUT MORE

MAIN APPLICATIONS

Plastics	Paper	Municipal Solid Waste	Refuse-Derived Fuel	Textiles
Single-stream Recycling	Wood	Commercial and Industrial Waste	Construction and Demolition Waste	E-Scrap

AUTOSORT™ *SPEEDAIR*

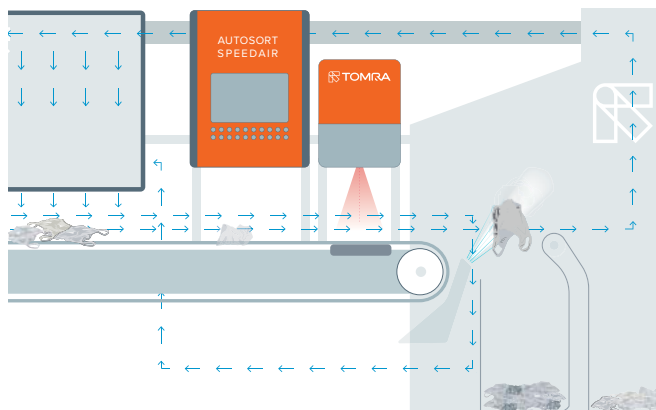
High-speed, intelligent sorting of plastic films and lightweight packaging



AUTOSORT™ SPEEDAIR

Accelerate the recovery of lightweight plastics with AUTOSORT™ SPEEDAIR. The innovative system combines multiple technologies and laminar air flow to stabilize lightweight objects along a high-speed conveyor belt for high precision sorting.

The machine's advanced design allows for an open conveyor system, which significantly reduces downtimes caused by material blockages with traditional conveyor belt covers. AUTOSORT™ SPEEDAIR is available as a solutions bundle (core device, conveyor belt and catcher hood) or as an add-on device to an AUTOSORT™ machine setup.



BENEFITS AND FEATURES

- Lowers risk of material blockages on sorting line
- Fan-driven system for optimized air handling
- Detects chemical properties and molecular differences in materials
- FLYING BEAM™ illumination technology
- Enhanced material detection with SHARP EYE™
- DEEP LAISER™ object-based recognition
- High system availability thanks to continuous calibration
- TOMRA Insight (optional)

TECHNICAL DATA

Type	1400	2000	2400	2800
Sorting system L/W/H [mm]	9450 / 2830 / 3100	9450 / 3430 / 3100	9450 / 3830 / 3100	9450 / 4230 / 3100
Weight [kg]	6424	7812	8462	9112
Power consumption* [kW]	6	7	9	9

**Varies based on application and configuration. Power consumption indicative of standard sorting task..*

Valves TS200 / TS450

Nozzles 12.5mm / 25mm

[FIND OUT MORE](#)

MAIN APPLICATIONS

Packaging

Plastic films

LDPE

AUTOSORT™ *RDF*

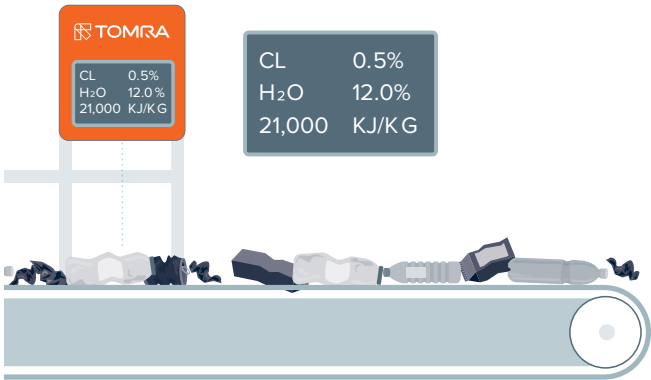
Real-time quality analysis for refuse derived fuels



AUTOSORT™ RDF

AUTOSORT™ RDF combines built-in machine intelligence and high precision sensor to analyze the overall combustibility of various waste streams, which can be utilized to prepare substitute fuels.

Whether analyzing municipal solid waste (MSW), industrial or commercial waste, AUTOSORT™ RDF enables operators to meet end-market requirements with reliable quality assurance. This field-proven technology is not only significantly more consistent than random sample analysis of waste streams, it is also more cost-effective long term.



BENEFITS AND FEATURES

- Calorific, water and chlorine content analysis
- Reduce downtimes caused by varying input qualities
- Real-time online monitoring for optimal process control
- Cost-effective quality assurance
- Used extensively in RDF preparation throughout Europe

TECHNICAL DATA

Type	600	1000	1400
Total width [mm]	depends on conveyor belt	depends on conveyor belt	depends on conveyor belt
Weight [kg]	135	170	200
Power consumption* [kW]	1.3	1.6	1.6

**Varies based on application and configuration*

FIND OUT MORE

MAIN APPLICATIONS

Refuse-derived fuel

AUTOSORT™ *BLACK*

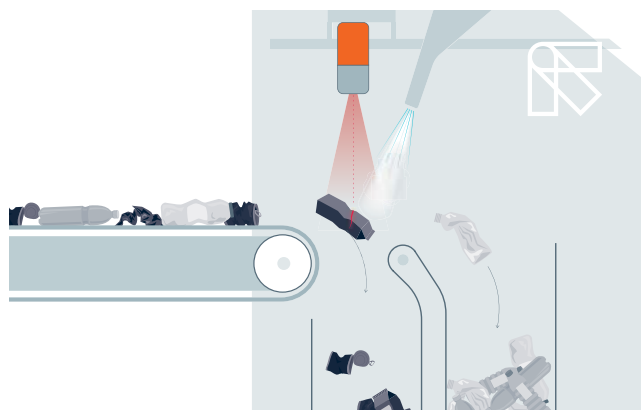
The ultimate solution for sorting carbon black plastics



AUTOSORT™ BLACK

Uncover the hidden value of black plastics with our AUTOSORT™ BLACK sorting system that separates carbon-filled black plastics by polymer types. Its intelligent illumination setup enables the built-in MIR spectroscopy to differentiate between different types of black plastics such as PE, PP and PS.

With its enhanced resolution and off-belt detection system, AUTOSORT™ BLACK delivers high-purity results for recyclers. The high-throughput system instantly sorts objects between 25 and 120 mm in size.



BENEFITS AND FEATURES

- MIR spectroscopy for sharp material detection
- Robust construction for higher throughput
- Reduced downtime, low maintenance efforts
- Sorts objects from 25 to 120mm in size
- Modified FLYING BEAM™ illumination technology
- Electromagnetic metal detection (optional)
- TOMRA Insight (optional)

TECHNICAL DATA

Type	1200	1800
Total L/W/H [mm]	2302 / 2270 / 2145	2302 / 2870 / 1980
Weight [kg]	3000	3000
Power consumption* [kW]	17.2	17.2

**Varies based on configuration. Please contact us for more details.*

Valves TS400

Nozzles 6.25

[FIND OUT MORE](#)

MAIN APPLICATIONS

Packaging

Plastics

E-Scrap

End-of-life Vehicles

Commercial and
Industrial Waste

GAINnext™

AI-powered sorting system with deep learning technology



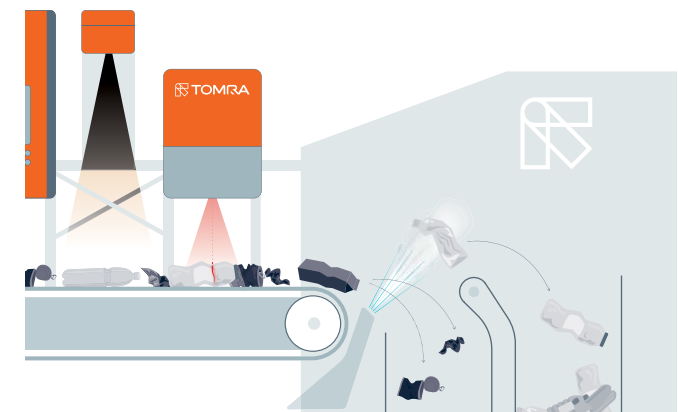
GAINnext™

Significantly enhance the value of your operations with the high-purity results made possible with GAINnext™. With its AI-based visual classification system, the intelligent system identifies hard-to-classify materials and sorts multiple streams on a single sorting line.

GAINnext™ automates complex tasks that cannot be achieved with traditional optical waste sorting, reducing the need for manual sorting. What's more, the connected and future-proof technology can continually improve performance and minimize downtime.



AUTOSORT™ with GAINnext™



BENEFITS AND FEATURES

- Enables higher purity results without manual sorting
- Deep learning technology developed by TOMRA
- Multi-sensor integration with AUTOSORT™
- Calculates trajectory positioning for high precision sorting
- Up to 2000 ejections per minute, depending on the application
- Wide application ecosystem and software upgradability
- TOMRA Insight (optional)

TECHNICAL DATA

Type	1000	1400	2000	2400	2800
Low-mounted system L/W/H [mm]	555 / 1562 / 615	555 / 1567 / 615	555 / 2292 / 615	555 / 2651 / 615	555 / 3011 / 615
High-mounted system L/W/H [mm]	555 / 857 / 615	555 / 857 / 615	555 / 1876 / 615	555 / 2346 / 615	555 / 2346 / 615
Control unit [kg]	110	110	110	110	110
Scanner unit, high mount [kg]	120	120	180	230	240
Scanner unit, low mount [kg]	72	72	108	120	120
Power consumption* [kW]	1.1	1.5	1.9	2.4	2.5

*Varies based on configuration. Data does not include conveyor belt.

Valves TS200 / TS450 / TS1500 Nozzles 6.25mm / 12.5mm / 25mm

FIND OUT MORE

MAIN APPLICATIONS

- | | | | |
|------------------------------|------------------------|-----------------------------------|--------------------------|
| Food-grade plastic packaging | PET cleaner | Aluminum used beverage cans (UBC) | Deinking / Paper cleaner |
| Wood A vs B, C&D | PE silicone cartridges | Wrought aluminum upgrade | |

AUTOSORT™ *FLAKE*

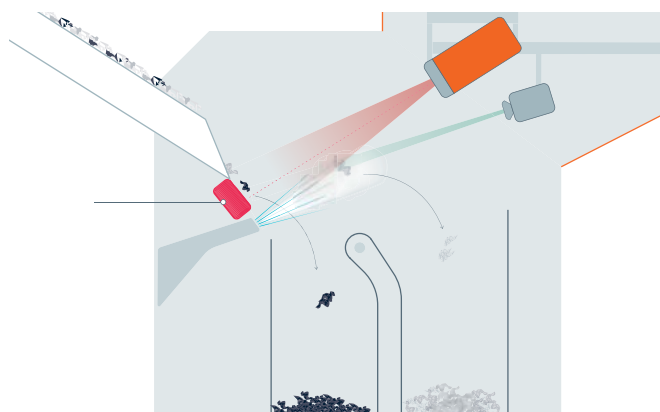
Our highest performance and most versatile optical flake sorter



AUTOSORT™ FLAKE

Achieve maximum purity for high-quality recyclates with our AUTOSORT™ FLAKE sorting system, which enables valuable applications like bottle-to-bottle recycling. Its powerful combination of sensors and high-speed valve blocks removes even the smallest contaminants and foreign materials.

The flake sorting system provides an integrated metal sensor and continuous signal correction to ensure exceptional performance and detection stability. What's more, its operational efficiency is cost-effective and ensures high operational availability.



BENEFITS AND FEATURES

- Enables high-value applications (e.g. PET flakes for food-grade applications)
- Detects all types of polymers
- Removes foreign materials like wood, rubber, silicon, etc.
- High-sensitivity EM sensor to remove any type of metal
- Enhanced light distribution for high-accuracy sorting
- Flexible remote control protocol (optional)
- Dust extraction for minimal downtime
- Integrated recovery track and level sensor

TECHNICAL DATA

Total L/W/H [mm]	2000 / 1900 / 2300
Total weight [kg]	1850
Power consumption* [kW]	10

**Varies based on configuration*

Valves TS100B

Nozzles 4mm

[FIND OUT MORE](#)

MAIN APPLICATIONS

PET Flakes

PO Flakes

PVC Flakes

PS Flakes

INNOSORT™ *FLAKE*

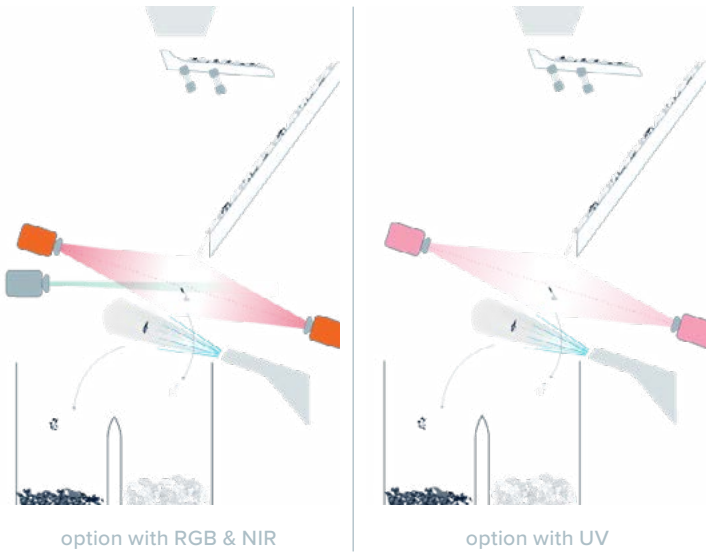
The world's most flexible color and polymer flake sorter



INNOSORT™ FLAKE

INNOSORT™ FLAKE is a highly adaptative and cost-effective sorting system for plastic recyclers worldwide. Its powerful sensor combination enables the simultaneous detection of polymers and colors, including white opaque, natural, transparent, translucent and aged flakes.

Thanks to its flexible sorting setup, operators can access new material streams like PET, PP, PE, PVC, PS, ABS, PA and more. With INNOSORT™ FLAKE, recyclers achieve high-purity recyclable flakes, even from contaminated mixed streams.



BENEFITS AND FEATURES

- Simultaneous detection of polymers, colors and foreign materials
- One machine for many applications thanks to flexible sorting setup
- Unrivalled efficiency and increased yield, regardless of contamination level
- Data-driven flake analysis and statistics (optional)
- Robust mechanical design for operational efficiency
- Dust extraction for minimal downtime
- Operating temperature up to 40°C before additional cooling is required

TECHNICAL DATA

Type	1000	1500	2000
Number of chutes	2 with optional integrated recovery tracks	3 with optional integrated recovery tracks	4 with optional integrated recovery tracks
Sorting system L/W/H [mm]	1900 / 2080 / 2220	1900 / 2640 / 2220	1900 / 3200 / 2220
Sorting system [kg]	1300	1920	2400
Power consumption* [kW]	6	8.5	9

*Varies based on configuration.

Valves TS105B

Nozzles 4.75mm

FIND OUT MORE

MAIN APPLICATIONS

PET Flakes

PO Flakes

PVC Flakes

PS Flakes

AUTOSORT™ *PULSE*

The dynamic LIBS solution for sorting aluminum scrap by alloy



AUTOSORT™ PULSE

AUTOSORT™ PULSE features our one-of-a-kind dynamic laser system with multiple scanning modes for higher precision sorting of aluminum with less material preparation – even with painted, coated or dusty alloys.

With 3D object scanning and shape recognition, the AI-powered system dissects overlapping and touching objects into individual fractions to boost purity and recovery. What’s more, our dynamic LIBS technology can track and analyze objects multiple times for the highest sorting precision of aluminum by alloy.



BENEFITS AND FEATURES

- High throughput LIBS sorting, no singulation required
- AI-powered object cutter that enables high belt occupancy
- Single-point focus mode for more precise spectra
- Object analysis to detect the ideal shooting position for ejection
- Dynamic laser system that detects any object on the conveyor belt
- High safety standards and small equipment footprint

TECHNICAL DATA

Total L/W/H [mm]	8580 / 2230 / 2513
Conveyor width [mm]	1200
Conveyor length [mm]	5472
Weight* [metric tons]	14
Power consumption* [kW]	< 22

**Varies based on machine configuration. Please contact us for more details.*

Valves TS450 / 6.25 / 1:1

FIND OUT MORE

MAIN APPLICATIONS

Aluminum

FINDER™

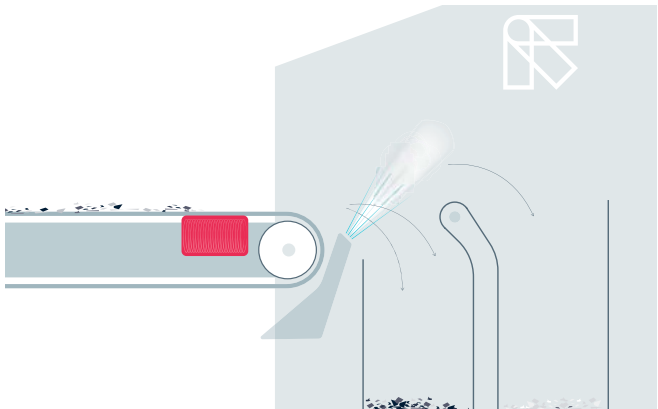
Ultra-flexible, intelligent sorting of non-ferrous metals



FINDER™

FINDER™ is the ideal backstop solution for the recovering of metals lost to eddy current separation and valuable commodities from other waste streams. The sorting system offers a wide range of sensor configurations to ensure maximum recovery based on your specific sorting requirements.

Featuring groundbreaking software including SUPPIX™, DEEP DATA™ and Intelligent Object Recognition (IOR) systems, FINDER™ delivers exceptionally high throughput and purity levels in metal and waste sorting.



BENEFITS AND FEATURES

- High throughput with belt speeds up to 3m/s
- SUPPIX™ spatial resolution for a wide range of grain sizes
- Higher detection rate for purity and recovery with object processing feature
- Multifunctional sorting and adaptive belt calibration
- Connectivity with statistics and remote adjustments of sorting tasks
- Optional sensors to sort copper wires, polymers, PCBs and wood
- Laser object detection (optional)

TECHNICAL DATA

Type	1200	1800	2400	3000
Total L/W/H [mm]	6420 / 2000 / 2120	6420 / 2600 / 2120	6420 / 3200 / 2120	6420 / 3800 / 2120
Conveyor width [mm]	1200	1800	2400	3000
Conveyor length [mm]	4000	4000	4000	4000
Weight* [kg]	3800	4600	4600	6900
Power consumption* [kW]	5	5.5	7.5	10

**Varies based on machine configuration. Please contact us for more details.*

Valves TS400 / 6.25 / 1:1
TS1500 / 6.25 / 1:2

FIND OUT MORE

MAIN APPLICATIONS

ASR E-Scrap Wood Ash recycling

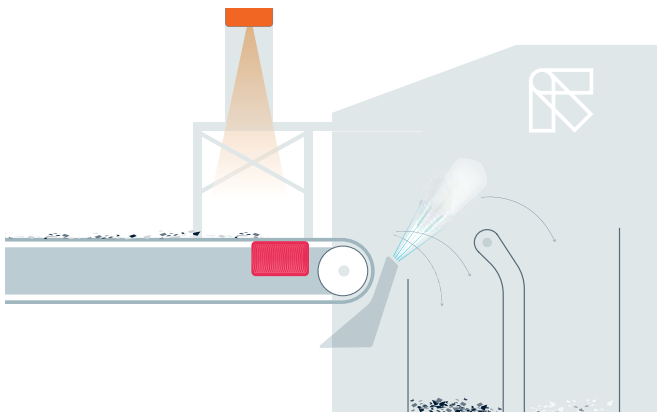
FINDER™ COLOR

High-precision color sorting to support a range of metal tasks



FINDER™ COLOR

FINDER™ COLOR is the flexible solution for high-precision color sorting of metals and e-scrap. Combining an advanced RGB camera with AI-powered object singulation, it delivers accurate detection and separation of copper, brass, stainless steel, and PCBs – even in complex streams. With high throughput and object-level precision, it ensures greater efficiency and reduced operating costs across diverse sorting tasks.



BENEFITS AND FEATURES

- High throughput of up to 20 t/h, depending on material
- RGB camera with outstanding spatial and color recognition
- AI-powered object singulation for precise, object-level separation
- Batch or continuous flow operation with quick fraction switching
- Electromagnetic sensor (optional) for enhanced purification and PCB classification
- Service platform for easier access, support, and performance optimization
- Compact design with low maintenance for reduced downtime

TECHNICAL DATA

Total L/W/H [mm]	6695 / 2780 / 2902
Conveyor width [mm]	1400
Conveyor length [mm]	4000
Weight* [kg]	7140
Power consumption* [kW]	11

**Varies based on machine configuration. Please get in touch with us for more details.*

Valves TS1500 / TS450

Nozzles 6.25 / 12.5

FIND OUT MORE

MAIN APPLICATIONS

Zorba Copper Stainless steel E-Scrap End-of-life vehicles (ELV)

X-TRACT™ for metal

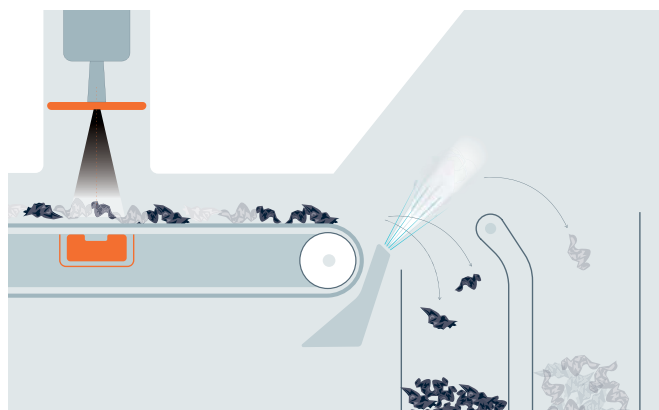
Powerful precision x-ray sorting of aluminum from heavy metals



X-TRACT™ for metal

For nearly two decades, X-TRACT™ has been the world's leading dual energy x-ray transmission (XRT) sorting system for aluminum recyclers and processors in 34 countries. The high-throughput sorting system can process multiple applications and grain sizes, including aluminum fines and copper wires.

Operators benefit from its Dual Processing technology, which allows them to prioritize sorting for either high recovery or high purity yields. It is the ideal solution for recovering high-value metals from complex streams.



BENEFITS AND FEATURES

- Precise density separation with new DuoLine™ XRT
- Detects overlapping objects and surface area at the same time
- Intensity scale feature measures the relative thickness of materials
- Classifies objects within software-defined ranges for high-speed throughput
- In-house sensor and software development by TOMRA
- Top-mounted x-ray source for the high accuracy sorting

TECHNICAL DATA

Total L/W/H [mm]	6420 / 2000 / 2120
Conveyor width [mm]	1200
Conveyor length [mm]	4000
Weight [kg]	9000
Power consumption* [kW]	--

**Varies based on machine configuration. Please contact us for more details.*

Valves TS1500 / 6.25 / 1:2
TS450 / 6.25 / 1:1

[FIND OUT MORE](#)

MAIN APPLICATIONS

Aluminum

Aluminum fines

Copper wires

X-TRACT™ for wood

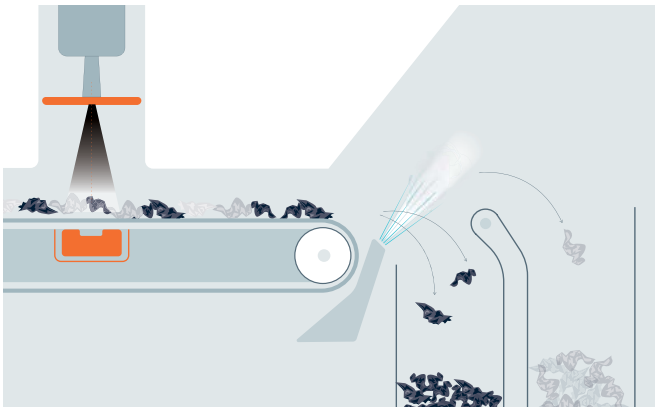
Powerful precision x-ray sorting of waste wood



X-TRACT™ for wood

Built for the demands of wood recycling, X-TRACT™ is a high-throughput XRT sorting machine that removes over 98% of inerts and metals (excluding foil) and more than 97% of heavy plastics based on atomic density.

It delivers high-purity output ideal for engineered wood products. A newly optimized ejection module reduces air consumption by up to 25%, while the redesigned catcherhood ensures precise, continuous sorting in harsh and dusty environments.



BENEFITS AND FEATURES

- Designed for continuous 24/7 operation in harsh environments
- High accuracy detection of inerts, metals and heavy plastics
- Engineered to minimize dust accumulation for long-term stability
- Processes up to 30 metric tons of waste wood per hour
- 16,000-hour warranty on x-ray source and sensor
- In-house sensor and software development by TOMRA

TECHNICAL DATA

Total L/W/H [mm]	6720 / 2400 / 2420
Conveyor width [mm]	1200
Conveyor length [mm]	4160
Weight [kg]	9500
Power consumption* [kW]	12

**Varies based on machine configuration, operation status and ambient conditions. Please contact us for more details.*

Valves TS450 / 6.25 / 1:1
TS1500 / 6.25 / 1:2

FIND OUT MORE

MAIN APPLICATIONS

Wood

TOMRA Local Control

Intuitive sorter control software on your local network



TOMRA Local Control

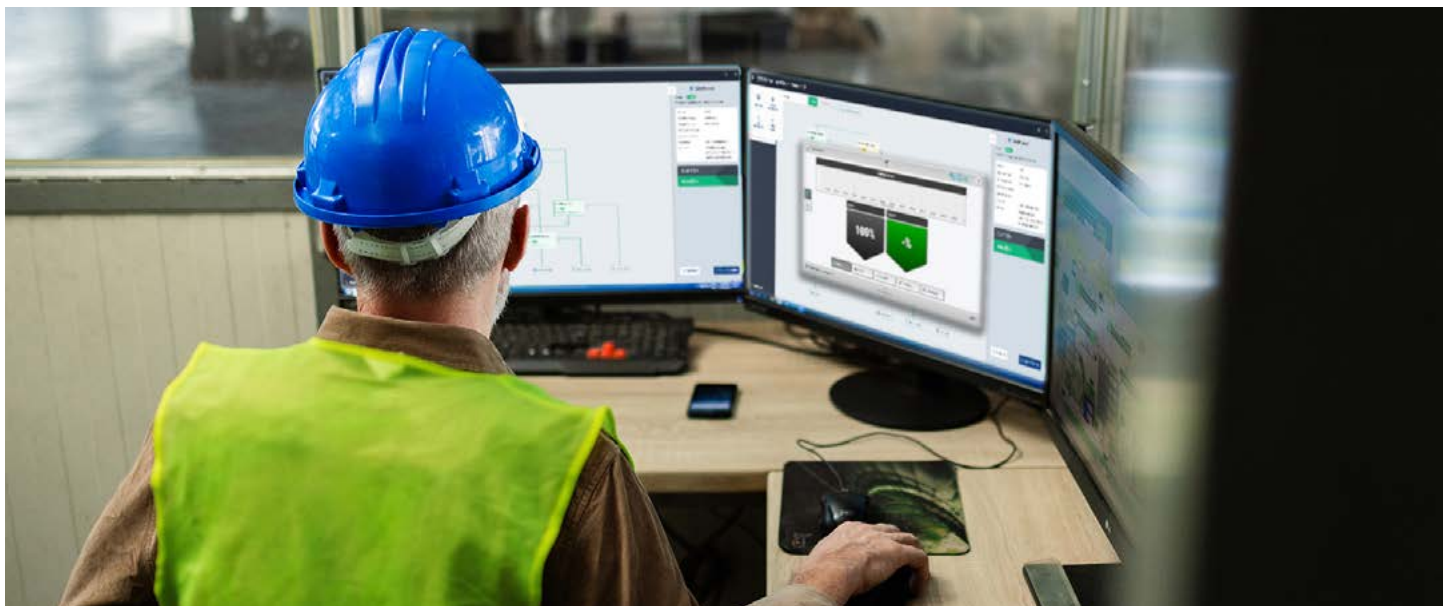
Take control of your sorting operation from one digital place. The intuitive software connects all TOMRA sorters on the local network, giving operators real-time visibility and full HMI access from any computer – without additional software or walk-arounds.

Built on secure edge data, it enables instant configuration changes, fast alarm response, and smoother, safer workflows. Designed to increase uptime and reduce manual effort, TOMRA Local Control also builds the foundation for digitalization and future automation.



BENEFITS AND FEATURES

- Control all sorters with one click
- Switch configurations instantly to react to change
- See real-time status with one-second updates
- Work safely and efficiently from the office
- Secure, encrypted data exchange on the local network
- Role-based access with Central User Management
- Supports KRITIS/NIS2-ready infrastructure
- Modular and scalable to grow with your operation



[FIND OUT MORE](#)



TOMRA Insight

We turn data into value

TOMRA Insight

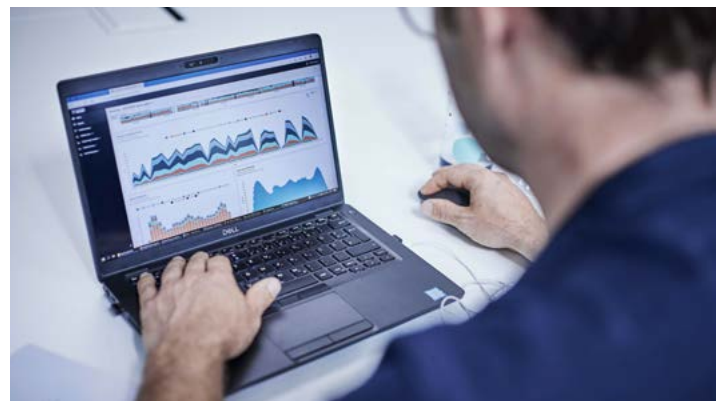
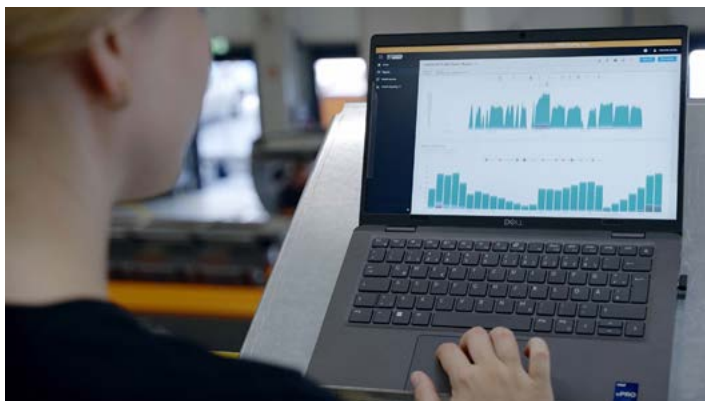
With TOMRA Insight, you'll have a cloud-based platform at your hands that turns your sorters into a powerful and connected source of information. Monitoring your TOMRA equipment wherever and whenever you want, you can unlock the full potential of your sorting line.

When it comes to your installation, you're the expert. With TOMRA Insight, you effectively combine your knowledge with our experience, opening up even more possibilities. Thanks to data visualization and analysis, you can optimize your work and increase the efficiency of your sorting process.



KEY BENEFITS

- Real-time analysis of all connected TOMRA sorters
- Material distribution and throughput variation analysis
- Easy access to data for faster reaction times
- Greater data transparency for fact-based decision making
- Continuous monitoring to meet quality targets



[FIND OUT MORE](#)



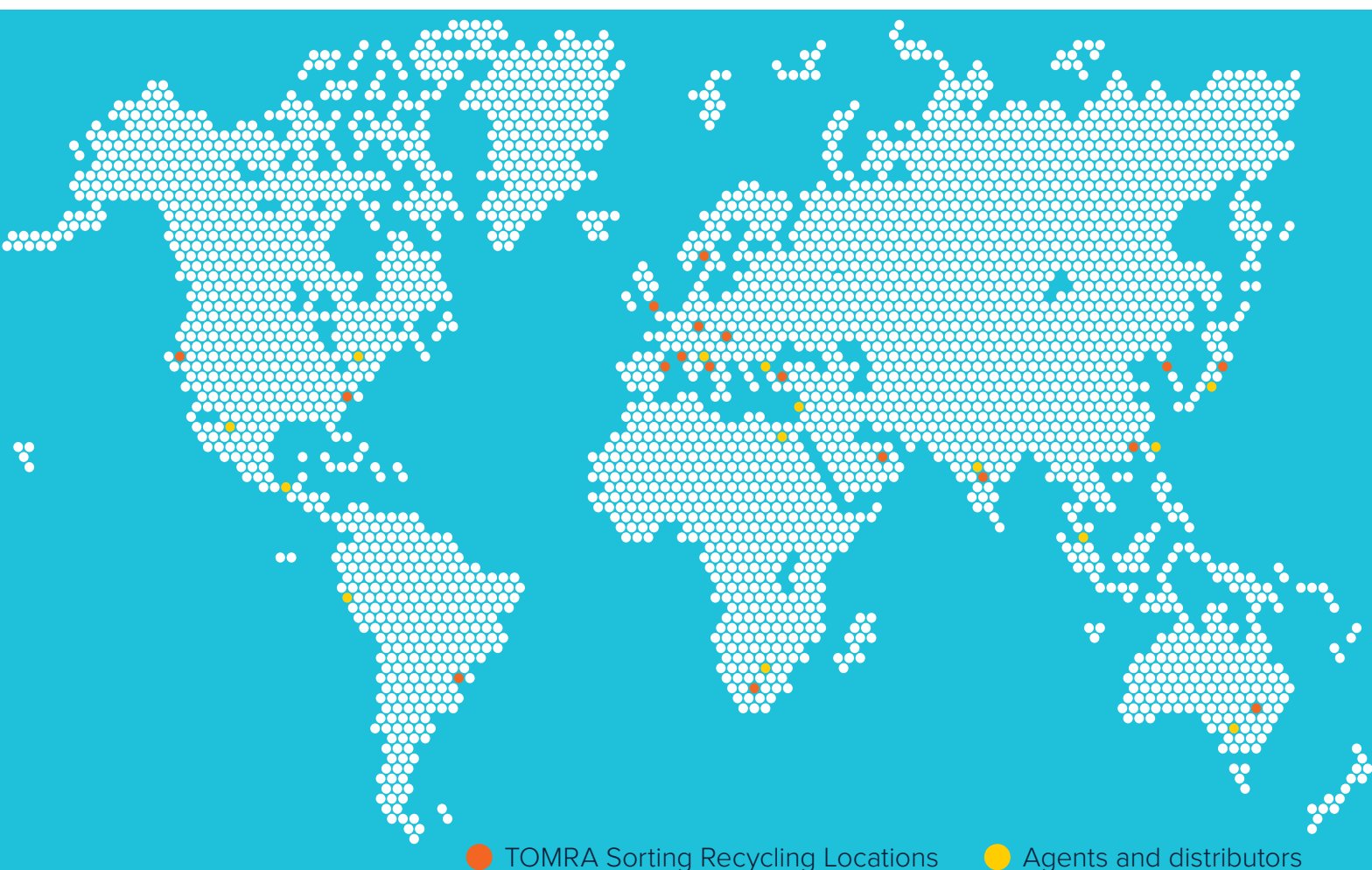
TOMRA Service

TOMRA Service

Delivering world-class sorting solutions is only part of our commitment to you. As your trusted service partner, we provide leading-edge technical support, training and operational performance solutions to make sure your plant runs at full power for the long term.

OUR PROMISE

- State of the art, proactive technical support, including remote diagnostics and preventive maintenance
- Data-driven real-time optimization through digital solutions
- Continuous training of your maintenance and operations teams
- Knowledge, insights and consultation to ensure consistent uptime availability
- Large global service network with local service teams and on-site spare parts support



TOMRA Service is an optional service available to customers.

[FIND OUT MORE](#)

e/PlasticTranspare



ottle/PlasticTransp



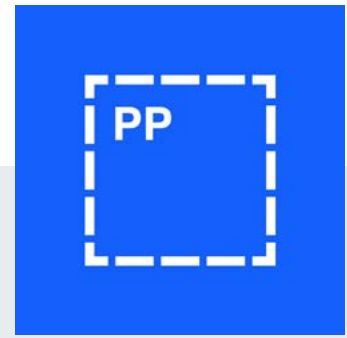
Waste Analyzer

AI waste analytics platform powered by PolyPerception

Bag/Plas



Waste Analyzer



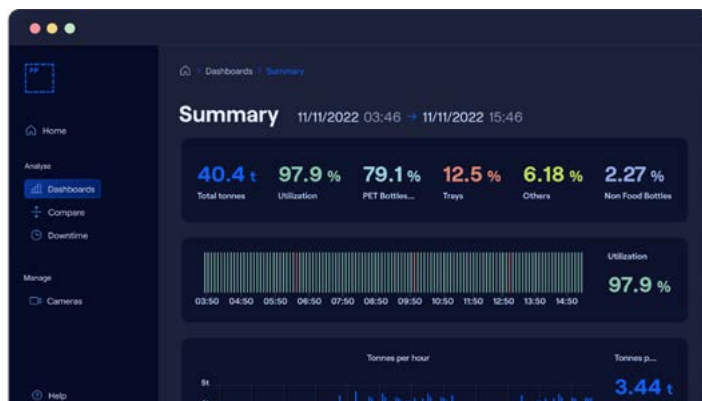
Harness the power of artificial intelligence and deep learning with our holistic waste analysis solution for material recovery facilities and recyclers. The waste analyzer powered by PolyPerception enables end-to-end object tracking and classification on any sorting line.

The waste analyzer's high-resolution color cameras capture real-time images of material flows, allowing operators to analyze key performance metrics like waste composition at key points in the sorting process, on one platform. Maximize throughput, recovery and purity rates by leveraging the power of actionable data and automation.



BENEFITS AND FEATURES

- AI waste analytics and compliance reporting
- Food vs non-food grade plastic analysis
- Computer vision for end-to-end material tracking
- Accurate mass estimation using machine learning
- Real-time data for improved sorting performance
- Deep learning based multi-object tracking
- Customizable alerts and reports
- Integration with TOMRA sorting machines



TECHNICAL DATA AVAILABLE UPON REQUEST.

[FIND OUT MORE](#)

MAIN APPLICATIONS

Packaging

Municipal solid waste

About us

TOMRA Recycling Sorting delivers technology-driven solutions to maximize material recovery from waste, enabling a circular economy. The company's sensor-based sorting systems with AI-powered intelligence continue to transform the waste management and recycling sectors worldwide.

As the first company to use high capacity near infrared (NIR) technology in waste and metal sorting applications, TOMRA Recycling Sorting has long-standing experience in material recovery and reprocessing. To date, around 10,000 systems have been installed in over 100 countries worldwide.

TOMRA Recycling Sorting is a division of TOMRA Group. TOMRA was founded on an innovation in 1972 that began with the design, manufacturing and sale of reverse vending machines (RVMs) for automated collection of used beverage containers. Today, TOMRA is leading the resource revolution to transform how the planet's resources are obtained, used and reused to enable a world without waste. The company's other business divisions are TOMRA Food and TOMRA Collection.

TOMRA has approximately 105,000 installations in over 100 markets worldwide and had total revenues of about 14.8 billion NOK in 2023. The Group employs 5,000 globally and is publicly listed on the Oslo Stock Exchange. The company headquarters are in Asker, Norway.







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