

Q | DataBeyond



# AI & Optoelectronics



WhatsApp



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**NO.1 Top Sales!**  
AI Optical Sorter.





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# AI and Optoelectronics

## Intelligent Sorting Equipment Provider

DataBeyond was founded in 2018, leading the high-end intelligent sorting technology applied globally. DataBeyond making high-end intelligent sorting equipment more affordable and accessible to recycling manufacturer. We aim to accelerate the arrival of the intelligent era in recycling. DataBeyond's optical sorters not only lead in domestic market but also are widely exported to dozens of countries and regions, including Japan, Malaysia, Indonesia, Brazil, Dubai, Saudi Arabia, India, etc., earning high praise and popularity among users.

**NO.1**

Top Sales in China

**≥85%**

Front-end Waste Recycling Market Share in China

**30+**

Turnkey Project Case

**3000+**

Project Cases Worldwide

**20000<sub>m</sub><sup>2</sup>**

Intelligent Equipment R&D and Production Base

**300+**

Chinese Intellectual Property





# » DataBeyond Technologies

## AI

### Artificial Intelligence Sorting Technology

DataBeyond utilizes its advanced backbone network, DataBeyondNet, to achieve accurate identification. This includes a highly efficient industry-specific model and the industry's pioneering structured waste big data image library. These innovations greatly enhance computational speed, enabling high-speed conveyor vision inspections of up to 6m/s.

### AI·SPEC™

#### Hyperspectral Sorting Technology

DataBeyond Technology's Proprietary AI·SPEC™ Software and Hardware System, DataBeyond Technology has developed the AI·SPEC™ software and hardware system, which utilizes 256 spectral bands to precisely identify hundreds of different materials. This system can even recognize composite plastic packaging made from multiple materials and waste paper with varying fiber densities.

### AI·Laser™

#### Laser Sorting Technology

DataBeyond innovatively integrates laser sorting technology with AI, creating the powerful AI·Laser™ sorting technology. By comprehensively detecting multiple dimensions such as object spectrum and spatial characteristics, it further enhances material identification accuracy and sorting purity.

### AI·FLUO™

#### Fluorescence Aging Sorting Technology

DataBeyond leads the industry by combining fluorescence aging sorting technology with AI to develop the distinctive AI·FLUO™ sorting technology. Prior to crushing PET bottles, AI·FLUO™ can actively segregate aged and fluorescent bottles, decreasing the presence of aged and fluorescent fragments in bottle flakes and significantly enhancing flake quality.

## FLYinVision™

### High-Speed Imaging Technology

DataBeyond's FLYinVision™ technology, combined with synchronous belt tracking functionality and a high-speed scanning system, enables rapid scanning of materials on a conveyor belt moving at speeds of up to 6m/s. This system captures multidimensional features of the materials, even identifying ultra-fine characteristics that are imperceptible to the naked eye.

## MultiSensor

### Multisensor Fusion Technology

DataBeyond's MultiSensor technology supports the combination of various sensors, including visible light, near-infrared, X-ray, fluorescence, laser, hyper-spectral, and metal detectors. Employing fuzzy logic and deep neural network algorithms, it performs decision-level fusion on multiple heterogeneous data sources.

## Cloud Brain

### DataBeyond Cloud Brain

DataBeyond Cloud Brain combines edge, terminal, and cloud technologies, continuously monitoring data from various sensors. It achieves remote intelligence enhancement, predictive maintenance of equipment, and 365 days \* 24 hours real-time monitoring and management.

## MSWDataBase

### Municipal Solid Waste Big Database

DataBeyond's MSWDataBase™ is the most extensive and comprehensive solid waste database in China. It encompasses a wide range of waste sorting scenarios, including renewable resources and urban solid waste. By collecting data from numerous waste treatment plants, it has built a vast image library that is extensively labeled and multi-dimensional, establishing a strong data advantage.

Awarded over 300 national patents



Received over 10 national, provincial, and municipal honors



National Level Professional, Refined, Distinctive, and Innovative "Little Giant" Enterprise Award



High-tech Enterprise Certificate



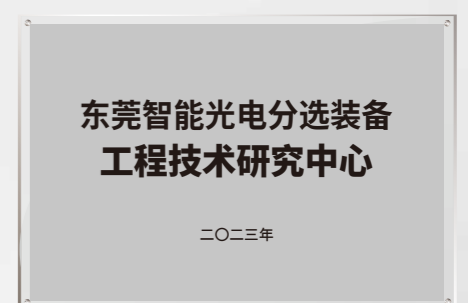
Post-doctoral Innovation Practice Base



Province Science and Technology SMEs



Listed Reserve Enterprise

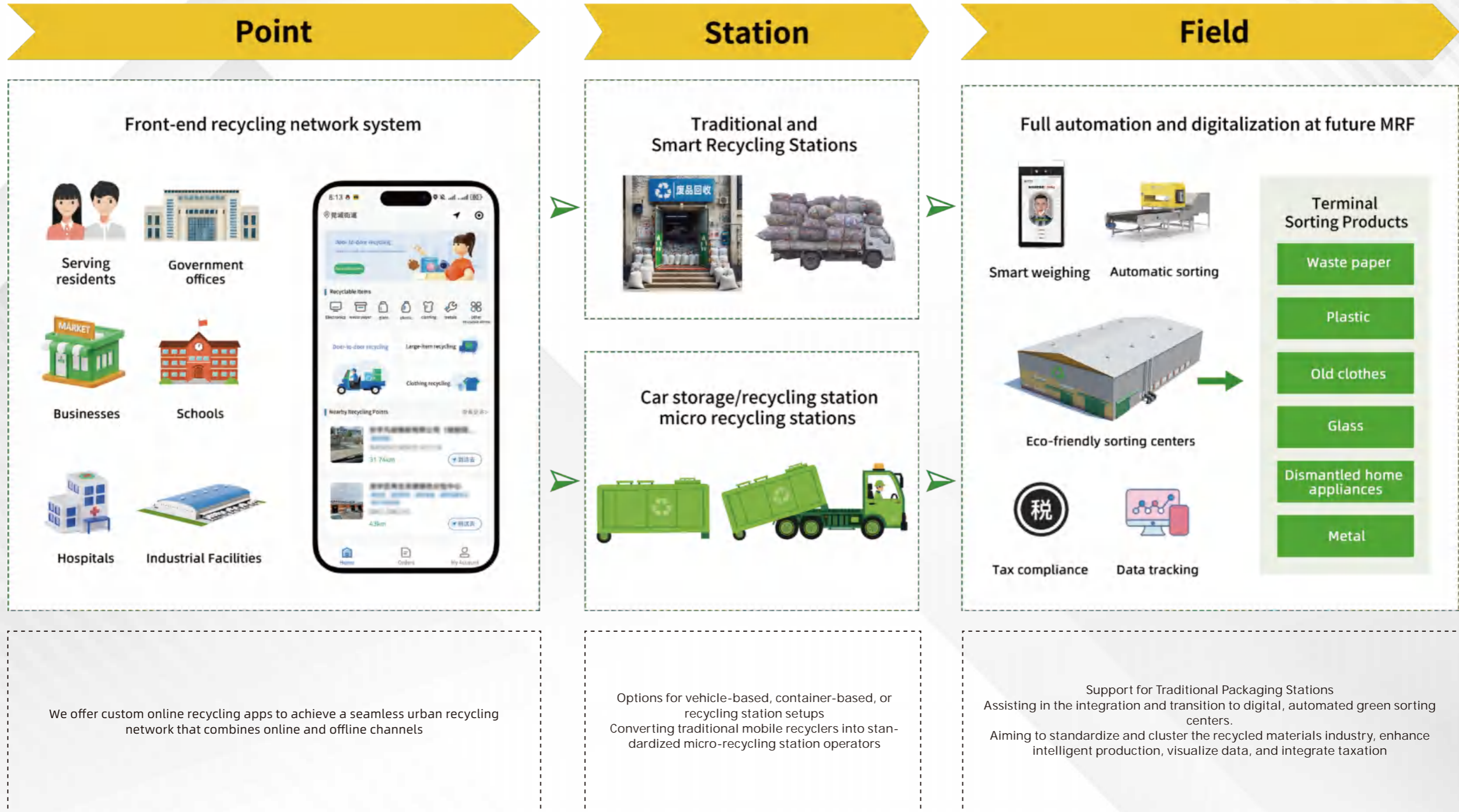


Intelligent Optoelectronic Sorting Equipment Engineering Technology Research Center



# 01 Recycling

## Comprehensive “ Point-Station-Field” Recycling Operations Solution



**Point**

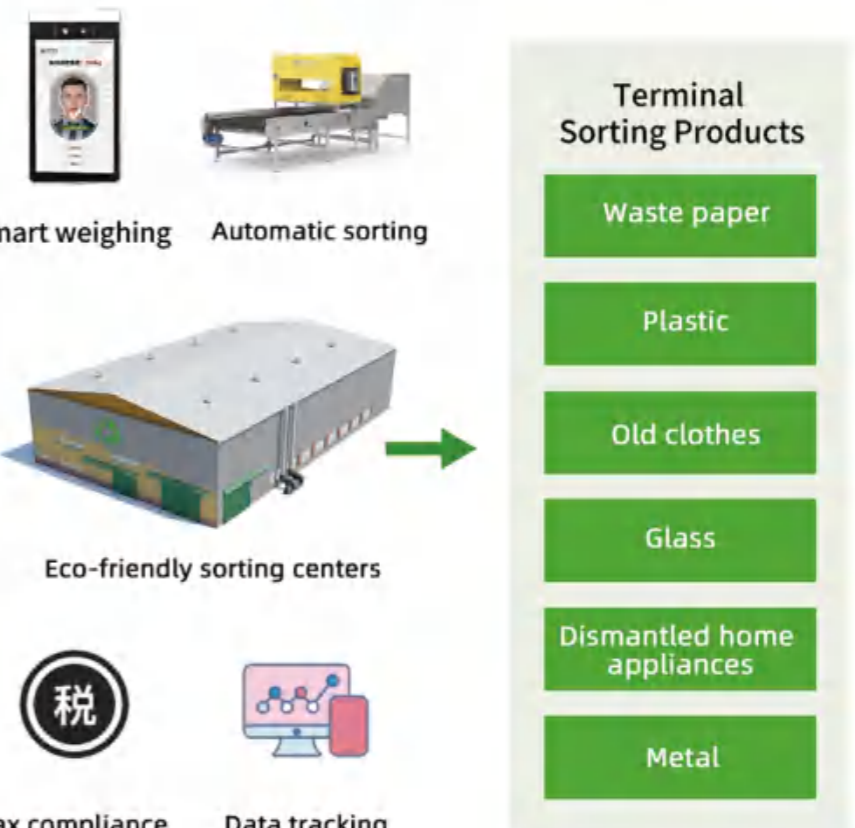
**Station**

**Field**

Front-end recycling network system

Traditional and Smart Recycling Stations

Full automation and digitalization at future MRF



Car storage/recycling station micro recycling stations



We offer custom online recycling apps to achieve a seamless urban recycling network that combines online and offline channels

Options for vehicle-based, container-based, or recycling station setups  
Converting traditional mobile recyclers into standardized micro-recycling station operators

Support for Traditional Packaging Stations  
Assisting in the integration and transition to digital, automated green sorting centers.  
Aiming to standardize and cluster the recycled materials industry, enhance intelligent production, visualize data, and integrate taxation



# 02 Sorting

## Renewable Resources Sorting »

DataBeyond's AI Optical Sorter is suitable for sorting various renewable resources.

- Separate various types of high-value plastics from mixed plastics, such as PET, PP, HDPE, LDPE, PC, PVC, etc.
- Separate plastics by the term of different colors, grades, and applications
- Separate paper by the term of yellow waste paper, white waste paper, miscellaneous paper (cigarette cards, medicine cards, folding box board(FBB), solid bleached sulphate(SBS),gray cards), tetra pak packaging, etc.
- Separate metal, including automobile recycling, appliance recycling, electronic waste recycling, battery recycling, etc.



PET



PP container



HDPE



Low-Value Recyclable



Municipal Solid Waste



Mixed Engineering Plastics



Paper



Textile



Medical Plastic Recycling

## Municipal Solid Waste Sorting »

DataBeyond provides a stable and reliable sorting solution for municipal waste disposal, aiming to achieve the goals of 'resource utilization, reduction, and harmlessness' for waste. DataBeyond has become a trusted partner for an increasing number of customers worldwide, offering a one-stop turnkey project from overall solution design, equipment manufacturing, on-site installation, to final complete delivery. With DataBeyond's intelligent sorting machine, we can separate various valuable materials from mixed waste, ultimately turning waste into treasure. If you are seeking a reliable partner to realize the resource utilization of municipal solid waste, DataBeyond's intelligent sorting technology and extensive industry experience can tailor a solution to meet your needs.



Mixed Household Waste



Construction and Demolition Waste



Waste Electrical and Electronic Equipment



Commercial Waste



Industrial Waste



Organic Waste



# Top Performance Of Product Combination for Recycling Manufacturer to Establish “Dark Factory”

## Mini & Medium AI Optical Sorter Series

- Applicable to bottle depot, MRFs for renewable resources, small bottle flake washing plants, and auxiliary line sorting of mixed materials in large bottle flake washing plants.
- The full series can be equipped with 256-band hyperspectral sensors.
- The full series comes standard with mainstream Taiwanese motors, 200-type metal rollers, ultra-high-definition true-color line scan cameras, and imported German light sources.
- Corrosion-resistant, high-temperature bullet spray valves, and retractable anti-rebound material capture bins.
- High-speed conveyor belt velocity 1.8m/s-3m/s.
- Identification accuracy ≥ 99.6%.
- IP65 protection rate for electronic control system.
- IP65 protection rate for valve bank system.



Data-driven optimization  
by DataBeyond Cloud Brain

## Large AI Optical Sorter Series

- Applicable to large bottle flake plants, mixed domestic waste treatment centers, construction and decoration waste treatment centers, and other scenarios.
- The full series can be equipped with 256-band hyperspectral sensors, metal sensors, fluorescence sensors, and laser sensors.
- The full series comes standard with German SEW motors, 350-type metal rollers, ultra-high-definition true-color line scan cameras. Stainless steel double-layer material capture bins, stainless steel high-pressure gas filtration systems, stainless steel belt cleaning devices. Imported German light sources, corrosion-resistant, high-temperature bullet spray valves.
- 3.5m/s-4.2m/s High-speed conveyor belt velocity.
- Identification accuracy ≥ 99.6%.
- IP65 protection rate for electronic control system.
- IP65 protection rate for valve bank system.



|                               |                  |                  |                                 |                  |                              |                      |                                |                  |                  |                   |
|-------------------------------|------------------|------------------|---------------------------------|------------------|------------------------------|----------------------|--------------------------------|------------------|------------------|-------------------|
| <b>103</b> 2 t/h              | <b>143</b> 3 t/h | <b>183</b> 4 t/h | <b>184</b> 4 t/h                | <b>204</b> 4 t/h | <b>184 Pro</b> 5 t/h         | <b>204 Pro</b> 6 t/h | <b>106</b> 4 t/h               | <b>146</b> 5 t/h | <b>206</b> 8 t/h | <b>286</b> 10 t/h |
| Mini AI Optical Sorter Series |                  |                  | Medium AI Optical Sorter Series |                  | Medium-Large Optical Sorters |                      | Large AI Optical Sorter Series |                  |                  |                   |

### 1. Model Explanation

- 184 Pro: Pro stands for the performance-enhanced version
- 4: indicates a conveyor length of 4 meters
- 18: indicates a conveyor width of 1.8 meters

- 2. Configurations are subject to change, please refer to the actual configuration.
- 3. The equipment capacity is related to the actual working conditions, please refer to the actual conditions.
- 4. The above feeding amount is taken as an example of PET bottles.



# AI Optical Sorter

**FASToAi®**

## Cost-effective solutions with enhanced value

The next-generation FASToAi® AI Optical Sorter delivers industry-leading recognition capabilities. All models support hyperspectral sensors and share the same cloud-based AI brain for continuously evolving intelligence. Enables simultaneous unloading/quality inspection/sorting - the optimal choice for bottle depots, MRFs, and small-scale bottle flakes washing plants.

- Ultra HD true-color line scan cameras with RGB tri-spectral imaging (significantly outperforms traditional area cameras)
- Industry's most comprehensive solid waste database (>99% recognition accuracy)
- German precision optical systems + 256-band hyperspectral sensors (identifies hundreds of materials, surpassing traditional NIR/multi-spectral technologies)
- Corrosion-resistant high-temperature bullet valves (30 billion cycle lifespan) for guaranteed stable ejection

| Model  | Mini AI Optical Sorter Series             |        |        | Medium AI Optical Sorter Series |        | Medium-Large Optical Sorters            |         |
|--|---|--------|--------|---------------------------------|--------|---|---------|
|  | 103                                       | 143    | 183    | 184                             | 204    | 184 Pro                                 | 204 Pro |
| Working Width                                | 1000mm                                    | 1400mm | 1800mm | 1800mm                          | 2000mm | 1800mm                                  | 2000mm  |
| Processing Volume (Taking PET as an Example) | 2t/h                                      | 3t/h   | 4t/h   | 4t/h                            | 5t/h   | 5t/h                                    | 6t/h    |
| Power  | 5KW                                       | 5KW    | 5KW    | 5KW                             | 5KW    | 5KW                                     | 5KW     |
| Weight                                       | 850kg                                     | 1200kg | 1500kg | 1600kg                          | 2000kg | 1600kg                                  | 2000kg  |
| Belt Conveyor Speed                          | 2.2m/s (Variable Frequency Speed Control) |        |        |                                 |        | 3m/s (Variable Frequency Speed Control) |         |
| Sorting Accuracy                             | ≥99.6%                                    |        |        |                                 |        | ≥99.6%                                  |         |
| Operating Voltage                            | Three-phase AC 380V/50Hz                  |        |        |                                 |        | Three-phase AC 380V/50Hz                |         |

\*The above data is for reference only; please refer to the actual equipment for accuracy. Sorting accuracy may vary due to differences in incoming materials. Configurable to meet varying electrical requirements in different countries

## Applications

- Mixed Municipal Waste Sorting
- PET Whole Bottle Sorting
- Waste Paper Sorting
- HDPE Whole Bottle Sorting
- Food Container Purification
- Recyclable Waste Sorting
- Construction & Demolition Waste Sorting
- Medical Waste Sorting





# AI Optical Sorter

## FASToAi®

### An AI Optical Sorter with "Human-like" Judgment Capabilities

All models in the series can be flexibly equipped with 256-band hyperspectral sensors, fluorescence sensors, metal sensors, laser sensors, and X-ray sensors. Every FASToAi shares the same cloud-based AI brain, becoming increasingly intelligent with use.

- German imported lighting systems, 8K ultra-HD true-color line scan cameras, 7nm ultra-fast AI processors, and 12-core/24-thread high-capacity processing
- 256-band hyperspectral sensors with precision optical grating technology - capable of identifying hundreds of materials, far surpassing traditional NIR and multi-spectral sensors
- Next-generation aerial imaging technology supports 4.2 m/s high-speed conveyor belts, increasing throughput by 20% compared to the previous generation
- Advantech ultra-high-performance independent controller with industrial-grade cooling, suitable for workshop temperatures up to 60°C
- Low-temperature resistant composite belts with low-temperature bearings, capable of operating in northern regions at -20°C

|  | Large-Scale Optical Sorter                    |        |        |        |
|--|---|--------|--------|--------|
| Model  | 106   | 146    | 206    | 286    |
| Working Width                                | 1000mm  | 1400mm | 2000mm | 2800mm |
| Processing Volume (Taking PET as an Example) | 4t/h  | 5t/h   | 8t/h   | 10t/h  |
| Power  | 6KW   | 8.5KW  | 11KW   | 12kw   |
| Weight                                       | 1600kg  | 2800kg | 4600kg | 5000kg |
| Belt Conveyor Speed                          | 3.5-4.2m/s (Variable Frequency Speed Control) |        |        |        |
| Sorting Accuracy                             | ≥99.6%  |        |        |        |
| Operating Voltage                            | Three-phase AC 380V/50Hz                      |        |        |        |

\*The above data is for reference only; please refer to the actual equipment for accuracy. Sorting accuracy may vary due to differences in incoming materials. Configurable to meet varying electrical requirements in different countries

## Applications

- Mixed Municipal Waste Sorting
- PET Whole Bottle Sorting
- Waste Paper Sorting
- HDPE Whole Bottle Sorting
- Food Container Purification
- Recyclable Waste Sorting
- Construction & Demolition Waste Sorting
- Medical Waste Sorting





### World's First AI-Hyperspectral Fusion Recognition System

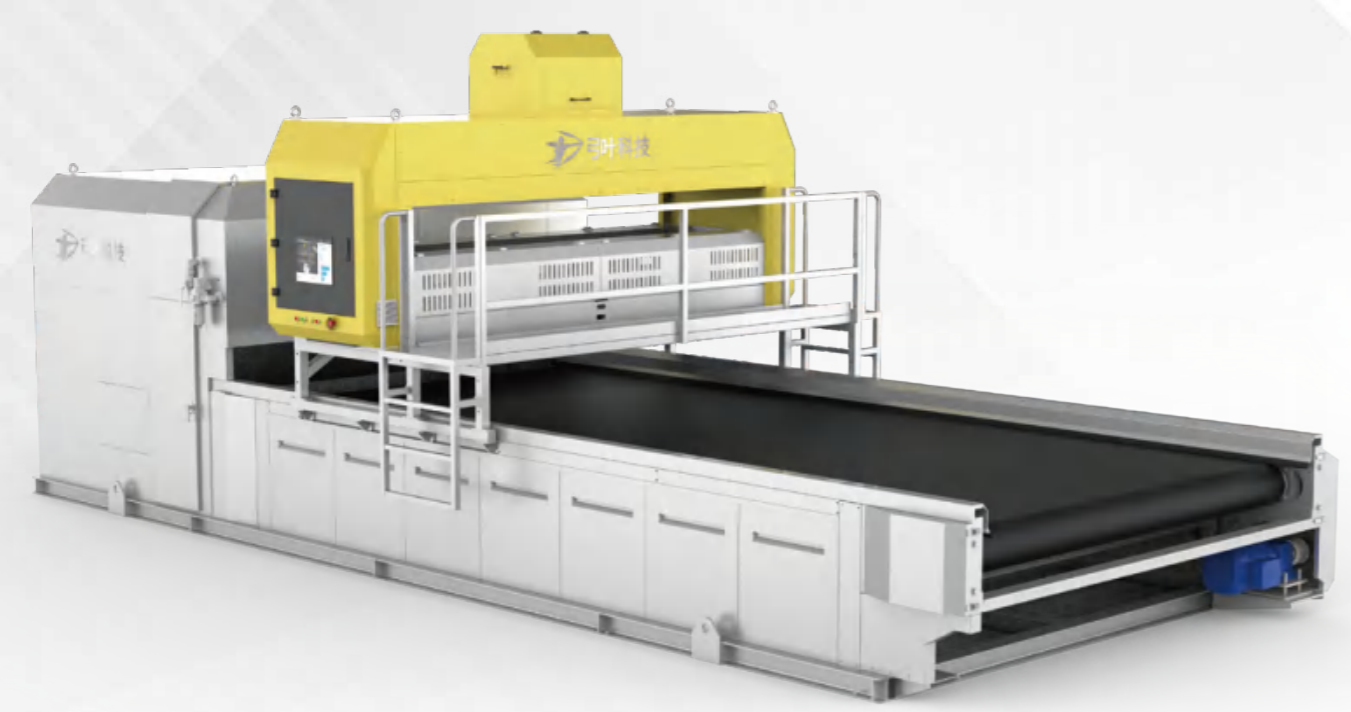
- Ultra HD true-color line scan cameras combined with 256-band hyperspectral sensors enable the sorting of hundreds of materials, including plastic bottles, plastic films, blended fabrics, waste paper, and shredded appliance residues.
- Accurate sorting of PP-labeled and PVC-labeled bottles - prevents PP-labeled bottles from entering the label removal machine, reducing label removal losses, energy costs, and bottle flake scratches.
- Precise identification of blended fabrics - distinguishes materials and proportions of polyester, nylon, spandex, wool, cotton, etc., enhancing the economic value of waste textiles and scraps.
- Accurate sorting of soft packaging and plastic films - including PP, PE, PVC, PET, PA, CPP, and BOPP films.

| Model             | 106  | 146    | 206    | 286    |
|-------------------|--|--------|--------|--------|
| Working Width     | 1000mm   | 1400mm | 2000mm | 2800mm |
| Power             | 7kw  | 9.5kw  | 13kw   | 14kw   |
| Weight            | 1600kg   | 2800kg | 4400kg | 5000kg |
| Sorting Accuracy  | ≥99.6%   |        |        |        |
| Operating Voltage | <b>Configurable to meet varying electrical requirements in different countries</b> |        |        |        |

\*The above data is for reference only; please refer to the actual equipment for accuracy. Sorting accuracy may vary due to differences in incoming materials.

### Applications

- PET
- PP container
- HDPE
- Low-Value Recyclables
- Municipal Solid Waste
- Material Recovery Facilities
- Paper Waste
- Textiles
- Medical Plastic Recycling
- Mixed Household Waste
- Construction and Demolition Waste
- Electronic Waste
- Commercial Waste
- Industrial Waste
- Organic Waste





**World's First AI-Fluorescence Fusion Recognition System**

● Equipped with both ultra HD true-color line scan cameras and fluorescence sensors, it not only removes fluorescent bottles, weak fluorescent bottles, and aged bottles but also eliminates impurities such as oil containers, adhesive residue bottles, label residue bottles, mixed-color bottles, heavily contaminated bottles, severely deformed bottles, bottles with internal foreign objects, and recycled bottles, ensuring yellow flake content remains within acceptable limits.

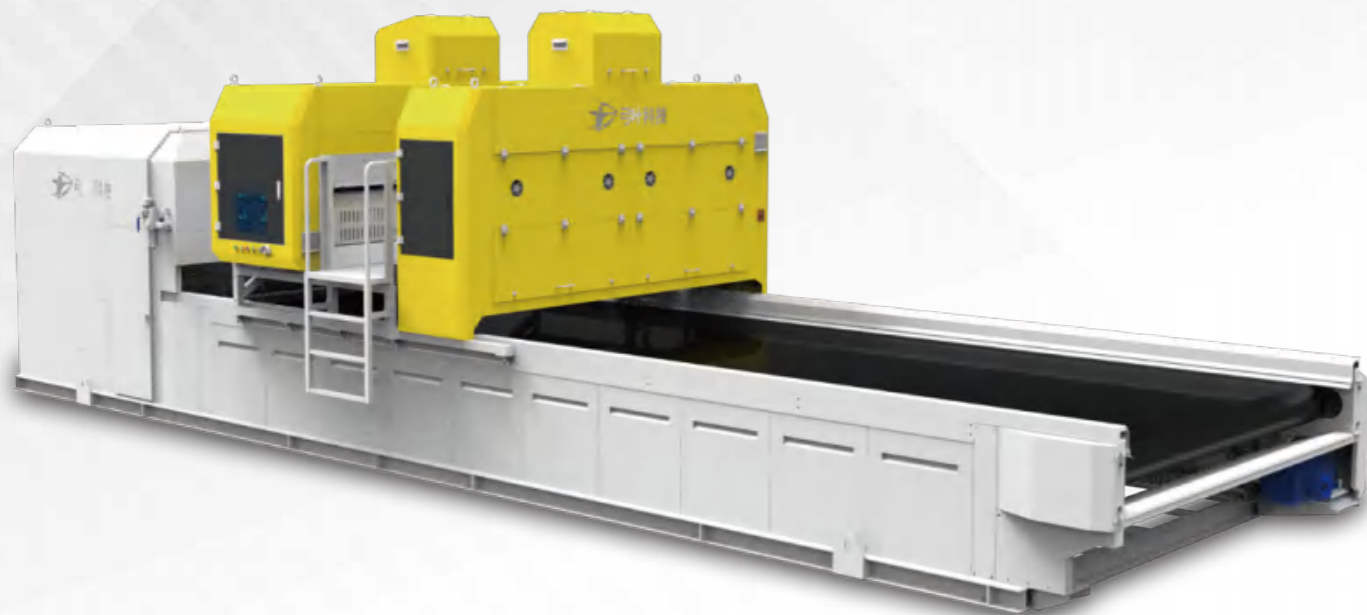
● FASToAi-FLUO® delivers exceptional impurity removal capabilities, serving as the final quality control step. It significantly reduces the need for manual inspection, helping you achieve a "dark factory" operation.

| Model             | 106  | 146    | 206    | 286    |
|-------------------|--|--------|--------|--------|
| Working Width     | 1000mm   | 1400mm | 2000mm | 2800mm |
| Power             | 6.5kw  | 9kw    | 12kw   | 13kw   |
| Weight            | 1600kg   | 2800kg | 4600kg | 5000kg |
| Sorting Accuracy  | ≥95%   |        |        |        |
| Operating Voltage | <b>Configurable to meet varying electrical requirements in different countries</b> |        |        |        |

\*The above data is for reference only; please refer to the actual equipment for accuracy. Sorting accuracy may vary due to differences in incoming materials.

**Applications**

- PET Bottle Sorting
- Bottle To Bottle Recycling
- Municipal Solid Waste
- Material Recovery Facilities





## AI-Color-Material-FLUO 4D Optical Sorter

「Laser Line Scanning Camera」 Combined With 「Hyperspectral Camera」 And 「Fluorescent Sensor」

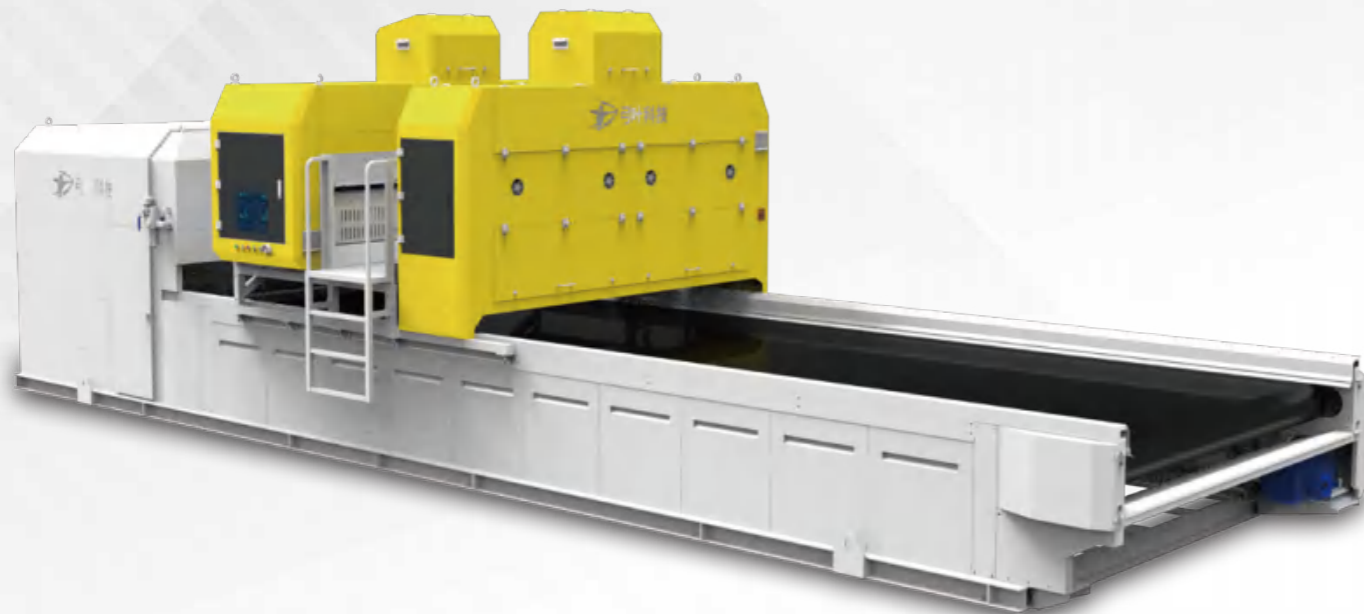
- Applied in the final process of whole-bottle sorting to improve product quality, identify ultra-fine characteristics that are imperceptible to the naked eye.
- Users can set miscellaneous materials by themselves, such as faintly fluorescent bottles, fluorescent bottles, oil bottles, aged bottles, trays, bottles of different material & various colors, soiled bottles, self-adhesive label bottles, bottles with label residue, etc.
- Achieves "machine replacing human" in the quality inspection process, reducing labor costs.
- Guard the final process of whole-bottle sorting, to establish "Dark Factory."

| Model             | 106  | 146    | 206    | 286    |
|-------------------|--|--------|--------|--------|
| Working Width     | 1000mm   | 1400mm | 2000mm | 2800mm |
| Power             | 7.5kw  | 10kw   | 14kw   | 15kw   |
| Weight            | 1600kg   | 2800kg | 4600kg | 5000kg |
| Sorting Accuracy  | ≥99.6%   |        |        |        |
| Operating Voltage | <b>Configurable to meet varying electrical requirements in different countries</b> |        |        |        |

\*The above data is for reference only; please refer to the actual equipment for accuracy. Sorting accuracy may vary due to differences in incoming materials.

## Applications

- High Quality Flakes Production
- Food Grade Bottle to Bottle Recycling





## Mixed plastic flakes sorter

# MIXAi · SPEC

## Expert in Crushing and Sorting Mixed Plastic

- Capable of sorting various materials without washing, with capacities of 2 to 8 tons per hour.
- Equipped with a 256-band hyperspectral sensor to sort PP, PE, PC, PVC, PET, PA, PMMA, ABS, and hundreds more.
- Suitable for automotive, construction, industrial, and household plastics, No matter how large or mixed the materials are.

## Applications

- PE Shredded Material
- Automotive Plastics
- Industrial Plastics
- PP Crushed Material
- Food Container Fragments
- Construction Plastics and more
- Bulky Household Waste
- Blister Sheet Crushed Material

## Application size

20mm-100mm

Automotive engineering plastics, construction engineering plastics, industrial plastics, general household plastics, etc.



Crushed, no cleaning required, directly sorts materials into 20mm-100mm sizes



One-click switching for sorting types  
Capable of individually sorting hundreds of materials such as PP, PE, PC, PVC, PET, PA, PMMA, ABS, and more





# FASToAI·SPEC®·AIR

## Innovative aerodynamic design

- Innovative aerodynamic design of the whole machine, specialized in lightweight materials sorting.
- Active airflow and high-speed conveyor belt synchronization, to ensure uniform, flat and stable material delivery
- The new type of catching bin can achieve the optimal flight path of lightweight materials, reducing floating and turbulence.
- Running speed up to 4.2m/s, 50% higher processing capacity.

## Ensuring high quality and high processing capacity in the sorting of paper and film

- Accurate identification of material, color and type with AI+SPEC hyperspectral recognition system
- Reduction of lightweight materials wrapping and dragging, minimizing material mis-selection and loss.

## Applications

Milk flexible packaging (food-grade), edible oil flexible packaging (food-grade), aluminum-plastic composite flexible packaging (can be sorted by brand), other plastic bags, plastic film, industrial waste, construction and demolition waste , wrapping film, bags, etc. in mixed household waste.

Application size: 50mm-500mm

Conveyor belt velocity: 4.2m/s





# PICKING-AI®

The AI-powered high-speed sorting robot PICKING-AI® can simultaneously sort various materials. It offers the option to choose suction or grasp two types of fixtures.

In addition, artificial intelligence embedded in systems also enables seamless analysis of sorted products, enable the digitization and visualization of the entire sorting process, making the future plants even smarter. The DataBeyond AI robot and AI optical sorter are excellent product combination.

- New Generation AI identification system
- New Generation FLYinVision™
- Smart Collaboration of 'hands + eyes + brain'
- Over 99% Sorting Accuracy

## Applications

- Recycling Resource Sorting
- Municipal Solid Waste Sorting
- Food Sorting



| Model                  | PICKING-Ai T1   | PICKING-Ai T2   |
|------------------------|---|-----------------|
| Ejection method        | Suction   | Clamping        |
| Maximum sorting range  | diameter 1600mm   | diameter 1600mm |
| Maximum Sorting Weight | 0.5kg   | 2kg             |
| Power                  | 6kw   | 8kw             |
| Sorting Accuracy       | ≥99%  |                 |
| Working Voltage        | Configurable to meet varying electrical requirements in different countries |                 |

\*The above data is for reference only; please refer to the actual equipment for accuracy. Sorting accuracy may vary due to differences in incoming materials.

# PICKING-EASY®

PICKING-EASY® is an AI heavy-duty sorting robot arm by DataBeyond, autonomously identifies and removes large-sized material, such as wood, plastic, woven bags, fabrics, foam, metal, shoes, etc. effectively reducing manual labor intensity and achieving optimal performance when integrated with DataBeyond optical sorter.



- Heavy-duty and Long-Travel Anti-collision Robot.
- Seamless analysis of sorted products, enable the digitization and visualization of the entire sorting process, making the future plants even smarter.

- Over 99% Sorting Accuracy

## Applications

- Construction and Demolition Waste Sorting
- Bulk Waste Sorting

| Model                  | PICKING-EASY S3   | PICKING-EASY S2 | PICKING-EASY S1 |
|------------------------|---|-----------------|-----------------|
| Number of Robots       | One-to-one  | One-to-one      | One-to-one      |
| Maximum sorting Range  | 2000mm×2000mm   | 2000mm×2000mm   | 2000mm×2000mm   |
| Maximum Sorting Weight | 5kg   | 10kg            | 20kg            |
| Power                  | 8kw   | 14kw            | 18kw            |
| Sorting Accuracy       | ≥99%  |                 |                 |
| Working Voltage        | Configurable to meet varying electrical requirements in different countries |                 |                 |

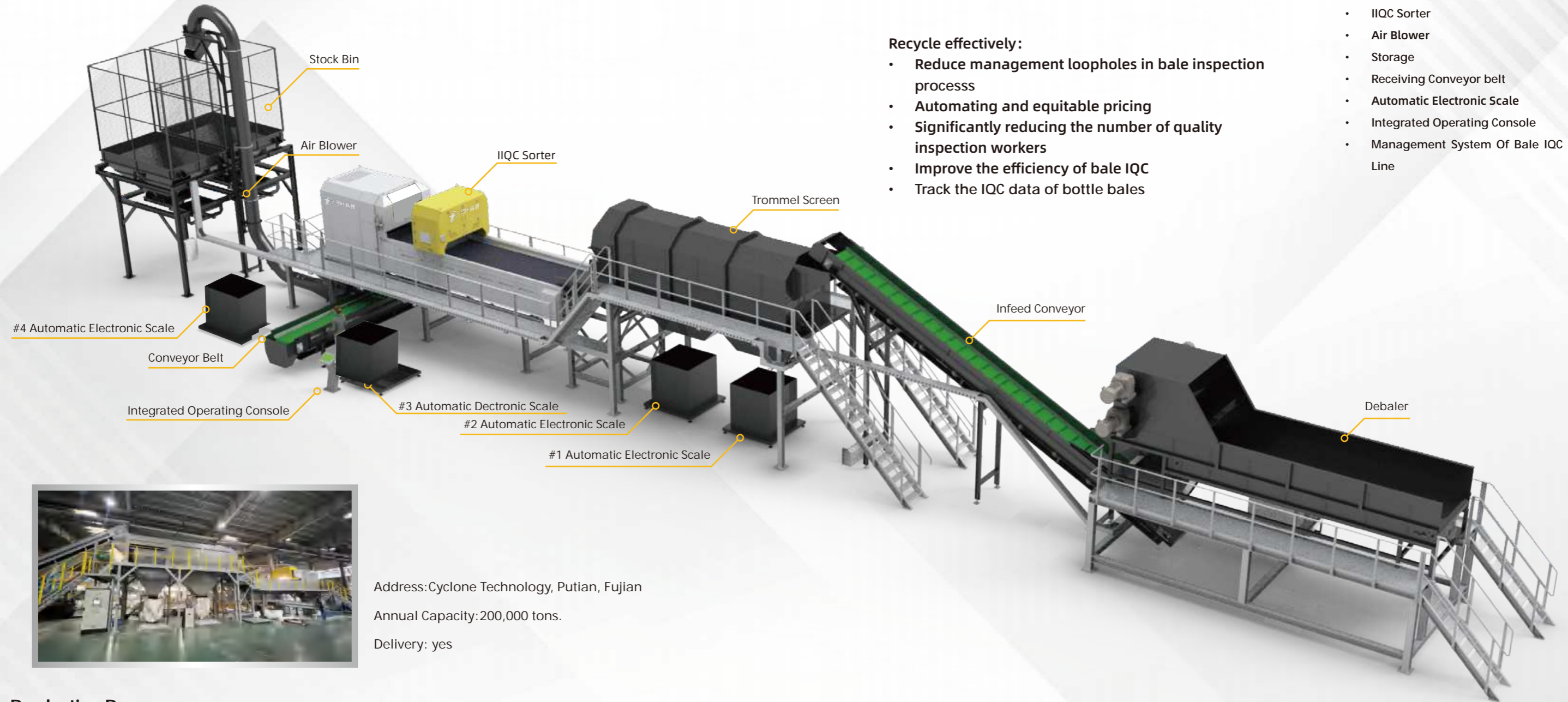
\*One-to-one means one central processing unit (CPU) controls one robot; it can be designed as one-to-two, where one CPU simultaneously controls two robots.

\*The above data is for reference only; please refer to the actual equipment for accuracy. Sorting accuracy may vary due to differences in incoming materials.





# IQC Line Of Plastic Bales



Address: Cyclone Technology, Putian, Fujian  
 Annual Capacity: 200,000 tons.  
 Delivery: yes

## Highlight :

Automated detection on rigid plastic bottle bales, including PET and PE, analyzing the weight proportions of various plastic bottles and miscellaneous materials.

## Recycle effectively:

- Reduce management loopholes in bale inspection processs
- Automating and equitable pricing
- Significantly reducing the number of quality inspection workers
- Improve the efficiency of bale IQC
- Track the IQC data of bottle bales

## System list :

- Debaler
- Infeed Conveyor
- Trommel Screen
- Vibration Feeder
- IIQC Sorter
- Air Blower
- Storage
- Receiving Conveyor belt
- Automatic Electronic Scale
- Integrated Operating Console
- Management System Of Bale IQC Line

## Production Process:



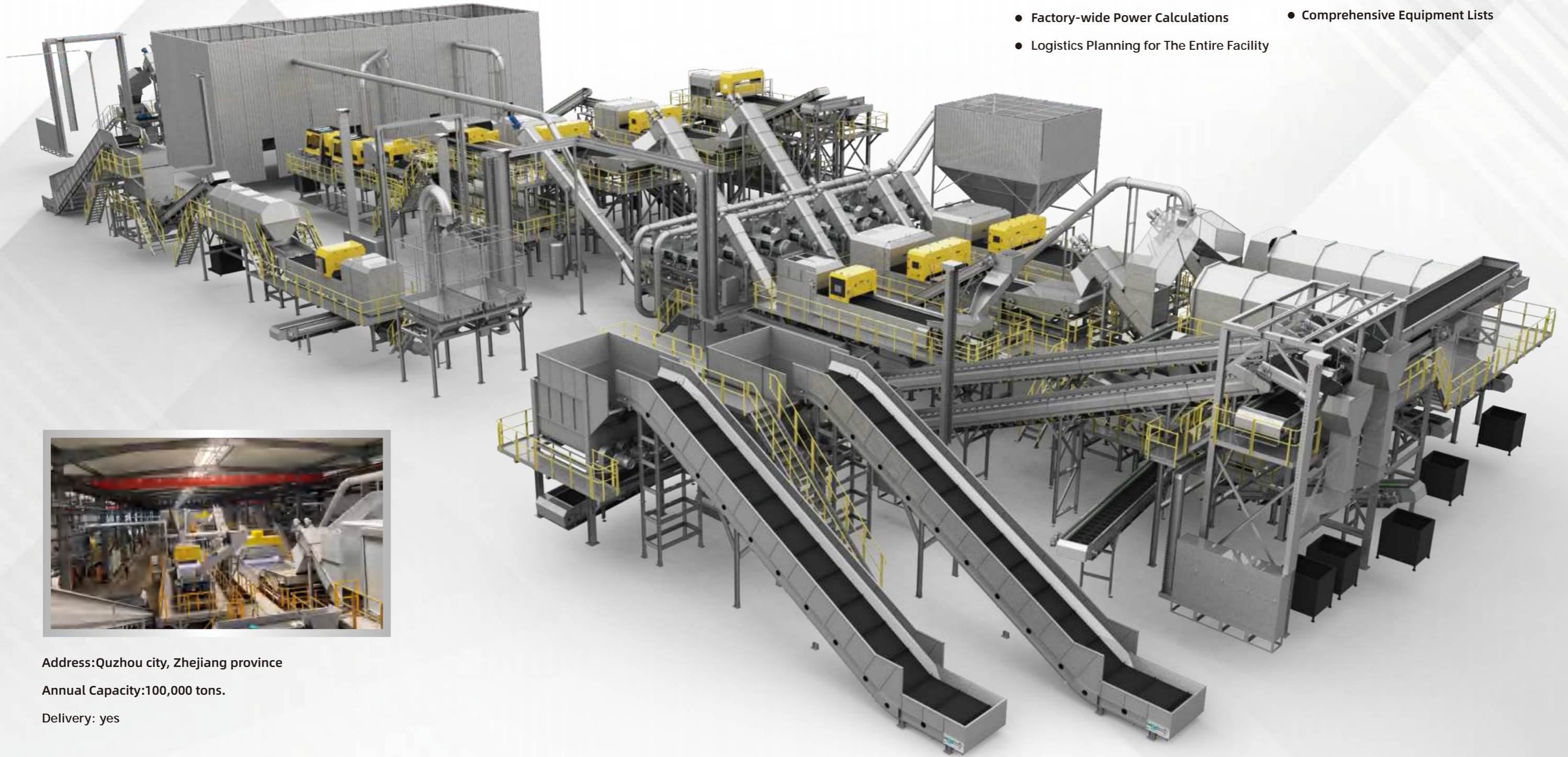


# Overall Solution Design and Construction

## Zhejiang Quzhou rPET “ Dark Factory”

We can offer you expert advice and provide the most suitable solutions:

- Complete Factory Process Diagrams
- Overall Equipment Layout Plans
- Factory-wide Power Calculations
- Comprehensive Equipment Lists
- Logistics Planning for The Entire Facility



Address: Quzhou city, Zhejiang province

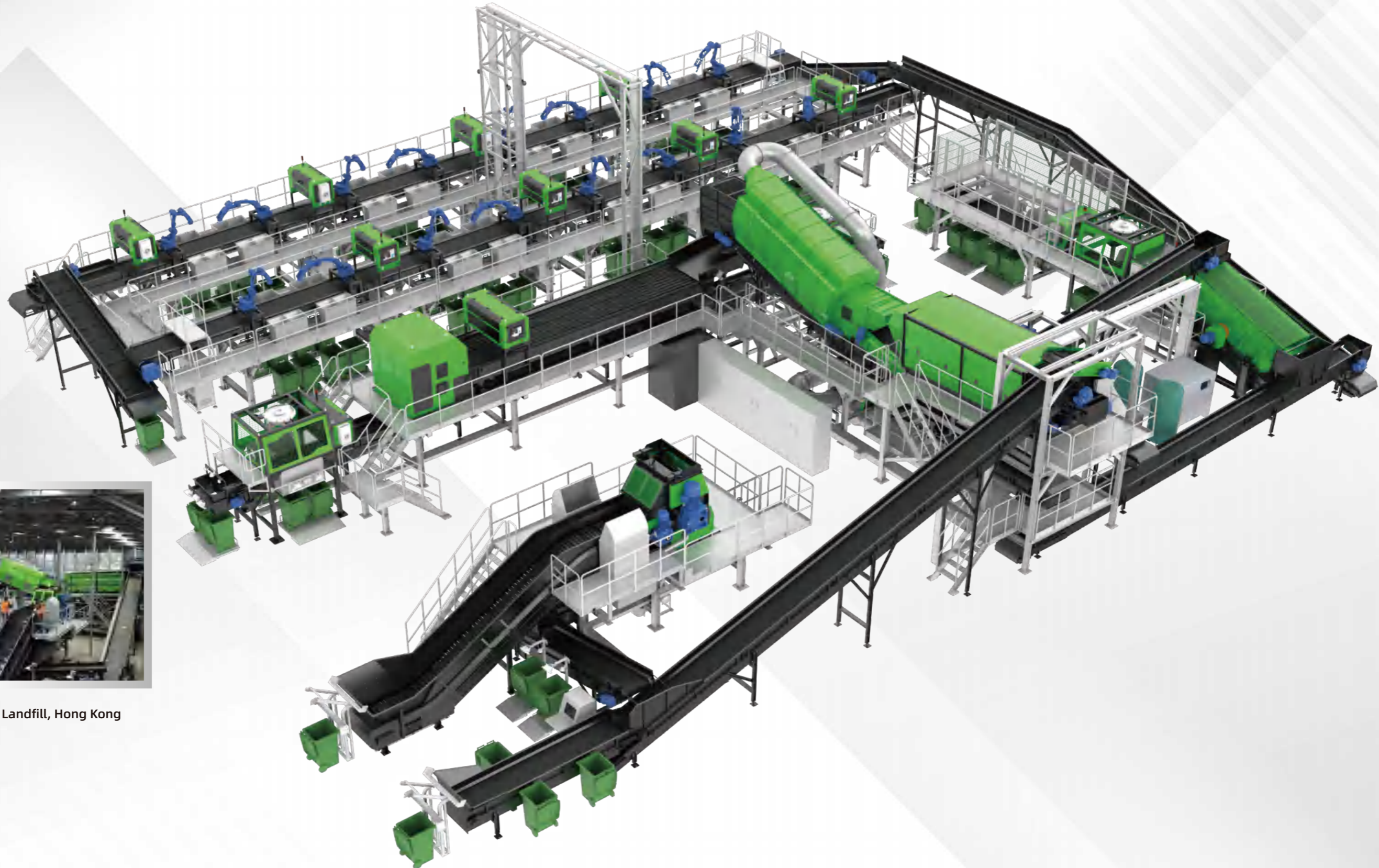
Annual Capacity: 100,000 tons.

Delivery: yes



# Overall Solution Design and Construction

## MSW Sorting Center for the HongKong Environmental Protection Department



Address: New Western Boundary Landfill, Hong Kong

Unit: HKEPD

Delivery: yes



# Overall Solution Design and Construction

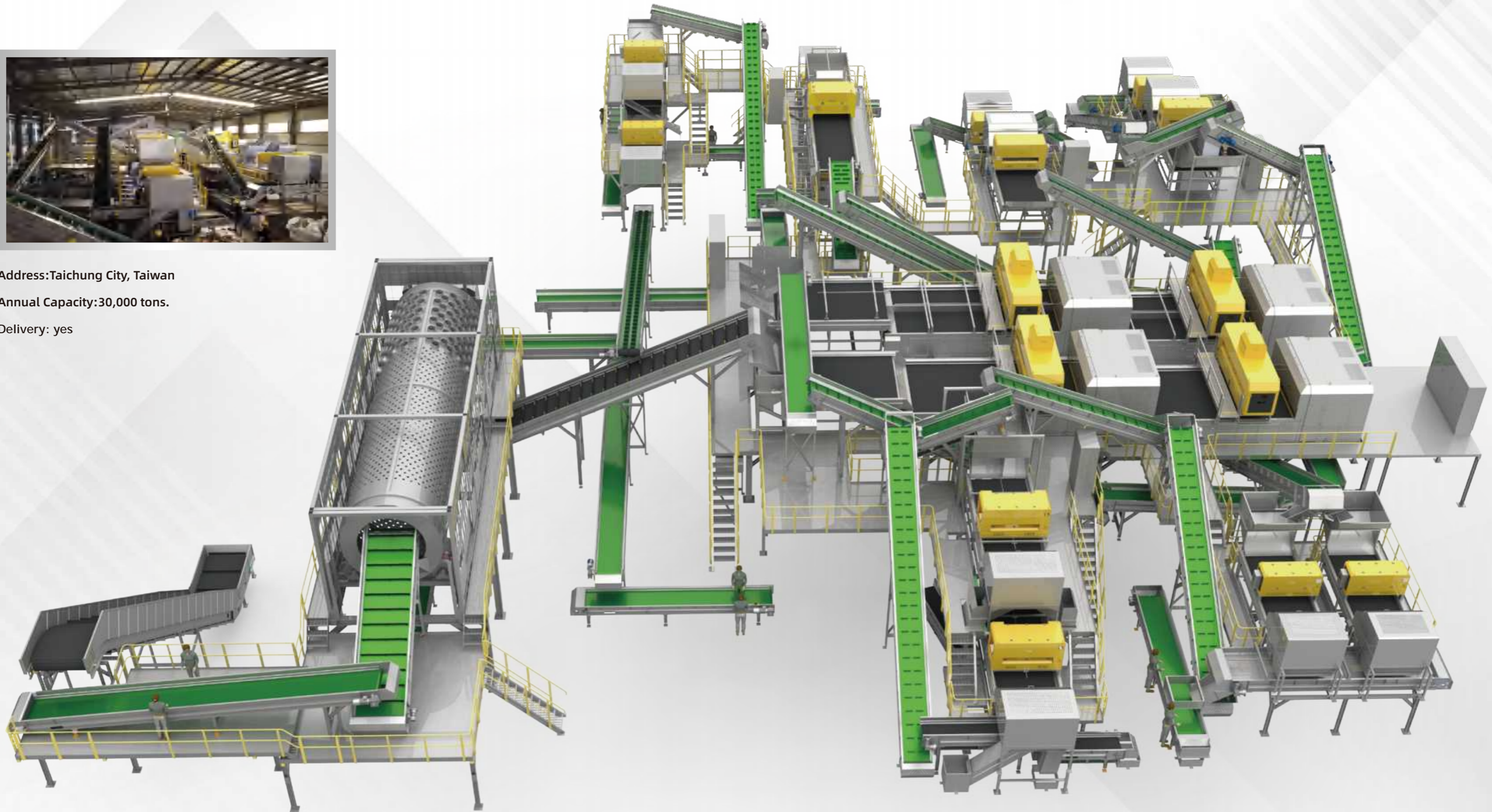
Fully Automated Digital sorting line for Mixed Plastic in Taiwan, China



Address: Taichung City, Taiwan

Annual Capacity: 30,000 tons.

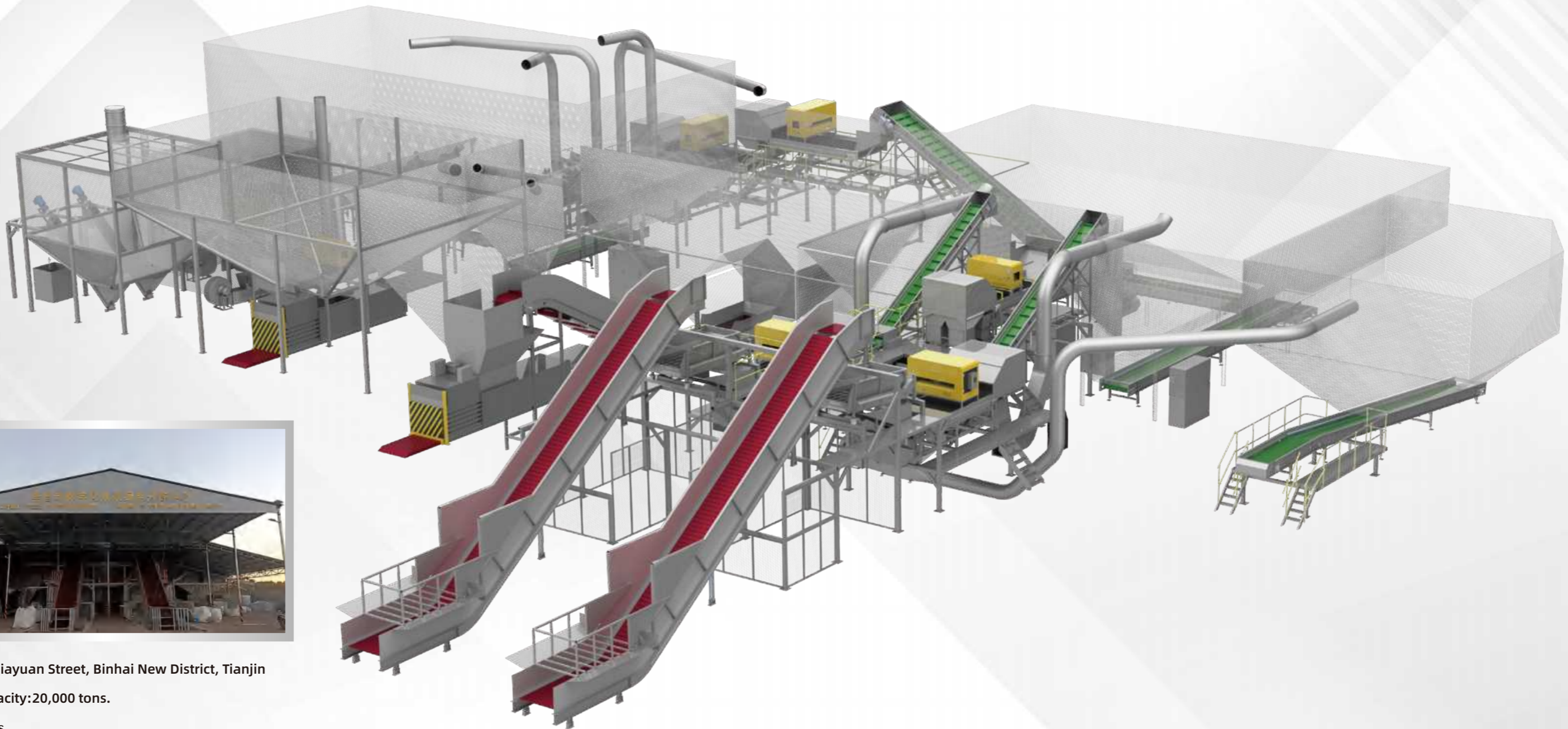
Delivery: yes





# **Overall Solution Design and Construction**

Fully Automated Digital sorting line for MRF, Tianjin, China



Address: Huijiayuan Street, Binhai New District, Tianjin

Annual Capacity: 20,000 tons.

Delivery: yes



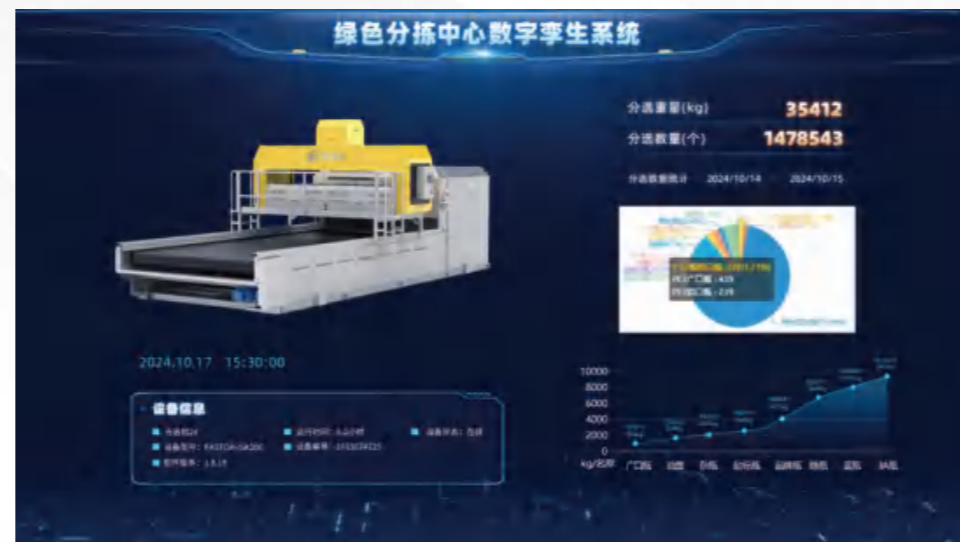
# MRF Digital Display Platform

## Digital Twin System

The digital twin system, comprising physical and digital spaces with virtual-physical interactions, greatly enhances the automation and control of MRF, covering weighing, unloading, sorting, and packing. It allows comprehensive monitoring of production and equipment performance to ensure product quality.

## Intelligent Settlement System

The system includes smart weighing, impurity deduction, and settlement features. It can trace delivery vehicle details, driver information, recycling station locations, waste types, weights, delivery frequency, and rankings. This system integrates with ERP systems for seamless invoicing and financial confirmation.





# MES Of Plastic Flakes Washing Plant

Eliminate Management Loopholes to Ensure Leading-edge Performance

Incoming materials management

QC management

Sorting management

Bottle Flakes  
Washing  
management

Shipping  
management

## Functions of MES

- Historical data query
- Production data & schedule progress visualization
- System alarm and troubleshooting
- Real-time monitoring of material process
- Data display on Web and phone App end
- Seamless connection between MES and ERP system

## Applications





# Test Center

## Invest in Equipment with more Confidence

Before investing in equipment, be sure to find the sorting solution that best suits your factory. DataBeyond Dongguan Testing Center has a full range of intelligent sorting equipment, including optical sorters with various sorting functions, intelligent sorting robots, and other separators. To provide you a visual understanding of the sorting capabilities of our machines, we have integrated these high-end intelligent equipment into a complete production line.

Together with our material experts and engineers, we help you find the best solution for your material recovery and sorting tasks. You are also welcome to visit our testing center and participate in the material testing process with us.

We provide you complete picture of DataBeyond's intelligent sorting equipment, covering processing capacity, sorting accuracy, reject rate, one-click material switching, quick setting of sorting recipes, and more. Based on this testing data, we will tailor a sorting solution that best suits your factory.

Our customer-focused testing services are free of charge. By using DataBeyond's material testing services, you can reduce the risks of investing in equipment, validate the sorting process, and ensure that the equipment you invest in is the best choice for your needs.

Due to diverse classification requirements from our clients, DataBeyond's Testing Center is the only facility in China that integrates various advanced sorting equipment, including AI optical sorters, AI hyperspectral optical sorters, whole-bottle fluorescence aging machines, AI material color fluorescence 4D optical sorters, and AI sorting robots. This comprehensive testing center is designed to offer personalized solutions tailored to meet your needs.

If you are unable to visit the testing center, we can conduct material testing according to your requirements and provide you with detailed test reports and complete testing videos.







# DataBeyond Technical Service Centers

## South China Technical Service Center

Address: No. 8, Shishui Street, Jiujiang, Changping Town, Dongguan City, Guangdong Province  
Phone: +86 18098283080

## East China Technical Service Center

Address: Yunqi Town, Xihu District, Hangzhou City, Zhejiang Province (Next to the Chinese Academy of Sciences)  
Phone: +86 18928243795

## Yunnan-Guizhou-Sichuan-Chongqing Technical Service Center

Address: No. 122, Xijun Middle Road, Longquanyi District, Chengdu City, Sichuan Province  
Phone: +86 18944738067

## Beijing-Tianjin-Hebei Technical Service Center

Address: Hujiayuan Subdistrict, Binhai New Area, Tianjin  
Phone: +86 18002821758

## Northeast & Northwest China Technical Service Center

Address: Cheng Street, Sujiatun District, Shenyang City, Liaoning Province  
Phone: +86 18024428078

## Taiwan Technical Service Center

Address: Tanzi District, Taichung City, Taiwan Province  
Phone: +886 972-351189

## Southeast Asia Technical Service Center

Address: Simpang Empat, 06650 Alor Setar, Kedah Darul Aman, Malaysia  
Phone: +60 12-5873293

## Japan Technical Service Center

Address: Saitama Prefecture, Japan  
Email: daniellai@atabeyond.cn

## Russia Technical Service Center

Address: Moscow, 107045, Russian Federation  
Email: likuanu@atabeyond.cn