AIRECO

We provide a next-generation AI-driven recycling system, transforming automated recycling with cutting-edge technology.

Sort in detail, more valuable they'll

www.aireco.tw

AIRECO = AI + RECYCLE + ECO SYSTEM

Continuing to bestow value upon every piece of waste, we reintroduce each recyclable item back into the cycle.

AIRECO CO., LTD.   T   +886-6-303-2743   E   team@aireco.tw

AIRECO revolutionizes the concept of recycling, heralding the advent of the AI era. Introducing the intelligent recycling solution—RECO.

Real-time remote monitoring reduces inspection time at the factory.	**Guaranteed compliance with government regulations.**	**Efficient operational flow.**	**Significantly reduced occupational safety risks.**	**Swift deployment reduces downtime.**
AIRECO provides continuous online imaging, using AI to detect sorting anomalies and send alerts to managers, allowing for remote monitoring of production line operations.	AIRECO using AI to recognize each object category on the recycling production line, instantly calculating the impurity rate. This allows managers to adjust work efficiency in real-time and generate reports to review recycling quality.	By designing and planning the plant layout, we precisely and effectively utilize limited space. Conveyors enable the step-by-step sorting of waste into resources.	Replacing manual labor with robotic arms reduces direct contact between workers and potentially dangerous waste, like sharp objects or pesticide containers. This enables workers to engage in lower-risk tasks and create more value.	RECO's full-automated plant offers quick deployment services, reducing installation time and minimizing losses caused by equipment upgrades.

01 RECO Cognita
Smart Waste Management

Equipped with intelligent analysis and management functions, this platform can comprehensively monitor and coordinate recycling plant operations. It acts like the plant's smart brain, achieving precise control and optimized efficiency through the collection, analysis, and processing of various data.

· **Gathering data supports objective decision-making.**
  Extract useful information, leveraging data-driven methods to enhance competitiveness.

· **Tailored to focus on crucial information.**
  A management system tailored to the specific characteristics and current conditions of the factory.

· **Easily accessible via the web without restrictions**
  It offers a high-performance web application for cross-platform and mobile device use.

· **Integrating new and old equipment to maximize utility**
  Various IoT and edge computing devices continuously monitor factory equipment, providing insight into actual operational status.

02 RECO Vista
AI Image Recognition

Real-time identification and classification of various items on the recycling production line, controlling sorting effectiveness. This equipment acts like the plant's keen eyes, ensuring compliance with regulations and providing real-time operational status and quality reports through AI technology and image recognition.

· **Actual images of recycled materials, properly labeled.**
  Executing complex multi-object sorting tasks in real-time, ensuring compliance with local recycling regulations.

· **Continuous monitoring of sorting quality.**
  Tracking and recording the quantity of each type of object to ensure sorting results meet the targets.

· **Continuously updated to adapt to the rapidly changing market.**
  Continuously update image datasets to keep up with the ongoing production of new products.

· **Simple deployment reduces energy consumption.**
  Considerate of the installation environment's design, we opt for low-power edge computing devices.

03 RECO Delta
Automatic Sorting Machine

This automated sorting robotic arm ushers in the new possibilities of a future with no human operators. Relying on AI-driven innovative technology, it precisely sorts waste, enhances recycling efficiency, and collects more valuable materials.

· **Flexibly execute and tackle various recycling challenges**
  Not only can it adeptly perform sorting tasks, but it can also handle diverse recycling scenarios.

· **Swift and precise, enhancing recycling efficiency**
  Capable of quickly and accurately selecting target items, making your recycling process more efficient.

· **Continuous operation, reducing labor costs**
  Capable of stable and continuous automatic sorting over long periods, alleviating labor cost burdens.

· **Simple operation, reducing maintenance costs**
  Easy to operate and user-friendly, allowing you to enjoy advanced automatic sorting technology more economically and efficiently.