

Revolutionizing Waste Sorting with Unrivalled Accuracy

AI Engine Specialized in Waste Sorting

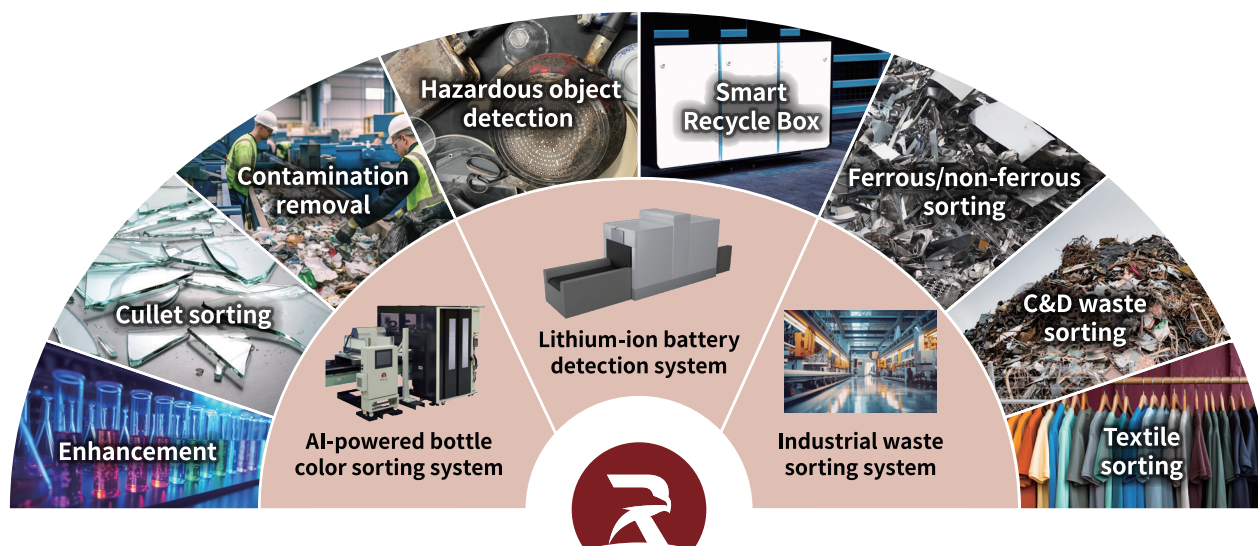
Raptor VISION



Turning Waste into Resources for a More Sustainable World

We developed **"Raptor VISION", an AI engine specialized in waste sorting**. Designed to automate labor-intensive sorting processes, it improves working conditions while accelerating the recycling cycle through faster and more efficient waste sorting.

By expanding its applications to industrial waste management and serving as a gateway to recycling, we aim to contribute to a more sustainable society.



Optical design

Image processing

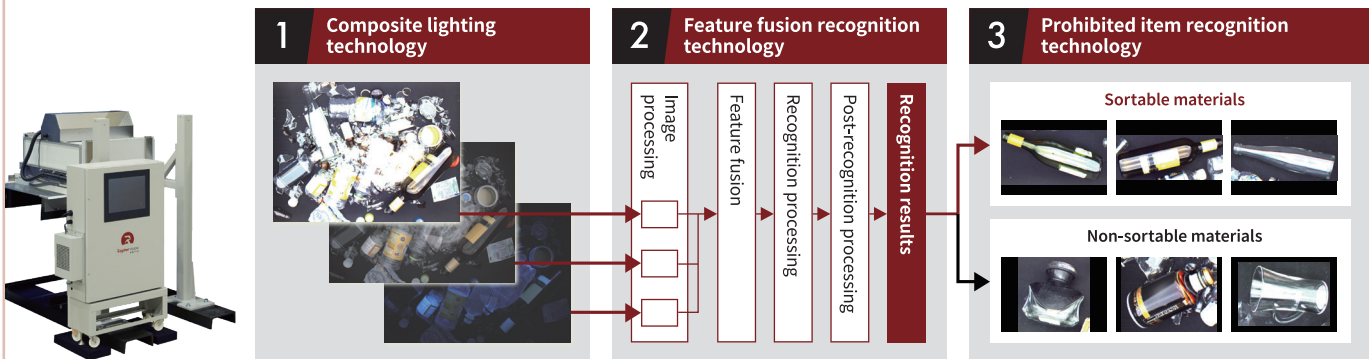
AI

Applying world-leading* scanner technology to
solve challenges in the industrial waste sector

Raptor VISION BOTTLE

AI Engine for Bottle Color Sorting

Raptor VISION BOTTLE is a vision system equipped with an AI engine that identifies bottles by color. It combines an imaging unit based on PFU's optical and image recognition technologies with proprietary algorithms. As bottles are conveyed on a conveyor belt, the system captures images with cameras and accurately identifies the color, type, and position of each bottle. It then sends the picking coordinates to the robot for automated sorting.

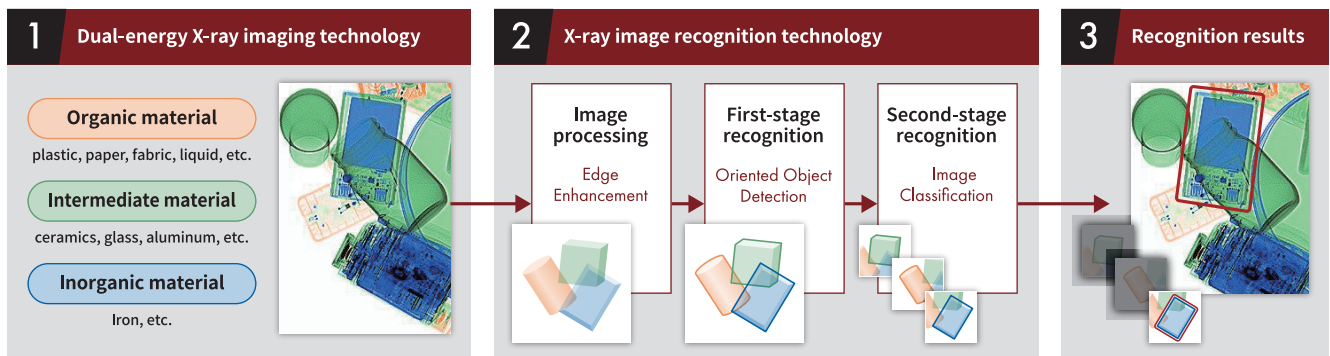


Raptor VISION BATTERY

AI Engine for Hazardous Object Detection

Raptor VISION BATTERY uses a unique algorithm to detect lithium-ion batteries and other hazardous items mixed in municipal and industrial waste.

Waste conveyed on a belt conveyor at a waste treatment facility is scanned using an X-ray imaging system. The transmitted X-ray images are then analyzed by an AI engine powered by PFU's proprietary image recognition algorithm, enabling highly accurate detection of the presence of lithium-ion batteries.



* Document scanner segment targeted. Japan and North America data compiled by Keypoint Intelligence (InfoTrends) for 2022. Market share total of six segments excluding Mobile/Micro, mainly for document scanners with speeds of 8 ppm or higher. European data based on infoSource (2022) for the Western European region (including Turkey and Greece).

Contact Information | PFU Limited RAPTOR Business Development Dept.

For product inquiries, please access the inquiry form via the QR code on the right and submit your request.

