

ZENROBOTICS[®]
A TEREX BRAND



The New OmniPicker

High precision & speed
Powered by Industrial AI
Compact Plug-and-Play

terex.com/zenrobotics

Overview

Recover More. Waste Less.

The global standard in AI-driven waste recovery.



The OmniPicker is an intelligent, high-speed robust sorting machine that secures your output quality. Advanced material analytics with powerful mechanical muscle. Protect your process from costly hazards. With Omnipicker you gain a reliable, long-term partner with a worldwide service network.

- **Built for Extreme:** IP67-rated, dust-proof, and water-resistant hardware.
- **Power & Speed*:** Up to 60 picks per minute and 15 kg lifting capacity.
- **Precision Picking*:** Up to 99,9% purity & yield.
- **Throughput*:** Up to 100 tons per hour.
- **Deep Intelligence:** ZenVision analytics and 7-day playback.
- **Modular:** Fits different conveyor widths & layouts.

OmniPicker

Material Analytics & Digital Tools

More than a sorting robot, the OmniPicker provides deep operational intelligence through integrated digital waste insights, high resolution picking playback, and predictive diagnostics.

- **ZenVision Digital Analytics:** Transform raw sensor data into real-time KPIs, including mass, object counts, and financial value.
- **Live Purity Analytics:** Automated verification of your output quality. Download boardroom-ready CSV/PDF reports with a single click.
- **7-Day Forensic Playback:** Stop guessing and start knowing. Replay, zoom, and inspect any object from the last week to verify purity or investigate downtime.
- **Active Recognition Refinement:** Master your facility's unique material streams. Manually tag new objects or correct recognition outcomes directly in the interface.
- **Predictive Diagnostics:** Early warning systems for mechanical conditions—such as gripper pressure or friction increases—before they cause a breakdown.



Key Benefits

- ✓ Unmanned 24/7 safe sorting.
- ✓ Multiple high-quality recyclables.
- ✓ Minimal pre-processing.
- ✓ Trainable and adjustable sorting.
- ✓ Online material composition analysis.
- ✓ Low operation and investment cost.

Sorting Tasks



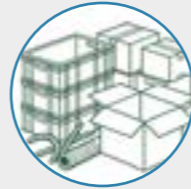
Scrap Metals

- Meatballs
- Copper Wires
- E40 Quality Control
- Ferrous/non-ferrous
- WEEE
- Tire Chips



Construction & Demolition (C&D)

- Wood (A-D)
- Inert materials (bricks/concrete)
- Metals
- Polymers



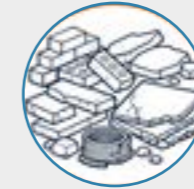
Commercial and Industrial (C&I)

- Rigid plastics
- OCC
- Mixed wood
- Scrap metals



Rigid Plastics

- PP
- PE
- PVC
- PET – Including complex black plastics



Mixed Inert

- Bricks
- Asphalt
- Gypsum
- Concrete
- Stones



MSW

- Bulky Waste
- Color-coded bag sorting

NEW



Hazardous & Specialized

- Asbestos detection
- Incineration Bottom Ash (IBA) recovery



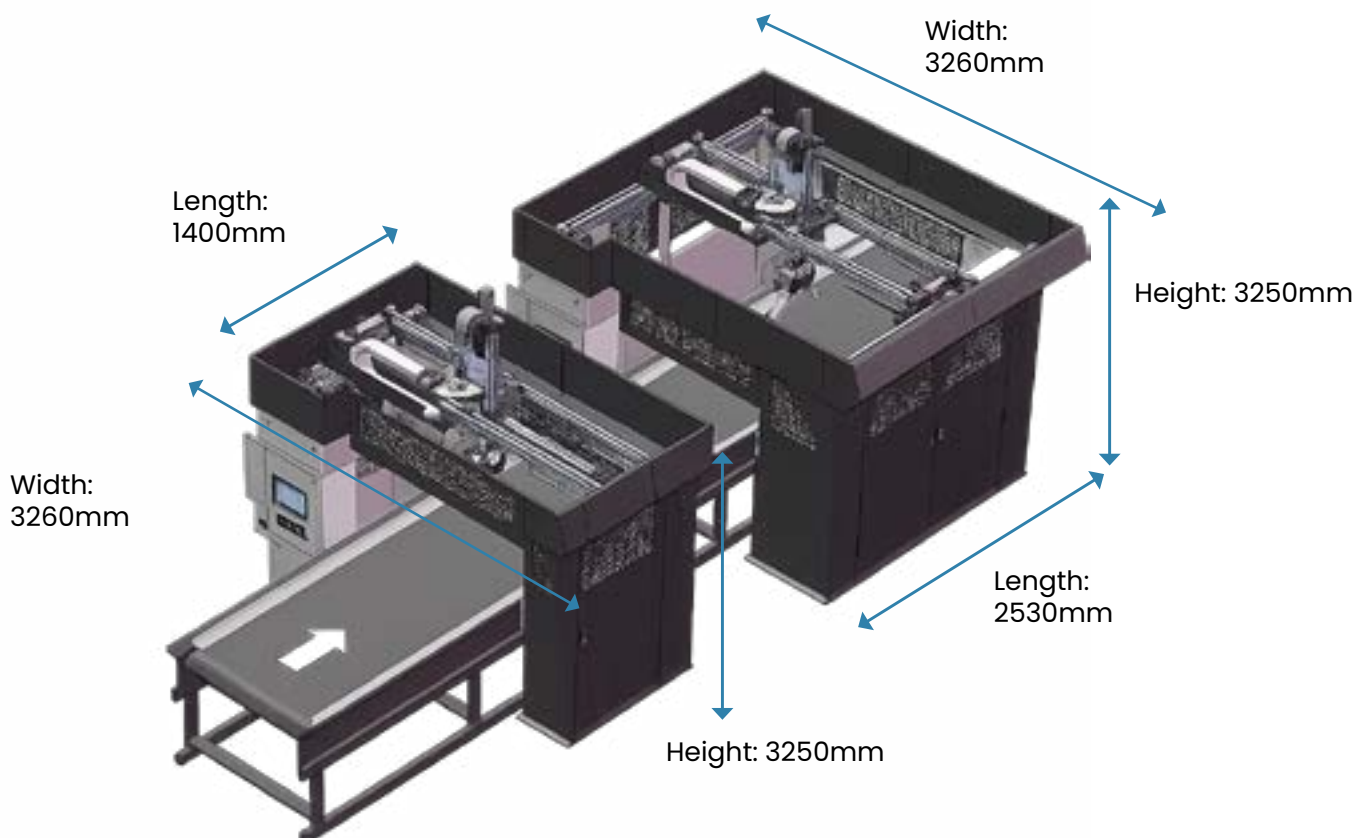
Train your own: The robot can be trained to sort any waste you need - fully adaptable to your needs.

Technical Specification

Robot Arms	As many as required		
ZenVision System	1 system (incl. processor+sensor) per robotic arm	Max. Object Size	1200mm x 400mm x 300mm
Gripper Type	Mechanical Gripper (model selected from catalogue depending on sorted material)	No. of Recognised Fractions	Unlimited
Max. Speed per Arm	3600 pph / 60 ppm*	Vision System	20MP High-Resolution RGB (Optimized for low-light/dim conditions)
Sorting Belt Speed	max 1 m/s	Air Consumption	Pressure of air supply: 7 bar (100 psi) 30 l/min (1 CFM)
Belt Width	Between 800mm - 1800mm	Installed Power (per 1 robot)	7 kW / 400VAC 3-phase
Discharge Chutes	Up to 2- 6 per Arm (1-3 per side)	Noise Level	< 85 dB(A)
Max. Object Weight	15 kg		
Robot Dimensions	Customisable to suit customer requirements		

*100% utilisation in ideal conditions. Actual picking speed depends on material feed.

Dimensions – Standard & Narrow



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