

ADS ECO – AI Sorting

AI Sorting is the first operational stage of the ADS ECO Eco-Industrial Complex. It combines Artificial Intelligence, Machine Vision, Robotics, IoT sensors and Data Analytics to identify, classify and separate waste materials with maximum efficiency and accuracy.



Purpose

- Maximize material recovery
- Reduce contamination
- Increase recycling efficiency
- Improve operational performance
- Generate high-quality recyclable materials

Key Technologies

- Artificial Intelligence (AI)
- Machine Vision Systems
- Robotic Sorting Arms
- Optical Sensors
- IoT Monitoring

- Data Analytics Platform

Smart Sorting Process

- Waste Reception & Inspection
- Pre-Sorting & Hazardous Material Removal
- AI Material Identification
- Robotic Sorting & Separation
- Quality Control Verification
- Baling & Storage

Material Streams

- Plastics
- Paper & Cardboard
- Metals
- Glass
- Textiles
- Wood
- Mixed Recyclables

Strategic Benefits

- Higher Recovery Rates
- Lower Operational Costs
- Reduced Landfill Disposal
- Improved ESG Performance
- Support for Circular Economy