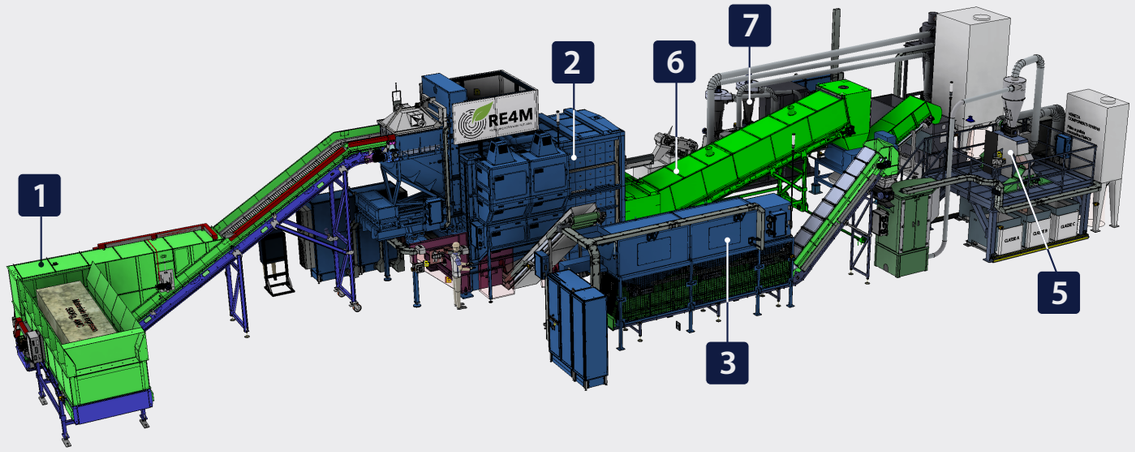
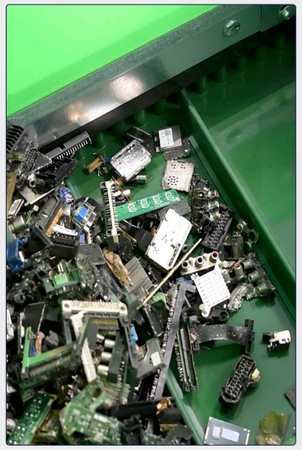
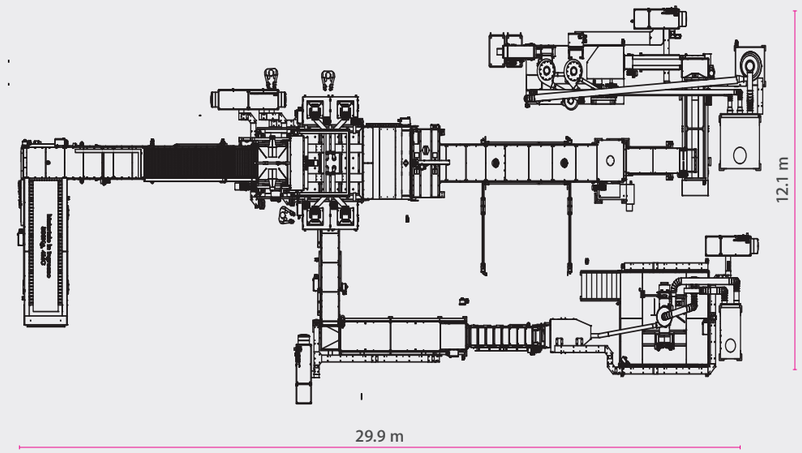
RE4M
RECYCLING FOR MANUFACTURING

Recycling plants for electronic waste

GREEN TECH | OSAI GROUP
AUTOMATION 4 RECYCLING







Input PCB type	Mod. 1 - **Boards** from PC\server and WEEE Cat. **R3 and R4**
Boards size	Minimum size: **100 x 60 x 10 mm** Maximum size: **600 x 600 x 20 mm**
Operators	**2 for monitoring and loading/unloading** the system on board the machine
Capacity	**2 tonnes per day** (2 shifts of 7 hours)
Cycle time	**15 minutes**
Autonomy working time	**2 hours** (about 500 kg of boards to be processed)
Yields Extraction (2 ton/day)	Components detached and shredded: **700 kg** PCBs processed and shredded: **1.200 kg** Process residue: **100 kg**
Output material	Mod. 2 - **Mixed components** and **Bare boards** Mod. 3 - **hredded components (size 1-5 mm) - 3 outputs per component type** Mod. 5 - **Shredded components** (size 1-5 mm) **3 outputs per component type + 1 reject (plastic)** Mod. 7 - Fraction of **copper, yellow metals, aluminum, ferrous metals**
Absorption	**190 kW** - peak power 210 kW
Dimensions	**29.9 x 9 x 12.1 m**

RE4M 2000
SUSTAINABLE SOLUTIONS FOR PCB DISMANTLING

Fully automated system for the valorisation of materials contained in the printed circuit boards of end-of-life electronic equipment, using a patented **thermo-mechanical process to remove components from printed circuit boards, followed by selection and separation,** also designed for the direct hydrometallurgical refining of precious metals such as gold, silver, copper and palladium.

PARTNERSHIP WITH SIEMENS

The collaboration between Siemens and Osai GreenTech is of great value to customers in terms of energy saving and optimisation, an important tool for monitoring the energy consumption of the modules that make up the system.

Energy Manager from Siemens offers two main advantages. On one hand, it enhances the value of the processed waste by integrating energy consumption data into the extraction of precious metals, and on the other hand, its continuous consumption monitoring allows for targeted maintenance whenever an anomaly is detected with respect to normal operation.

HIGHLIGHTS

- **Innovative, patented technology** for detaching components from the PCBs
- **Automated solution** for high processing volumes
- **Modular and scalable solution** depending on requirements and volumes
- Sustainable process with **low environmental impact** and reduced energy consumption
- **Process monitoring and traceability** through advanced digital technology
- **Energy consumption monitoring** through digital technology
- Reliable solution due to **sturdy design with high safety standards**

1		PCBs
2		Bare boards (min. 60 x 10 mm max. 600 x 600 mm)
2		Detached components **MIXED**
3		Selected components **LARGE size**
3		Selected components **MEDIUM size**
3		Selected components **SMALL size**
5		Components Shredded (1-5 mm)
7		Fraction of copper, yellow metals, aluminum
7		Ferrous metals

Osai GreenTech: the future, today.

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AUTOMATION 4 RECYCLING

30 YEARS OF INDUSTRIAL AUTOMATION AT THE SERVICE OF URBAN MINING

We are the technology partner, solution provider and system integrator of major national and international players engaged in the ecological transition and circular economy. We promote technological innovation and advanced industrial automation to the world of recycling, bringing efficiency, speed and reliability.

We provide the market with advanced robotics solutions for specific applications through the use of the most innovative technologies such as artificial intelligence for WEEE treatment processes. With Osai GreenTech automation becomes the vehicle for a new 'recycling era'.

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