

Solar Panel Recycling Plant

Solar panel processing line | Recycling line



Product description

The solar panel processing line recovers the valuable material fractions from end-of-life or damaged solar modules: glass, silicon wafers, aluminium frames, copper and silver. Processing is fully integrated, from frame removal through shredding and separation to the final fractions. The glass (~75% by weight) can be returned to glass manufacturing or used as a road construction aggregate.

Key technical features

Parameter	Value
Processable types	Monocrystalline and polycrystalline silicon; thin-film panels
Output 1	Glass (~75% by weight) – recyclable
Output 2	Silicon wafer – semiconductor raw material
Output 3	Aluminium frame
Output 4	Copper and silver fraction
Process	Frame removal → glass separation → laminate shredding → separation
EU compliance	WEEE Directive (2012/19/EU)
Supply voltage	380 V / 50 Hz

Applications

- Panel take-back obligations of solar plant operators and installers
- Building solar panel processing capacity for waste management companies
- Recovery of silicon and precious metals as secondary raw materials
- Compliance with the EU WEEE Directive requirements for photovoltaic modules