

CDM Eco-Unit® is a compact solution counting & melting post consumer scrap, designed for the green aluminium industry

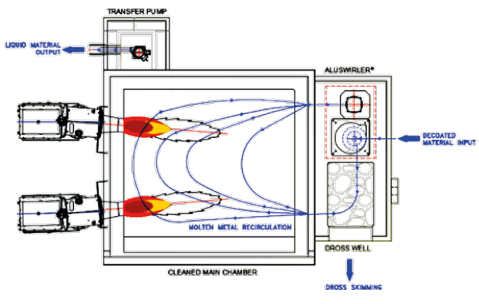
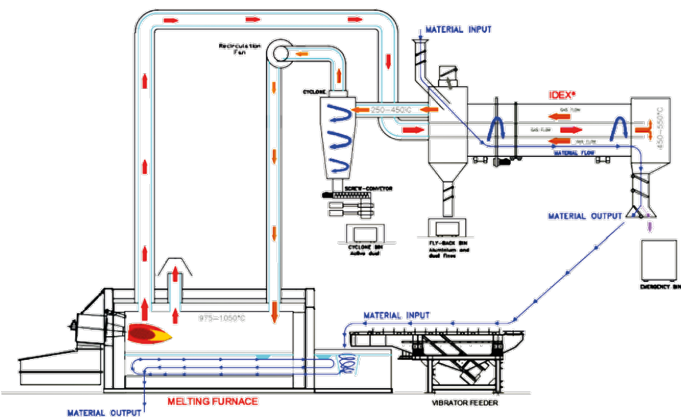
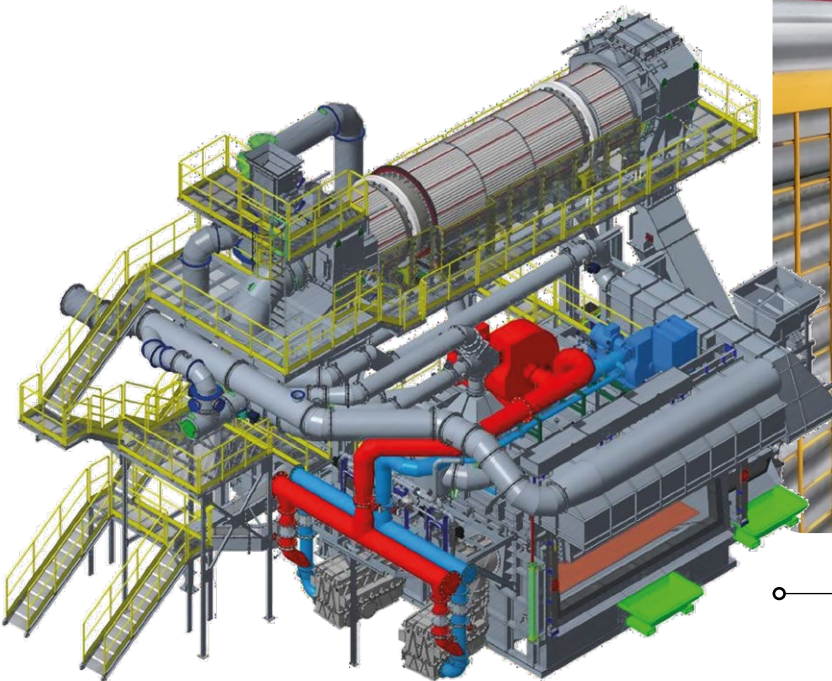


CDM Eco-Unit® is the best available technology when processing post-consumer or end of life scrap. The Combination of the Decoating and the Melting processes in one only machine guarantees the production of green aluminum with reduced machine footprint and highest metal efficiency.

Main features:

Process Monitoring	Metal Recovery	Maintenance	Environment
- Separated decorating & melting process. - Individual operation, easy adjustment of different parameters (scrap residence time, etc....).	- Fines collected in the decorating process, less dross generation. - Good contact between hot gases and scrap surface efficient decorating (continuous process). - Controlled scrap residence time inside the kiln, avoiding scrap oxidation. - Hot scrap fast submerging in the vortex system, avoiding metal oxidation.	Separated decorating and melting, easy maintenance routine.	Full incineration of pyrolytic gases, breaking the hydrocarbons into inert emissions.

CDM Eco-Unit® in operation



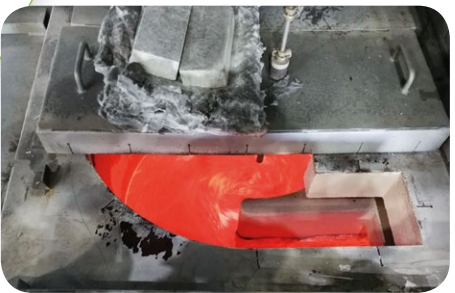
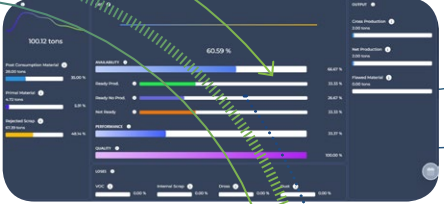
Material flow \
An efficient and compact solution

- The material will be charged continuously into the Rotary kiln which is controlled by the weighing system of the feeder installation at this point.
- The input scrap will be dried, decoated and preheated in the Rotary kiln, and the material will get out through a double damper exit located at the end of the kiln, filling into the vibratory feeder to the melting furnace vortex.
- The material will be then melted continuously by a submersion in the low turbulence ALUSWIRLER® vortex.

Gas flow \
A green solution

The gas flow process will circulate the pyrolytic gases generated inside the IDEX® system into the main chamber of the Melting furnace by the actions of a controlled flow recirculation fan.

Once the gases have been fired and incinerated, they can be reused into the IDEX® system, generating the supply of energy potentially required to sustain the thermal pyrolytic process.



Benefits:

- Highest metal efficiency, only 100% clean scrap is melted, less scrap is needed.
- Excellent decoating of aluminum scraps, 0.3% of remaining VOC guaranteed.
- Increases melting ratio in the furnace, feeding hot scrap from decoater.
- Incinerates completely the gaseous VOC, reducing dramatically harmful emissions.
- Minimizes the use of salts/fluxes.
- Reduced energy consumption, reusing part of the hot gases generated in the furnace main chamber.
- Fully automated system, profitability-oriented technology.

Ready for green aluminium production