How it works

When molten metal is siphoned into a crucible, it is possible that some electrolytic bath material is siphoned with it. When this happens, the bath material has negative effects on the furnace during the batching process (generation of sodium). To prevent this problem, an automatic skimming machine – the ACS / Aluminium Crucible Skimmer – has been developed to be used alone or fully integrated to the TAC operation.

The automatic skimming unit is equipped with a special tool set designed to remove the maximum of solid bath and dross floating on the liquid metal surface. Part of the tool is fixed, while the other, mobile, allows a circular movement around the crucible to collect the dross and solid bath. The dross and bath are then discharged into a hopper and collected in a bin.

In addition to minimizing the negative effects of the bath, the automated skimmer also reduces labor and operating costs as well as safety and hygiene problems.

Key features

Metal Quality Improvement
- Effective and reliable bath removal.
- New “wall follow” technology that increases the skimmed surface by 10%.
- Improved metal cleanliness.
- Reduction of metal treatment operations in and downstream of the furnace.

Productivity Improvement
- High productivity unit with less than 4 minutes of treatment time.
- Low operating cost, skimming tool life of 6 months and more.
- Skimming tool temperature reading.
- Detection of metal level with automatic adjustment of skimming head height.

Safe Operating Environment
- No operator required.
- Fully automatic cycle.

Robot skimmer

Benefits - Why using our automatic skimmer solution?
- Automatic change of tools without operator intervention.
- Automatic sampling after skimming.
- Camera included to record skimming quality of each crucible.