How it works

The TAC / Treatment of Aluminium in Crucible® process, based on the strong affinity of aluminium fluoride for alkali metals, is very efficient compared to the traditional in-furnace treatment. The treatment is carried out in the crucibles (or ladles) while the metal is on its way from the potroom to the casthouse.

The TAC rotor is designed to achieve optimal contact and constant recirculation of the flux. Its action creates a vortex with axial and radial flow components, which guarantees high reaction efficiency with minimum surface turbulence. Continuous recirculation of the agglomerated flux pellets rich in AlF₃ during TAC treatment prevents melt loss and contributes to improve metal cleanliness.

Key features

Metal Quality Improvement
- Effective and reliable alkali (lithium and sodium) removal (up to 95%).
- Improves metal cleanliness.

Productivity Improvement
- Extremely rapid with a treatment time of less than 10 minutes.
- High productivity unit.
- Adjustable process parameters for various product requirements.

Safe Operating Environment
- No chlorine used.
- Fully automatic cycle.
- Complete recycling of spent AlF₃ in cell room operations.

Note: Can be combined with the ACS / Aluminium Crucible Skimmer for removal of bath material before and/or after the TAC treatment.

Models available | Configuration with an ACS available