



Aluminium bath treatment for pressure and continuous casting

- ➔ Improved quality aluminium – bath contents are cleaner and more homogeneous
- ➔ Higher furnace capacity
- ➔ Long service life of the porous plugs

Alu-Treat[®]

Aluminium bath treatment for pressure and continuous casting

The aluminium bath treatment for pressure and continuous casting can be used in casting furnaces of all makes and ensures the production of superior-quality aluminium.

Design

A porous fire and aluminium-resistant plug enclosed in a gastight enclosure is incorporated into the bottom of the furnace. Although the plugs are porous, the aluminium is unable to penetrate them. A gas supply pipe opens below the porous plugs. Cleaning gas from a regulation station from the gas supply pipe permeates the porous plugs and forms as fine bubbles on the hot side.

Advantages:

- > Improved cleanliness and homogeneity of the bath contents
- > Typical density index value: Approximately 1.5
- > Inclusions (STIC) are reduced by approx. 80%
- > Minimised temperature differences above the bath height
- > Higher furnace capacity
- > Excellent service life of the porous plugs
- > Easy to retrofit – on any casting furnace

Superior quality aluminium

Argon is the most commonly used propellant gas. However, nitrogen may also be used as a cleaning gas if nitride formation (e.g. with magnesium) is not anticipated. The result is aluminium of a particularly high quality. Available as special equipment for chlorine gas.

Three operating modes

The result in the furnace is directly dependent on the volume of gas; during everyday activities we distinguish between three operating modes:

- > Outgassing: Small volume of gas used to reduce hydrogen in the bath
- > Flushing: Large volume of gas for the intensive cleaning of the bath
- > Cleaning: High gas pressure for periodic cleaning of the bubble stones



- 1 Bath treatment with Alu-Treat[®]
- 2 Gas regulation cabinet
- 3 Bath treatment with Alu-Treat[®]

An overview of our industrial furnace products:

- MultiMelter[®]
- EcoMelter[®]
- Casting furnace GO
- Rotary drum furnace DKO
- Charging
- Alu-Treat[®]

More information at:
www.jasper-gmbh.de

