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High-performance hearth and bath melting furnace

- ➔ Future-orientated design ensures a safe investment
- ➔ Energy saving through the use of regenerative burner systems
- ➔ High melting capacity
- ➔ Clean (minimised burn-off losses)

EcoMelter[®] Type HSO

High-performance hearth and bath melting furnace

The EcoMelter[®] Type HSO is a hearth and bath melting furnace that is available as a tilting or fixed design. The entire bath area serves as the melting zone and is provided with a high furnace roof. A dry hearth is integrated for the preheating of ingot material or as a melting bridge to separate aluminium and iron. A special feature is that the dense flue gas layer over the molten material ensures complete combustion and excellent heat transfer. The furnace is available with the EcoReg[®] or PulsReg[®] regenerator burners. Gas, oil or pulverised fuels can be used.

Advantages:

- > Safe investment
 - through innovative design with heat recovery
- > Direct connection to filter system
 - without leaking air and additional exhaust gas cooling
- > Lower overall energy consumption
 - through regenerative burner systems
- > Optimum handling – on/in the furnace
 - through proven furnace geometry
- > Minimised burn-off losses
- > up to 200 t net melting capacity per day and 60 t bath content
- > Can be equipped with the bath treatment system for aluminium Alu-Treat[®], and a metal pump or electromagnetic stirrer

Charging

Due to its low charging height the EcoMelter[®] Type HSO can be charged with a forklift or wheel loader. For loose scrap a charging machine of Type SC is beneficial. This can charge the furnace with 10 t in only a few minutes. The surface cleaning of the bath should be performed with a dross machine.

Alu-Treat[®] system

The EcoMelter[®] Type HSO is available with an Alu-Treat[®] system for the treatment of aluminium in the bath. Argon is mainly used as a fuel 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.

Programmable control

The system is controlled by a Siemens S7, in which the entire system and all necessary data are visualised.



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- 1 EcoMelter[®] HSO tilted
- 2 EcoMelter[®] with rotary bed regenerator EcoReg[®]
- 3 EcoMelter[®] with PulsReg[®]-Medusa system

An overview of our industrial furnace products:

- MultiMelter[®]
- EcoMelter[®] HSO / MSO / WSO
- Casting furnace GO
- Rotary drum furnace DKO
- Charging
- Alu-Treat[®]

More information at:
www.jasper-gmbh.de

