



Zinc melting technique

A goal of our developments is to provide cost advantages to the foundry. Either by reduction of the operating costs by remelting the biscuits and runners or by supplying the ideal conditions for casting.

Remelting (recycling) in the central furnace (indirectly heated), prevents external recycling costs, including transport costs, temporary storage costs, and reduces crucially the costs of the storage of the raw material.

Remelted material is by quality equivalent with new material and can be either automatically casted to ingots again, or - still more economically – filled directly into the machine furnaces in liquid condition.

Ideal conditions for casting can be found, if the Zinc is available with constant level and constant temperature at the gooseneck chamber.

Already in 1984 RAUCH has developed a machine furnace, which fulfills both demands with two separated crucible chambers. The logical continuation of this is done by the connection of remelting and automated transport of the material to the machine furnaces. This is done with the central remelting process as well.



View of the burners of the Zinc melting furnace ZSOR850B

Products

- Zinc machine furnaces with a one chamber crucible (ZMO): in different sizes, melting capacity from 90 to 350 kg per hour.
- Zinc machine furnaces with a two chamber crucible (ZMOSZ): with pump, in different sizes, melting capacity from 90 to 350 kg per hour.
- Zinc melting furnaces (ZSO): with a melting capacity of 450 to 700 kg per hour. Electrical heated or gas fired.
- Zinc melting furnace (ZSOR): melting capacity of 850 kg per hour, gas fired, with circulator in the crucible, also suitable for remelting of overflows.
- Zinc melting furnace (ZSO1000R): melting capacity of 1000 kg per hour, with recuperator technology.
- Zinc melt container (ZSB): for a melt content of 450 kg.
- Zinc conveyor (ZFB): for automated filling of the melting furnaces with scraps.
- Zinc ingot casting conveyor (ZMGB): with a casting capacity of 450 to 600 kg per hour.
- Lifting and tilting device (HUK): for a safe filling of zinc melting furnaces, with a lifting force of 60 kg.
- Container emptying device (BEG): for emptying of scrap containers with a weight of 500 kg or 1000 kg.
- Zinc liquid transport system with fork lift (ZFTS): to carry a zinc melt container (ZSB) with a fork lift.
- Zinc liquid transport with monorail system (ZFTH): to carry a zinc melt container (ZSB), with single sided or double sided transfer of the liquid melt.
- Zinc liquid transport with automated guided vehicle system (ZFTF): to carry a zinc melt container (ZSB) with an automated guided vehicle system.



Zinc melt container ZSB453



Zinc pump



Zinc ingot casting conveyor ZMGB600