



POST OF 09/07/2026

Dosing furnace: different rules from the melting furnace

A dosing furnace does not melt — it holds, doses and, above all, must not do one thing: change the metal. Its refractory rules therefore differ fundamentally from those of the melting furnace.

Tight geometry, constant metal contact at a constant temperature and the highest demands on metal purity shift the material choice from "robust" to "non-wetting, precise, clean".

What makes the dosing furnace special

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| ☐ Non-wetting first | corundum build-up in the dosing chamber distorts dosing weights long before it endangers the lining |
| ☐ Shaped parts instead of cast in situ | tight chambers and channels call for prefabricated, densely fired parts with a proper fit |
| ☐ Riser tube and dosing channel | wear parts with their own replacement rhythm — do not tie them to the furnace campaign |
| ☐ Metal purity | abrasion-resistant qualities that release no particles into the melt (inclusions in the casting) |
| ☐ Heating system protection | lining around heating elements/immersion tubes designed for their replacement, not the other way round |
| ☐ Drying | small volumes tempt you into a fast start-up — the curve still applies |

*Dosing furnace: tight geometry, constant metal contact**Lining with prefabricated shapes*

Common mistakes

- Melting-furnace material in the dosing furnace: mechanically durable, but it ruins dosing accuracy and metal quality.
- Riser tube replacement postponed "because the furnace is still fine" — then the cheapest component dictates the shutdown.
- Repair without a look at the dosing-weight history: it reveals corundum build-up earlier than any visual inspection.

PRACTICAL NOTE

Track the dosing-weight deviation as a maintenance indicator. If it creeps upwards, the furnace is already working against you on the inside — weeks before any damage becomes visible.

Questions about your furnace?

We assess lining, zones and condition — with a reply within 24 hours on working days.

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