



POST OF 14/07/2026

Anchoring: The invisible part of the lining

No component of the lining is as invisible after handover as the anchoring — and none has such a direct bearing on the service life of monolithic zones. The castable does not carry itself: it hangs on the anchor, and the anchor on the steel structure.

Anchor material, spacing pattern and installation must match the temperature, the weight of the lining and the movement of the shell.

What matters in anchoring

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| ☐ Material selection | based on the temperature at the anchor tip, not at the wall surface — several hundred degrees often lie between the two |
| ☐ Spacing pattern | closer at edges, openings and roofs; a uniform standard pattern is almost always distributed wrongly |
| ☐ Expansion allowance | plastic cap or bitumen coating at the tip — the anchor expands differently from the castable |
| ☐ Welding | full connection to the shell, tested (ring test/bend test), not merely tacked |
| ☐ Replacement | renew with every new lining — anchors age together with the lining, not more slowly |
| ☐ Documentation | anchor plan with material and spacing pattern in the plant file — the next turnaround will thank you for it |



Anchor field before the castable is applied



Anchoring in the hearth lining

Common mistakes

- Stainless steel anchors across the board "because they are better": the wrong alloy embrittles or grows — the material follows the temperature.
- Anchors saved in the roof area: that is exactly where the full weight bears at full temperature.
- No caps: during heat-up, anchor expansion drives fine cracks into the fresh castable.

PRACTICAL NOTE

When a monolithic zone fails over a large area, the cause more often lies behind the castable than in it. At handover, ask to be shown the anchor plan — not just the finished surface.

Questions about your furnace?

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

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