## Heraeus

## Hot Metal Probe

65 %5: %5 %5-%5 %5 %5 <u>%5 %5</u>

The masters when it comes to control techniques

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The Hot Metal Probe accurately measures the temperature and the sulphur/silicon concentrations of Hot Metal in the Torpedo as well in the Transfer ladle. The Hot Metal Probe is fully compatible with standard Heraeus Electro-Nite hardware.

The Hot Metal Probe optimizes the Hot Metal desulphurization process through:

- **Cost savings on reagents:** The usual over-addition (safety margin) becomes obsolete thus saving up to 15% on material (on average €40 per treatment).
- **Time savings:** With the HM Probe results are obtained in seconds compared to the long delay time required for the sample analysis result.
- **Chemistry:** It is well known that non-metallic particles in samples originating from the desulphurization treatment influence the final result. The HM Probe however measures the "true" sulphur and silicon contents and is not influenced by non-metallics.
- **Plant logistics:** The instant sulphur measurement with the Hot Metal Probe allows the mixing of Hot Metal in the Torpedo according to the sulphur target. Instantaneous decision if to send the transfer ladle first to desulph station or straight to BOF.

## Product specifications

Temperature range: 1250°C to 1450°C. Measurement time: approx. 15s. Compatible with standard HEN contact blocks, probe holders, cabling. Instrument: Multi-Lab III

<u>Sulphur determination</u> from 0.0005 to 0.1%: Precision: Usually 10% relative in the Ca-Mg co-injection process (process dependent)

<u>Silicon determination</u> from 0.1 to 1% Precision: Usually 10% relative (process dependent)

## **Ordering information**

| Tube length (mm) | Thermocouple type |             |                |
|------------------|-------------------|-------------|----------------|
|                  |                   |             |                |
|                  | Pt10% Rh/Pt       | Pt13% Rh/Pt | Pt30%Rh/Pt6%Rh |
| 900              | CE10240990        | CE13240990  | CE36240990     |
| 1200             | CE10241290        | CE13241290  | CE36241290     |
| 1500             | CE10241590        | CE13241590  | CE36241590     |
|                  |                   |             |                |

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