

Hot Metal Probe

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 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 holder, cabling.

Instrument: iM² Sensor Lab

Sulphur determination from 0.0005 to 0.1%:

Precision: Usually 10% relative in the Ca-Mg co-injection process (process dependent)

Silicon determination 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



Heraeus Electro-Nite

info.electro-nite.be@heraeus.com

www.heraeus-electro-nite.com

© 03/2025 Heraeus Electro-Nite