

For more information on this product and on our complete package of solutions

Please contact our **local service center:**

▶ **VESUVIUS SENSORS & PROBES DO BRASIL**

Rua Benjamin da Silveira Baldy, 2001
Paulas e Mendes
CEP 18170-000 Piedade
São Paulo, Brazil
Tel: +55 15 3344 9000

▶ **VESUVIUS SENSORS & PROBES USA**

33554 Pin Oak Pkwy
Avon Lake, OH 44012
United States of America
Tel: +1 440 930 0362

▶ **VESUVIUS SENSORS & PROBES EUROPE**

Via Mantova, 10
20835, Muggiò (MB) Italy
Tel: +39 039 27111.1

▶ **VESUVIUS SENSORS & PROBES ARGENTINA**

Urzquia 919, Piso 1, Rosario,
Santa S2000ANC
S2000ANC Exterior Argentina
Tel: (54) 341 449 5008

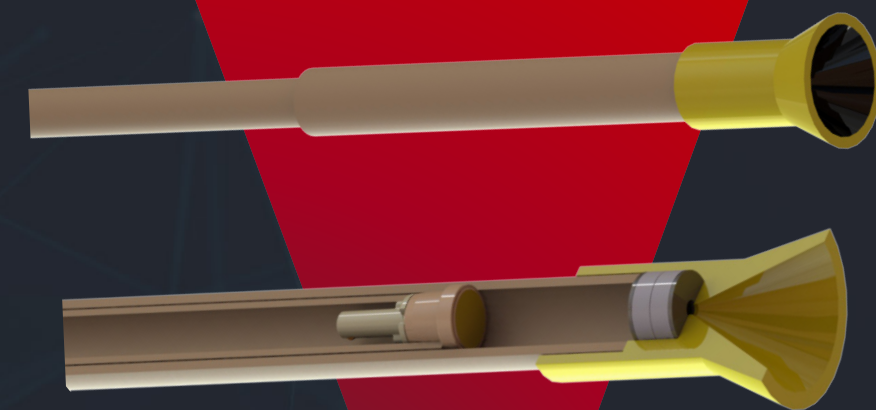
▶ **VESUVIUS SENSORS & PROBES CANADA**

175 Calixa-Lavallée
Verchères, QC, Canada
J0L 2R0
Tel: (450) 583-3917

▶ **VESUVIUS SENSORS & PROBES FRANCE**

Centre d'Activités Economiques – ZI de
Franchepré 54240 JOEUF – France
Tel: +33 3 87 50 03 10

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PRODUCT

Slag Samplers

Slag sampling for Ladles and EAF applications

- Slag composition plays a key role in steelmaking processes in order to produce cost effective and high-quality steel. Chemical analysis of slag samples is crucial to achieve optimal slag composition in steelmaking and for process quality control
- Vesuvius Slag Sampler provides samples in the shape of a coin, which will make your process much safer and cleaner than old fashion methods that use a metallic rod
- Optimization of slag composition is essential to reduce refractory wear, increasing campaign lifetime. It also plays a fundamental role in refining, such as dephosphorization process in BOF where the phosphorous partition ratio is a function of slag composition

Vesuvius Slag Sampler

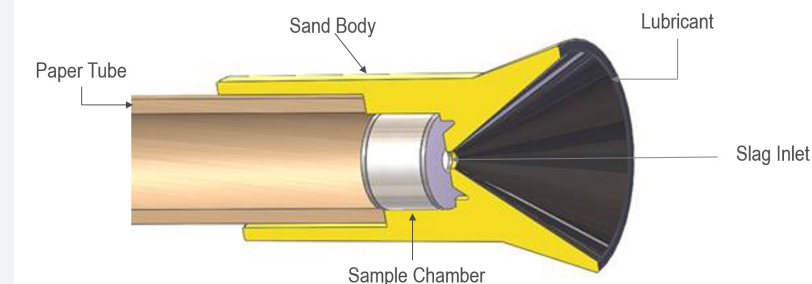
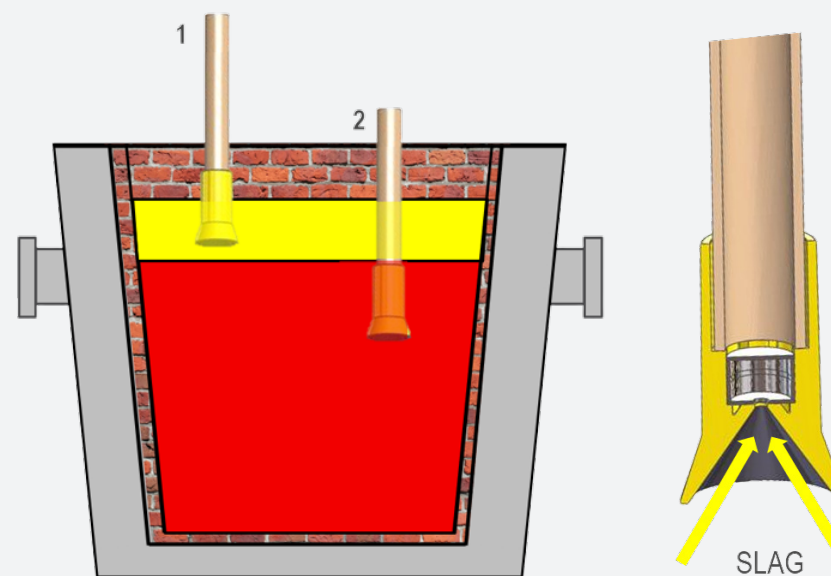
Brings Safety and Convenience to your process

- Instead of having to handle a very hot rod and collect debris, the operator only needs to open the sampler and collect a single part with defined shaped.
- This also prevents contamination when collecting the sample.
- This product can also be used with automatic manipulators or robots to increase even further the safety in the melt shop.
- It provides a sample in the format of a coin that has 34 mm in diameter and the thickness can be 12 mm or 24 mm depending on the amount of slag required for the analysis. A larger sample will require a longer immersion time.
- The quality of the obtained sample will change depending on the composition and oxidation of the slag. Typically samples obtained from ladles are more solid and full due to the lower oxidation levels.
- The sample must be analysed via X-Ray method after a specific preparation.



How to Use the Slag Sampler

- The process to collect a sample using the Vesuvius Slag Sampler is exactly the same as the regular immersion samplers for steel.
- The probe must be inserted vertically into the bath and reach approximately 300 mm of immersion.
- The probe initially carries the slag down with its conical collector (1). Once in the steel the slag melts, fills the chamber and solidifies again (2).
- It is important to pay attention to make the immersion in a region where slag is present, avoiding "eyes" that can be generated by other probes or lances.
- It is recommended that this is the first probe taken from a sequence.



Overall Product Design

Paper Tube:

- Internal diameter of 39 mm.
- Length can be chosen to best fit your application. Standard sizes: 400, 600, 800, 1200 and 1600 mm.

Sample Types (coin shape):

- Standard Sample: Diameter is 34 mm and thickness of 12 mm. Provides up to 25g of slag.
- Double Size Sample: Diameter is 34 mm and thickness of 24 mm.
- The weight values above are references only, it will vary according to the slag composition.

