



# SAMPLING DEVICE TYPE MS 3 AND MS 4



## DESCRIPTION

The product is used for probe prelevation in ovens, convertors and ladles, in melted steel.

Through its variants the product offer the possibility of prelevating different types and shapes of probes and performing complete laboratory analysis of the steel probes (spectral analysis and gases analysis : carbon, sulphur, nitrogen, oxygen).

Products MS 3 type (fig. 1) and MS 4 (fig. 2) are used for probe prelevation in unkillng steel (when is used deoxidation agent – aluminium, zirconium ) and killing steel.



## TECHNICAL DATA

- Types of prelevated probes : fig.3;
- Maximum immersion : 8 seconds ;
- Characteristic length L : 900 mm, 1200mm (for MS 3 and MS 4) and 1500 mm (for MS 4);
- Immersion depth : (1/2...2/3) L ;
- Cardboard tube : uniform for MS 3 type and telescopic for MS 4 type.
- Internal diameter for cardboard tube : 40 for MS 3 (fig. 1); 18 for MS 4 (fig. 2)

## SIMBOLISING

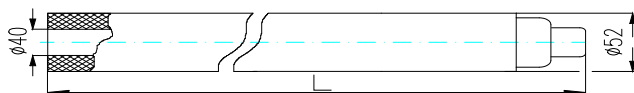
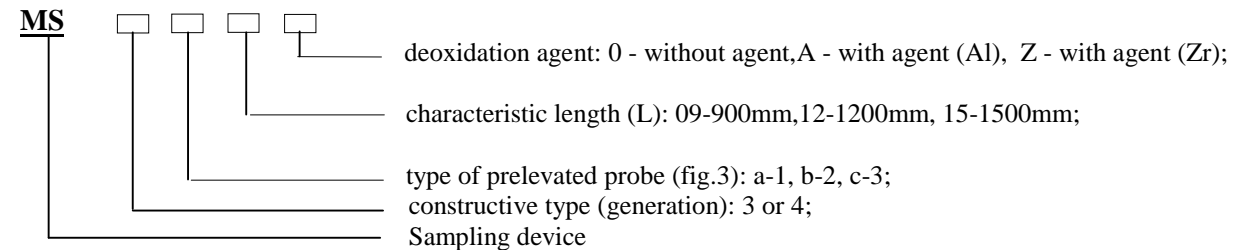


Fig. 1 MS-3

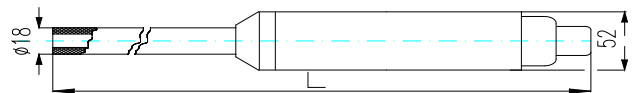
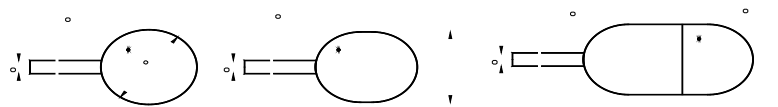


Fig. 2 MS-4

## ORDERING

Use	Constructive type Sampling device	Characteristic length (L)	Type of prelevated probe			Deoxidation agent
			Round simple thickness (1)	Oval simple thickness (2)	Oval double thickness (3)	
Steel	MS 3 (fig. 1)	900 mm	MS 3-1.09.O	MS 3-2.09.O	MS 3-3.09.O	Without
			MS 3-1.09.A	MS 3-2.09.A	MS 3-3.09.A	Aluminium
			MS 3-1.09.Z	MS 3-2.09.Z	MS 3-3.09.Z	Zirconium
		1200 mm	MS 3-1.12.O	MS 3-2.12.O	MS 3-3.12.O	Without
			MS 3-1.12.A	MS 3-2.12.A	MS 3-3.12.A	Aluminium
			MS 3-1.12.Z	MS 3-2.12.Z	MS 3-3.12.Z	Zirconium
	MS 4 (fig. 2)	900 mm	MS 4-1.09.O	MS 4-2.09.O	MS 4-3.09.O	Without
			MS 4-1.09.A	MS 4-2.09.A	MS 4-3.09.A	Aluminium
			MS 4-1.09.Z	MS 4-2.09.Z	MS 4-3.09.Z	Zirconium
		1200 mm	MS 4-1.12.O	MS 4-2.12.O	MS 4-3.12.O	Without
			MS 4-1.12.A	MS 4-2.12.A	MS 4-3.12.A	Aluminium
			MS 4-1.12.Z	MS 4-2.12.Z	MS 4-3.12.Z	Zirconium
		1500 mm	MS 4-1.15.O	MS 4-2.15.O	MS 4-3.15.O	Without
			MS 4-1.15.A	MS 4-2.15.A	MS 4-3.15.A	Aluminium
			MS 4-1.15.Z	MS 4-2.15.Z	MS 4-3.15.Z	Zirconium

Fig. 3 Prelevated probe with MS 3 and MS 4



a) round simple thickness - 1 b) oval simple thickness 36 x 32 - 2 c) oval double thickness - 3