Selectarc WELDING

SELECTARC Co1

"Grade1" Type Cobalt Base Hardfacing Electrode

Classification

AWS A5.13 : ECoCr-C
EN 14700 : E Co3
DIN 8555 : E20-UM-55-CTZ

Characteristics

Hardfacing electrode with a rutile-basic coating. Cobalt based deposit of « stellite grade 1 » type (Co-Cr-W). Hardest Selectarc Co-type (superior to all other types of stellite). Very good resistance for metal to metal wear and to corrosion up to 800°C. Coefficient of friction very low. Highly resistant to erosion and cavitation.

* Note : "Stellite" is a trade mark of Deloro Stellite (Haynes International)

Applications

Hardfacing of Rollers, Rails, Bearing and Shafts of Pumps, Extrusion Nozzles, Hot Cutting Tools, Conveyor Screws.

Typical Weld Metal Composition (%)

C	Si	Cr	W	Fe	Co
2.10	1.00	30.00	12.50	3.00	base

All Weld Metal Mechanical Properties (Typical)

Hardness +20°C (HRC) AW (Obtained on pure weld metal)	Hardness +600°C (HRC) AW
53 - 57	45

Welding Current & Instructions

Electrode	Ø x L (mm)	3.2 x 350	4.0 x 450	5.0 x 450
Current	(Amp)	90 - 100	130 - 140	160 - 180

Redrying of electrode at 250°C for 1hr before use, if necessary. Preheat massive pieces 250-400°C. Use a slow welding current in order to limit the dilution with the base metal and to achieve the hardness of this alloy. Cool down slowly in order to limit the risks of cracks in the deposit. Weld eventual cushion layers with Selectarc 307 R or 29/9.

1G/PA 2F/PB 2G/PC

= +	~ 70 V