



Selectarc Co1

**“Grade 1” type cobalt base
Hardfacing Electrode**

Classification

AWS A5.13 : ECoCr-C
EN 14700 : E Co3

DIN 8555 : E20-UM-55-CTZ

Description & Applications

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 to metal-metal wear and to corrosion up to 800°C. Coefficient of friction very low. Highly resistant to erosion and cavitation.

General applications: Hardfacing of rollers, rails, bearing and shafts of pumps, extrusion nozzles, hot cutting tools, conveyor screws.

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

Typical Weld Metal Composition (%)

C	Si	Cr	W	Fe	Co
2.1	1.0	30.0	12.5	3.0	Rem.

All Weld Metal Mechanical Properties

Hardness (as welded) +20°C	Hardness (as welded) +600°C
53-57 HRC	42-45 HRC

Welding Current & Instructions

Electrode	ØxL (mm)	3.2x350	4,0x350	5,0x450
Current	(A)	100	140	180

Redrying 1h at 250°C, if necessary. Preheat massive pieces 250-400°C. Use a low 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

= + ~ 70V

ind.12

