



SELECTARC Co12

“Grade 12” Type Cobalt Base Hardfacing Electrode

Classification

AWS A5.13 : ECoCr-B
EN 14700 : E Co2

DIN 8555 : E20-UM-50-CTZ

Characteristics

Hardfacing electrode with a rutile-basic coating. Cobalt base deposit of « stellite grade 12 » type (Co-Cr- W). The deposit with a high hardness is characterised by a very good resistance to metal and mineral abrasion combined with corrosion and high temperature up to 800°C, in the presence of moderate shocks. Highly resistant to erosion and cavitation. Highly recommended when an important hardness is searched and for a deposit stressed by temperature, corrosion, abrasion and impact. Excellent welding characteristics.

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

Applications

Hardfacing of Tools for Processing Plastics, Wood and Paper (carton and paper cutting) characteristics, Pressing tools, Hot cut tools , Hot shear blades, Extrusion screws, ...

Typical Weld Metal Composition (%)

C	Si	Cr	W	Fe	Co
1.60	1.00	29.00	8.50	3.00	base

All Weld Metal Mechanical Properties (Typical)

Hardness +20°C (HRC)	Hardness +600°C (HRC)
AW (Obtained on pure weld metal)	AW
50	38 - 40

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	170 - 180

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



1G/PA



2F/PB



2G/PC

= + ~ 70 V

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