



SELECTARC Co21S

“Grade 21” Type Cobalt Base Hardfacing Electrode

Classification

AWS A5.13 : ECoCr-E
EN 14700 : E Co1

DIN 8555 : E20-UM-350-CKTZ

Characteristics

Hardfacing electrode with a rutile-basic coating. Cobalt base deposit of « stellite grade 21 » type (Co-Cr-Mo-Ni). Deposit characterised by a good metal to metal wear and oxidation resistance up to 1000°C, even in presence of sulphurous atmosphere. Good behaviour to important Thermal and Mechanical shocks, excellent resistance to cracks, highly resistant to cavitation and erosion, deposit non-magnetic.

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

Applications

Surfacing of Motor valves, Gas turbine blades, Extrusion nozzles, Forging dies, Forging tools, Mixers, Valves for gas/water/vapour/acids.

Typical Weld Metal Composition (%)

C	Si	Mn	Cr	Mo	Ni	Fe	Co
0.30	0.80	0.50	28.00	5.00	2.50	2.00	base

All Weld Metal Mechanical Properties (Typical)

Hardness +20°C (HRC)	Hardness +600°C (HRC)
AW (Obtained on pure weld metal)	AW
32 - 38	250 - 300

Welding Current & Instructions

Electrode	∅ x L (mm)	2.5 x 350	3.2 x 350	4.0 x 350
Current	(Amp)	65 - 75	90 - 100	130 - 140

Redrying of electrode at 250°C for 1hr before use, if necessary. Preheat massive pieces 250-400°C. Keep this temperature during welding, cool down slowly to reduce the risk of cracks while cooling. Weld eventual cushion layers with Selectarc B 90.



1G/PA



2F/PB



2G/PC

= + ~ 70 V

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