

COBASTEL 1

Electrodes MMA [SMAW]

Hardfacing and repairing

CLASSIFICATION:	APPROVALS:	APPLICATION:
EN ISO 14700-A : E Co3 cptz DIN 8555 : E 20-UM-55-CPTZ AWS A-5.21 : E CoCr-C		Hardfacing and repairing

- Rutile-basic electrode with alloyed core wire, for welding with alternating current.
- A cobalt-based overlay with an austenitic-ledeburic structure with embedded tungsten carbides (CrW).
- The hardest of the standard cobalt-based alloys.
- The overlay is resistant to corrosion, impact, abrasion, as well as thermal shocks and high mechanical pressure.
- The overlay is workable only by grinding.
- Operating temperature: from room temperature to 1000°C.

Recommendations:

- The operating temperature should be maintained between 400° and 600°C, depending on the base material and type of construction.
- Slow cooling, and if required furnace cooling, is recommended for low alloy and austenitic steels.

Application

Hardfacing of steam and chemical valves, as well as tools working with hot steel, such as: tongs' caps, scissor knives, pumps for high-temperature liquids, briquette squeezing screws.

Typical chemical composition %

C	Si	Mn	Cr	Fe	Co	W	Inne
2,20	1,20	1,00	30,00	3,00	rest	12,50	<3,00

Typical mechanical properties

Hardness 55 HRC (RT) / 44 HRC (600°C) / 34 HRC (800°C) /

Coating type rutile-basic

Welding current



Welding positions



Redrying

350°C / 1 h

Additional description

Melting temperature: 1250 - 1290°C Density: 8,7 g3/cm3

Welding parameters and packing

∅	Length [mm]	Welding current [A]	Weight of packet [kg]	Weight of carton [kg]
3,2	350 /	70-110	5,0	20,0
4,0	350 /	100-140	5,0	20,0
5,0	350 /	140-180	5,0	20,0

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