

## Corrosion and wear at elevated temperatures

### GENERAL DESCRIPTION

Cobalt base welding electrode for hardfacings where maximum resistance to corrosion and wear at red heat (up to 1000 °C (1830 °F)) is required.

Excellent resistance to shocks.

Deposit machinable with hard metal tools.

Good resistance to acetic and nitric acid, and organic chemical products such as: petroleum, plastic, rubber and resins, even molten metals as aluminium and zinc.

Also used in the food and pharmaceutical industry.

### APPLICATIONS

Warm cutting tools, metal shear blades, stone breakers, hammers, valves and valve seats of combustion motors, glass cutting tools, shafts and pump bearings, hot working dies and moulds, ...

Hardness: 38-46 HRC

Hot hardness: approx. 31 HRC @ 600 °C (1110 °F)

### CHEMICAL COMPOSITION (%) (Typical values, all weld metal)

C : 0.70 – 1.40	Cr : 25.00 – 32.00	Mo : < 1.00	Mn : < 2.00	Si : < 2.00
W : 3.00 – 6.00	Fe : < 5.00	Ni : < 3.00	P & S : < 0.025	Co : Balance

### MECHANICAL PROPERTIES (Typical values, all weld metal)

Yield Strength N/mm <sup>2</sup>	Tensile Strength N/mm <sup>2</sup>	Elongation 5d (%)	Impact Strength Charpy V notch (ISO-V)

### GENERAL INFORMATION

<b>Welding positions</b>	All, except vertical down.		
<b>Shielding gas</b>	NA		
<b>Packing</b>	5 Kg in a plastic box		
<b>Polarity</b>	AC or DC, Reverse polarity (electrode positive)		
<b>Diameter (mm)</b>	2.4	3.2	4.0
<b>Length (mm)</b>	350	350	350
<b>Approx. current (A)</b>	45 - 55	80 - 95	100 - 130

#### Tips & Tricks

Remove all rust and dirt.

Sharp edges must be rounded for optimum adhesion.

The arc should be short to avoid too much dilution with the base metal.

On crack sensitive steels, apply a buttering layer with Modi Lastek 9066.

*The information in this document is based on intensive tests and is accurate to the best of our knowledge. Do note that these values are only typical values for tests in accordance to prescribed standards. The suitability of the product should always be confirmed by qualification tests before use in any application. The information can be changed without previous notice.*