

Lastek 251 E

Wear at elevated temperatures

CLASSIFICATION

EN ISO 14700 : E Co3

AWS A5.13 : E CoCr-C

GENERAL DESCRIPTION

Cobalt base hardfacing electrode for abrasion and corrosion resisting surfacings.

Good resistance to high temperatures and to metal to metal friction.

High hardness at elevated temperatures (up to 1000 °C (1830 °F)).

Returns to its original hardness upon cooling.

Resistant to petroleum, plastic, rubber.

Also resistant to food, nitric acid (up to 70% at room temperature), acetic acid, sulphuric acid (up to 60 °C (140 °F) - 10% conc.).

APPLICATIONS

Knives, valve seats, rollers, extrusion screws for the rubber and plastic industry, bearings, ...

All components subject to metal to metal friction.

Hardness: 52 - 60 HRC.

Hot hardness: 30 - 40 HRC @ 650 °C (1200 °F).

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

C : 2.00 - 2.60	Cr : 29.00 - 32.00	Mo : < 1.00	Si : 1.50 - 1.90	W : 12.00 - 14.00
Fe : < 3.00	Ni : < 3.00	Co : Balance		

MECHANICAL PROPERTIES (Typical values, all weld metal)

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

GENERAL INFORMATION

Welding positions All, except vertical down.

Shielding gas NA

Packing 5 kg in a plastic box

Polarity AC or DC, reverse polarity (electrode positive)

Diameter (mm) 3.2 4.0 5.0

Length (mm) 350 350 350

Approx. current (A) 80 - 95 100 - 130 130 - 170

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 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.