

High hot hardness

GENERAL DESCRIPTION

Weld deposit with very high hardness.
 Exceptional resistance to abrasion by hard minerals.
 Very good shock resistance although very hard.
 The hardness remains high up to 600 °C (1112 °F).
 Crack and porosity-free deposit.
 Self-releasing slag.

APPLICATIONS

Universal use as wear resistant hard facing.
 Dredging buckets, grab jaws, pneumatic drills, mixing augers and blades.
 Cold and hot working dies and tools, cutting shears, rolls, forging and die cast dies, plough shears.

Hardness after welding: 57-62 HRC.
 Hot hardness at 600 °C (1112 °F): 42 HRC.
 Hardness after heat treatment (1 hour at 600 °C (1112 °F), air cooling): 61-65 HRC.

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

C : 0.35 - 0.45	Si : 0.50 – 1.20	Mn : 0.40 – 1.00	Mo : 4.00 – 5.00	Cr : 4.50 – 6.00
V : 0.30 – 0.60				

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		
Shielding gas	NA		
Packing	5 Kg in a plastic box		
Polarity	AC or DC, Reverse polarity (electrode positive)		
Diameter (mm)	2.5	3.2	4.0
Length (mm)	350	350	350
Approx. current (A)	60	110	150

Tips & Tricks

Use a short arc and as low as possible amperage to avoid dilution with the base metal.
 Electrode position: almost 90° to work piece.
 For the surfacing of steel with a hardness lower than 40 HRC, minimum three layers are necessary to obtain the maximum hardness.

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.