

# **Product Data Sheet**

### Core wire alloyed High Chrome - Nickel Austenite.

## **SUPER OPTIMAL 312-17**

Classification AWS A 5.4: E 312- 17ÁÁ

#### DIN EN ISO 3581-A :EÁGJÁJÁJÁFGÁ

#### Werkstoff Nr :FÈ HH

Description and applications

Electrode for high strength joint welding and surfacings of similar and equal steels or cast steels, for joint welding tensile unalloyed steels, tempered and tool steels, high manganese steels, spring steels and joints between dissimilar steels with high alloyed stainless steels. Furthermore for crack proof tough inter-passes on hard surfacings and for abrasion resistant and warm hardened surfacings. The austenitic – ferritic weld metal is stainless & corrosion resistant. Due to enhanced delta –ferrite content, black – white joints are highly resistant against hot-cracking. Dies, tools, spring steel, shaft repair....superior weld ability for all steels...

Typical weld metal Chemical	С	Si	Mn	Cr	Ni	S	Р
Composition (%)	0.10	<0.90	<1.0	29.0	9.0	0.012	0.015

All weld metal mechanical properties	Tensile Strength R <sub>m</sub> (N/mm <sup>2</sup> )	Yeild Strength R <sub>p</sub> (N/mm <sup>2</sup> )	Elongation A₅(%)
(typical)	>800	>500	>20

Amperes (A)

2.50mm	3.15mm	3.20mm	3.25mm	4.00mm	5.00mm
50-80	80-110	80-110	90-120	110-150	150-180

Welding instruction

Pre-heating depending on base material, low heat input required. Otherwise pre-heating not necessary. Keep dry and avoid condensation. Re-dry generally not required, if necessary redry electrodes at 300-350°C for 1hr.Interpass temperature :< 200°C.

Welding positions

		=+ ~

#### SUPERON SCHWEISSTECHNIK INDIA LTD.

Plant 1 : A-125, Okhla Industrial Area, Phase 2, New Delhi -110020 Corporate Office & Plant 2 : 552, Pace City II, Sector 37, Gurugram, Haryana -122001 Plant 3 : B-100, Mayapuri Industrial Area, Phase-1, Near Police Station, New Delhi-110064 Plant 4 : A-334, RIICO Industrial Area, Karoli, Bhiwadi, Rajasthan - 301707 Ph No. 0124 -4940900, Mob: +91-84480 86859 I Email: export@superoncorp.com I Website: www.superoncorp.com