

Standards

TS EN ISO 2560-A	: E 46 6 2 Ni B 42 H5
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AWS A5.5	: E8018-C1 H4

**Chemical Composition of
Weld Metal % (Typical)**

C	Si	Mn	Ni
0.05	0.3	0.8	2.4

Mechanical Properties

Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Impact Strength (ISO-V/-80°C)	Elongation (L ₀ =5d ₀) (%)	Heat Treatment
min. 460	550 - 690	min. 47 J	min. 20	605°C / 2h / 300°C (air)

Typical Base Material Grades

- 12Ni14, 14Ni6, 13MnNi6-3, G12Ni14, S255N-S460N, S255NH-S460NH, S255NL-S460NL, S255NL1-S460NL 1, TTS135/N/V, TTS145N/V

Features and Applications

- Suitability for use in welding fine-grained, Ni-alloyed and carbon steels as well as cryogenic steels
- High ductility and crack resistance in weld deposits
- Serviceability of weld metals at temperatures down to -80°C
- Weld metal recovery of approx. 120%
- Convenience of welding at all positions except for vertical down position
- Possibility of applying same heat treatment temperatures at pre- and post-welding as well as at transition stages as those of base metal
- Weld deposits with very low contents of hydrogen
- Requirement of re-drying for minimum 2 hours at the temperatures between 300°C and 350°C

Welding Positions

Current Type

D.C. (+)

Operating Data

Product Code	Diameter x Length (mm) / (inch)		Welding Current (A)	Weight g / 100 pcs
3010100681	2.50 x 350	3/32 x 14"	70 - 100	2170
3010100684	3.20 x 350	1/8 x 14"	110 - 140	3700
3010100687	4.00 x 450	5/32 x 18"	140 - 180	6900
3010100690	5.00 x 450	3/16 x 18"	190 - 230	10500

Approvals: TSE, CE, SEPRO