

Standards

TS EN ISO 2560-A	: E 46 6 3 Ni B 42 H5
EN ISO 2560-A	: E 46 6 3 Ni B 42 H5
AWS A5.5	: E 8018-C2 H4

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

C	Si	Mn	Ni
0.05	0.3	0.7	3.2

Mechanical Properties

Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Impact Strength (ISO-V/-100°C)	Elongation (Lo=5do) (%)	Heat Treatment
min. 460	550 - 700	min. 47 J	min. 24	605°C / 2h / 300°C (air)

Typical Base Material Grades

- Cold-tough steels: 10 Ni14, 16Ni16, S 255NL1-SS00NL1, S275NL2-P460NL2

Features and Applications

- Suitability for use in welding Ni-alloyed construction steels for cryogenic applications
- High ductility and crack resistance in weld deposits
- Serviceability of weld metals at temperatures down to -110°C
- Weld metal recovery of approx. 120%
- Convenience of welding at all positions except for vertical down position
- 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
3010100693	2.50 x 350	3/32 x 14"	70 - 110	2220
3010100696	3.20 x 350	1/8 x 14"	110 - 140	3650
3010100702	4.00 x 450	5/32 x 18"	140 - 180	6600
3010100705	5.00 x 450	3/16 x 18"	190 - 230	10500

Approvals: TSE, CE, SEPRO