

Standards

TS EN ISO 3581-A	: E 19 12 3 Nb R 32
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AWS A5.4	: ~E318-16

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

C	Si	Mn	Mo	Ni	Cr	Nb
0.04	0.8	0.8	2.8	11.0	19.4	+

Mechanical Properties

Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Impact Strength (ISO-V/+20°C)	Elongation (L ₀ =5d ₀) (%)
min. 390	580-750	min. 47 J	min. 30

Typical Base Material Grades

- EN: X6CrNiMoTi 17 12 2, X6CrNiMoNb 1 12 2, X5CrNiMo 17 13 2, G-XCrNiMo 18 10, X10CrNiMoNb 18 12, X5CrNiMo 17 13 3, G-X10CrNiMo 18 10, G-X10CrNiNb 18 10,
- AISI: 316Ti, 316Cb, 316L

Features and Applications

- Used for the welding of tanks and pipes made of Cr-Ni-Mo-alloyed, stabilized steels which are used in food, chemical textile and paint industries
- The weld metal stabilized by Nb is resistant to temperatures up to +400°C
- Requirement of Re-drying for min. 2 hours at the temperatures between 120°C and 200°C

Welding Positions

Current Type

D.C.(+) / A.C.

Operating Data

Product Code	Diameter x Length (mm) / (inch)		Welding Current (A)	Weight g / 100 pcs
3010101333	2.00 x 250	5/64 x 10"	40 - 60	930
3010101338	2.50 x 250	3/32 x 10"	50 - 90	1540
3010101343	3.20 x 300	1/8 x 12 "	80 - 120	3030
3010101348	3.20 x 350	1/8 x 14 "	80 - 120	3530
3010101353	4.00 x 350	5/32 x 14"	110 - 160	5150

Approvals: TSE, CE, SEPRO