

TIG Rod for Welding of Austenitic Stainless Steels

Classification

AWS A5.9 : ER316L
ISO 14343-A : W 19 12 3 L

General Description

Solid rod with extra low carbon for welding austenitic CrNiMo-steels.
High resistance to intergranular corrosion and general corrosion conditions.

Chemical Composition (w%), Typical, Wire

C	Si	Mn	Cr	Ni	Mo	P+S
< 0.03	0.45	1.70	18	12	2.50	< 0.060

Mechanical Properties, Typical, All Weld Metal

Yield Strength : 400 N/mm²
Tensile Strength : 620 N/mm²
Elongation (L=5d) : 35 %
Impact ISO-V : 100 J (+20°C)

Approvals

ABS (ER316L)
GOST, SEPRO

Shielding Gases (acc. ISO 14175 and EN 439)

TIG : I1 - Ar (%100)

Materials to be Welded

	EN 10088-1/-2	EN 10213-4	Mat. Nr.
Extra Low Carbon (C < %0.03)	X2 CrNiMo 17 12 2		1.4404
	X2 CrNiMo 18 14 3		1.4435
	X2 CrNiMoN 17 11 2		1.4406
	X2 CrNiMoN 17 13 3		1.4429
Medium Carbon (C > %0.03)	X4 CrNiMo 17 12 2		1.4401
	X4 CrNiMo 17 13 3		1.4436
		G-X5 CrNiMo 19 11	1.4408
Ti/Nb Stabilized	X6 CrNiMoTi 17 12 2		1.4571
	X6 CrNiMoNb 17 12 2		1.4580
	X6 CrNiNb 18 10		1.4550
		G-X5 CrNiNb 19 10	1.4552

Packaging and Available Sizes

Diameter	0.8	1.0	1.2	1.6	2.0	2.4	3.2	Tube Weight
TIG Rod	-	-	-	X	X	X	X	5 kg