

TI 318

TIG Welding Wire - Stainless Steels

Standards	
AWS/ASME SFA - 5.9	ER318
EN ISO 14343 - A	W 19 12 3 Nb
TS EN ISO 14343 - A	W 19 12 3 Nb
DIN M. No.	1.4576

Properties and Applications

Austenitic stainless steel welding rod for GTA (TIG) welding of unstabilized or stabilized corrosion resisting Cr-Ni-Mo steels. Stabilized with Nb (Niobium) and resistant to intergranular corrosion up to 400°C. Especially used in welding of chemical tanks, pipes and equipments which are used in chemical, petrochemical, paper, paint, shipbuilding industries.

Materials		
Width	Material	ASTM
X2CrNiMo17-12-2	1.4404	316L
X2CrNiMoN17-11-2	1.4406	316LN
X2CrNiMo18-14-3	1.4435	316L
X3CrNiMoN17-13-3	1.4436	316
X6CrNiMoTi17-12-2	1.4571	316 Ti
X6CrNiMoNb17-12-2	1.4580	316 Cb
G-X5CrNiMoNb 19-11-2	1.4581	
X10CrNiMo18-12	1.4583	318
GX3CrNiMoCuN24-6-5	1.4573	

Typical Chemical Features of the Welding Wire

Type of Analysis	C	Si	Mn	Cr	Ni	Mo	Nb
Welding Wire	0.04	0.40	1.70	19.50	11.50	2.60	0.70

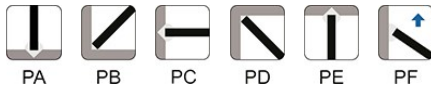
Typical Mechanical Values of Weld Metal

Test Condition	Protection Gas	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation A5 (%)	Charpy V-Notch Properties (J)
As welded	I1	480	640	32	20°C → 130

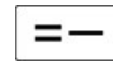
* Chemical composition and mechanical properties are valid when using shielding gas EN ISO 14175 - I1 (%100 Ar) .

Application Information

Welding Positions



Polarity:



Protection Gas:
I1

Welding Parameters & Efficiency

Diameter x Length (mm)
1.20x1000
1.60x1000
2.00x1000
2.40x1000
3.20x1000

Packaging Information

Product Code	Diameter x Length (mm)	Quantity per Box	Box Gross Weight (kg)	Boxes per Outer Box	Outer Box Gross Weight (kg)	Packaging Type
23107EBKM2	1.20x1000	5 kg	5.30	4	21.40	Cardboard Tube
23107GBKM2	1.60x1000	5 kg	5.30	4	21.40	Cardboard Tube
23107HBKM2	2.00x1000	5 kg	5.30	4	21.40	Cardboard Tube
23107IBKM2	2.40x1000	5 kg	5.30	4	21.40	Cardboard Tube
23107LBKM2	3.20x1000	5 kg	5.30	4	21.40	Cardboard Tube

Storage & Re-Drying Information

Shouldn't be exposed to high statical load and impact.
It should be stored in a dry room (relative humidity < 50%, room temperature > 20°C) on wooden pallets.