TI 309L

TIG Welding Wire - Stainless Steels

Standards

AWS/ASME SFA - 5.9	ER309L
EN ISO 14343 - A	W 23 12 L
TS EN ISO 14343 - A	W 23 12 L
DIN M. No.	1.4332

Properties and Applications

Austenitic-ferritic wire electrode for GTA (TIG)-welding of stainless steels to unalloyed or low-alloyed steels, subject to operating temperatures up to 300°C. Low carbon content increases resistance to intergranular corrosion. Suitable to use also as buffer layer on carbon steel before welding with 308 and 308 L to reach 304 and 304L surface layer.

Approvals & Certificates

DNV-GL TL

Materials

Width	Material	ASTM
X5CrNi18-10	1.4301	304
X2CrNi19-11	1.4306	304L
X5CrNiMo17-12-2	1.4401	316
X2CrNiMo18-14-3	1.4435	316L
X6CrNiTi18-10	1.4541	321
X6CrNiMoTi17-12-2	1.4571	316 Ti
	1.4583	318

Typical Chemical Features of the Welding Wire

Type of Analysis	C	Si	Mn	Cr	Ni
Welding Wire	0.02	0.35	1.75	23.50	13.50

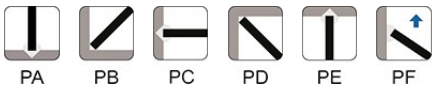
Typical Mechanical Values of Weld Metal

Test Condition	Protection Gas	Yield Strength (N/mm²)	Tensile Strength (N/mm²)	Elongation A5 (%)	Charpy V-Notch Properties (J)	
As welded	I1	550	670	30	-30°C → 90	-196°C → 62

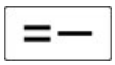
* Chemical compositon and mechanical properties are valid when using shielding gas EN ISO 14175 - I1 (%100 Ar) .

Application Information

Welding Positions



Polarity:



Protection Gas:

I1

Welding Parameters & Efficiency

Diameter x Length (mm)
1.60x1000
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
23103GBKM2	1.60x1000	5 kg	5.30	4	21.40	Cardboard Tube
23103HBKM2	2.00x1000	5 kg	5.30	4	21.40	Cardboard Tube
23103IBKM2	2.40x1000	5 kg	5.30	4	21.40	Cardboard Tube
23103LBKM2	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.