

316 L Tig

CATEGORY GMAW-GTAW Solid wires

TYPE Solid stainless steel filler metal with excellent resistance against general corrosion.

APPLICATIONS The alloy is widely used in the chemical and food-processing industries, as well as in shipbuilding and various types of architectural structure.

CLASSIFICATION

AWS	A 5.9: ER 316L
EN ISO	14343-A: W 19 12 3 L
DIN: W.Nr.	1.4430
DIN	8556: SG X2 CrNiMo 19.12

SUITABLE FOR	1.4583	X102CrNiMoNb 18 12	316Cb	UNS S31640
	1.4435	X2CrNiMo 18 14 3 (TP)	316L	.
	1.4436	X4CrNiMo 17 13 3	-	.
	1.4404	X2CrNiMo 17 12 2 (TP)	316L	UNS S31603
	1.4406	-	316LN	UNS S31653
	1.4408	X 5 CrNiMo 19 11 2	316H	.
	1.4401	X4CrNiMo 17 12 2 (TP)	316	UNS S31600
	1.4571	X6CrNiMo 17 12 2	316 Ti	UNS S31635
	1.4580	X6CrNiMoNb 17 12 3	316Cb	.
	1.4406	X2CrNiMoN 17 12 3 (TP)	316LN	.

APPROVALS CE approved

WELDING POSITIONS:



WELD DEPOSIT ANALYSIS %

C	Cr	Ni	Mo	Mn	Si	P	S
<0.03	18-20	11-14	2.0-3.0	1.0-2.5	0.3-0.65	<0.03	<0.03

TYPICAL MECHANICAL PROPERTIES

Heat Treatment	R _{p0.2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HRc / HV
				+20°C	-40°C	-196°C	
AW	440	620	35	120		55	

AW: as welded

WELDING PARAMETERS / PACKING

D (mm)	Welding Parameters Current (A) DC-	Packing (kg)	
		single	master
1.0 x 1000	20-50	5	25
1.2 x 1000	30-70	5	25
1.6 x 1000	50-80	5	25
2.0 x 1000	70-110	5	25
2.4 x 1000	110-180	5	25

REDRYING TEMPERATURE not required

GAS ACC. EN ISO 14175: I1