

316 L

CATEGORY GMAW-GTAW Solid wires

TYPE Solid stainless steel welding wire (AISI 316)

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: G 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	S	P	Si
0.035	16-18	10-15	2-3	1-2	0.03	0.045	0.75

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

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A) DC+	spool type	kg / spool	kg / pallet
0.8	12-24	55-160	D-200 / BS-300 / Drum	5 / 15 / 250	1000 / 1080 / 1000
1.0	15-28	80-240	D-200 / BS-300 / Drum	5 / 15 / 250	1000 / 1080 / 1000
1.2	15-29	100-300	D-200 / BS-300 / Drum	5 / 15 / 250	1000 / 1080 / 1000

REDRYING TEMPERATURE not required

GAS ACC. EN ISO 14175: M11, M12, M13