

## Stainless solid wire

### Classification

AWS A5.9	: ER316L
EN 12072	: W 19 12 3 L

### General description

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

### Shielding gases (acc. EN 439)

GTAW	I1	Inert gas Ar (100%)
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### Chemical composition (w%), typical, rod

C	Mn	Si	Cr	Ni	Mo
0.010	1.5	0.5	18.5	12	2.7

### Mechanical properties, typical, all weld metal

	Process	Shielding gas	Condition	0.2% Proof strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)	Impact ISO-(VJ)		
							+20°C	-120°C	-196°C
Typical values	GTAW	I1	AW	400	620	35	100	80	40

### Materials to be welded

Steel grades	EN 10088-11-2	EN 102 13-4	W.Nr.	ASTM/ACI A240/A312/A351	UNS
Extra low carbon C < 0.03%	X2CrNiMo17 12 2		1.4404	(TP)316L	S31603
	X2CrNiMo18 14 3		1.4435	(TP)316L	S31603
	X2CrNiMoN 17 11 2		1.4406	(TP)316LN	S31653
	X2CrNiMoN 17 13 3		1.4429		
Medium carbon C > 0,03%	X4 CrNiMo 17 12 2		1.4401	(TP)316	S31600
	X4 CrNiMo 17 13 3		1.4436		
Ti-,Nb stabilized		GX5 CrNiMo 19-11	1.4408	CF 8M	J92900
	X6 CrNiMoTi 17 12 2		1.4571	316 Ti	S31635
	X6 CrNiMoNb 17 12 2		1.4580	316 Cb	S31640
	X6 CrNiNb 18-10		1.4550	(TP)347	S34700
		GX5 CrNiNb 19-10	1.4552	CF-8C	J92710

### Packaging and available sizes

Process	Unit	Diameter (mm)	1.6	2.0	2.4	3.2
GTAW	10 kg tube		X	X	X	X

Other sizes and packaging on request

LNT 316L: rev. EN 20