

## 316 LSi

**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.

**PROPERTIES** 316LSi offers good general corrosion resistance, particularly to corrosion in acid and chlorinated environments. The alloy has a low carbon content which makes it particularly recommended when there is a risk of intergranular corrosion. The higher silicon content improves the welding properties such as wetting and results in a bright seam.

**CLASSIFICATION**

AWS	A 5.9: ER 316LSi
EN ISO	14343-A: G 19 12 3 L Si
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** TUV (12388.00), CE approved



**WELD DEPOSIT ANALYSIS**

C	Mn	Si	Cr	Ni	Mo
<0.02	1.7	0.8	18.8	12.5	2.6

**MECHANICAL PROPERTIES**

Heat Treatment	R <sub>p0,2</sub> (N/mm <sup>2</sup> )	R <sub>m</sub> (N/mm <sup>2</sup> )	A <sub>5</sub> (%)	Impact Energy (J) ISO-V			Hardness HRC / HV
				+20°C	-40°C	-196°C	
AW	440	620	37	120		55	

AW: as welded

**WELDING PARAMETERS / PACKING**

Welding Parameters			Packing		
D (mm)	Voltage (V)	Current (A) DC+	spool type	kg / spool	kg / pallet
0,6	-	-	D-200 / D-300	5 / 15	1000 / 1080
0.8	12-24	55-160	D-200 / K-300 / Drum	5 / 15 / 250	1000 / 1080 / 1000
1,0	15-28	80-240	D-200 / K-300 / Drum	5 / 15 / 250	1000 / 1080 / 1000
1,2	15-29	100-300	D-200 / K-300 / Drum	5 / 15 / 250	1000 / 1080 / 1000
1.6	23-31	150-375	D-200 / K-300 / Drum	5 / 15 / 250	1000 / 1080 / 1000

**REDRYING TEMPERATURE** not required

