

LNT/LNM 316LSi

Stainless solid wire

Classification

AWS A5.9-93	: ER316LSi
EN 12072-99	: W 19 12 3 LSi / G 19 12 3 LSi

General description

Solid wire with extra low carbon for welding stainless CrNiMo-steels
See also LNT/LNM 316L, high silicon for improved wettability

Shielding gases (acc. EN 439)

GTAW	I1	Inert gas Ar (100%)
GMAW	M12	Mixed gas Ar+ >0-5% CO ₂
	M13	Mixed gas Ar+ >0-3% O ₂

Approvals

	ABS	BV	CTL	DB	DNV	GL	LR	TÜV
GTAW	ER 316LSi		+	+	316L MS		+	+
GMAW	ER316LSi	316L	+	+	316L	4571S	316L S	+

Chemical composition (w%), typical, wire / rod

C	Mn	Si	Cr	Ni	Mo
0.010	1.6	0.8	18.5	12.2	2.5

Mechanical properties, typical, all weld metal

	Process	Shielding gas	Condition	0.2% Proof strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%)	Impact ISO-(VJ)		
							+20°C	-120°C	-196°C
Typical values	GTAW	I1	AW	400	620	35	100		40
	GMAW	M12	AW	420	620	39	150	70	45

Materials to be welded

Steel grades	EN 10088-11-2	EN 102 13-4	W.Nr.	ASTM/ACI	UNS
Extra low carbon C < 0.03%	X2CrNiMo17 12 2		1.4404	(TP)316L	S31603
				CF-3M	J92800
	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		
	GX5 CrNiMo 19-11		1.4408	CF 8M	J92900
Ti-, Nb stabilized	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

Packaging

Process	Unit	Sizes (mm)						
		0.8	1.0	1.2	1.6	2.0	2.4	3.2
GTAW	2,5 and 10 kg tube		X	X	X	X	X	X
GMAW	5 kg spool S200	X	X					
	15 kg spool BS300	X	X	X	X			

Other sizes and packaging on request

LNT/LNM 316LSi : rev. EN 15

LINCOLN
ELECTRIC

GMAW/GTAW