

LNT/LNM 309LSi

Stainless solid wire

Classification

AWS A5.9-93	: ER309LSi
EN 12072-99	: W 23 12 L Si / G 23 12 L Si

General description

Solid wire for GMA welding of stainless steel to carbon steel
With 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
GMAW	M13	Mixed gas Ar+ >0-3% O ₂

Approvals

	ABS	BV	CTL	DNV	GL	LR	TÜV
GTAW	ER 309LSi					+	+
GMAW	ER309LSi	309L	+	309	4332S	SS/CMn S	+

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

C	Mn	Si	Cr	Ni	Mo
0.010	1.8	0.8	23.3	13.8	0.14

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-V(J)		
							-20°C	-46°C	-120°C
Typical values	GTAW	I1	AW	400	600	35		65	
	GMAW	M12	AW	430	565	35	96		65

Materials to be welded

Steel grades	EN 10088-1/-2	W.Nr.	ASTM/AISI A240/A312/A351	UNS
Corrosion resistant	X2 CrNiN 18-10	1.4311	(TP)304LN	S30453
Cladsteel	X2 CrNi 19-11	1.4306	(TP)304L	S30403
	X4 CrNi 18-10	1.4301	(TP)304	J92500 S30400

- Dissimilar metals (mild and low alloyed steel to stainless steel)
- Build-up welding on mild and low alloyed steel

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	15 kg spool BS300	X	X	X	X				

Other sizes and packaging on request

LNT/LNM 309LSi: rev. EN 15

LINCOLN
ELECTRIC

GMAW / GTAW