



Product Data Sheet

SUPERMIG 308LSi

SS MIG WELDING WIRE
Stainless and Heat resistant steels

Classification:

AWS A 5.9 : ER 308LSi
EN ISO 14343 : G 19 9 LSi

Description: SUPERMIG 308LSi is an extra low carbon 20 Cr/ 9 Ni stainless steel filler wire suitable for MIG welding of austenitic stainless steels such as 18 Cr /8 Ni type, AISI 301, 302, 304, 304L, 308 and 308L type of steels. Excellent corrosion resistance and good mechanical properties. Ferrite is controlled between 5-10%.Si~0.80 content improves weldability and bead appearance .

SUPERMIG 308LSi is used for welding of 304 and 304L grade stainless steel. The weld metal provides good corrosion resistance to intergranular attack from a range of liquid media. It is used for a wide range of applications including pipe work and plate fabrication, vessel production etc. The low carbon reduces the propensity to intergranular carbide precipitation, which increases the resistance to intergranular corrosion without the use of stabilizers. The increased silicon content results in increased weld pool fluidity to give a smooth deposit appearance . This all – position, quality MIG wire is ideally suited for joining common austenitic stainless steel grades referred to as “18-8” steels. It is specially processed to provide superior feeding and arc stability.

Precision layer winding technologies ensure smooth, virtually trouble-free feeding.

Typical applications includes welding of austenitic stainless steels like AISI 301, 302, 304, 304L, 308 and 308L type generally used in food processing and chemical industries, as well as for pipes, tubes, boilers...

Materials to be welded

Steel Grades	EN 10088-1/-2	EN 102 13-4	W.Nr.	ASTM /ACI A240/A312 /A351	UNS
Extra low carbon (C <0.03%)	X2CrNi19 11		1.4306	(TP)304 L CF-3	S30403 J92500
	X2CrNiN18 10		1.4311	(TP)304LN 302, 304	S30453 S30400
Medium carbon (C >0.03%)	X4CrNi18 10		1.4301 1.4308	(TP)304 CF-8	S30409 J92600
		GX5CrNi19 10			
Ti-, Nb stabilized	X6CrNiTi18 10		1.4541	(TP)321 (TP)321H	S32100 S32109
	X6 CrNiNb 18 10		1.4550 1.4552	(TP)347 CF-8C	S34700 J92710
		GX5 CrNiNb 19 10			

Product Data Sheet

Typical Chemical Composition (%)

C	Mn	Si	Cr	Ni	Mo	Cu	S	P
0.030 max.	1.60 - 2.50	0.65-1.00	19.50 - 22.00	9.00 - 11.00	0.75 max.	0.75 max.	0.03 max.	0.03 max.

Typical All Weld Mechanical Properties

Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation A5 (%)	Impact Energy ISO – V (J)
≥350	≥520	≥35%	≥60

The chemistry and all weld mechanical properties will vary with the type of shielding gas used. Recommended shielding gas is 98% Ar + 2% O₂ or Ar + 2 – 3% Co₂.

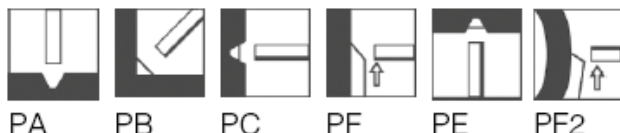
Welding Directions :- MIG welding can be performed as short, spray or pulsed arc. Short arc is preferably used for thin gauges, both for horizontal and positional welding. Spray arc increases the deposition rate. Welding with pulsed arc gives excellent possibilities for a good result in varying plate thicknesses in all positions. The highest flexibility using pulsed arc is achieved with 1.20 mm

Corrosion Resistance :- Corresponding to ER308LSi, i.e. fairly good under severe conditions such as oxidising and cold dilute reducing acids.

Current Conditions:- DC (+)

Storage:- Keep dry and avoid condensation.

Welding position:-



Recommended Welding Data:-

Diameter (mm)		0.8	1.0	1.2
		Operating range		
Ar+1~2%CO ₂	Amp	40~120	80~160	100~210
	Volt	15~20	16~22	17~22
Ar+1~2%O ₂	Amp	160~210	180~280	200~300
	Volt	24~28	24~30	24~30

Packing Data:

Size (mm)	0.60	0.80	0.90	1.00	1.10	1.20	1.60
Weight (kg)	12.50/15.00	12.50/15.00	12.50/15.00	12.50/15.00	12.50/15.00	12.50/15.00	12.50/15.00



Product Data Sheet

SUPERTIG 308LSi

SS TIG WELDING WIRE
Stainless and Heat resistant steels

Classification :

AWS A 5.9 : ER 308 LSi
EN ISO 14343 : W 19 9 LSi

Description: SUPERTIG 308LSi is a 20 Cr / 10 Ni stainless steel TIG welding wire similar in composition to ER 308LSi, suitable for welding of austenitic stainless steels such as 18 Cr/ 8 Ni type, AISI 304, 304L and 308LSi type of steels. Excellent corrosion resistance and good mechanical properties. Ferrite is controlled between 5% to 10 %. Silicon – 0.85 % approx content improves weldability and bead appearance.

Extra low carbon increases inter-granular corrosion resistance. Excellent crack resistance.

Materials to be welded

Steel Grades	EN 10088-1/-2	EN 102 13-4	W.Nr.	ASTM /ACI A240/A312 /A351	UNS
Extra low carbon (C <0.03%)	X2CrNi19 11		1.4306	(TP)304 L CF-3	S30403 J92500
	X2CrNi18 10		1.4311	(TP)304LN 302, 304	S30453 S30400
Medium carbon (C >0.03%)	X4CrNi18 10		1.4301	(TP)304 CF-8	S30409 J92600
		GX5CrNi19 10	1.4308		
Ti-, Nb stabilized	X6CrNiTi18 10		1.4541	(TP)321 (TP)321H	S32100 S32109
	X6 CrNiNb 18 10	GX5 CrNiNb 19 10	1.4550 1.4552	(TP)347 CF-8C	S34700 J92710

Typical Chemical Composition (%)

C	Mn	Si	Cr	Ni	Mo	Cu	S	P
0.03 max	1.50-2.20	0.65-1.00	19.50-22.00	9.00-11.00	0.75 max.	0.75 max.	0.03 max.	0.03 max.

Typical All Weld Mechanical Properties

Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation A5 (%)	Impact Energy ISO-V(J) 20° C
≥ 350	≥ 520	≥ 35	≥ 47

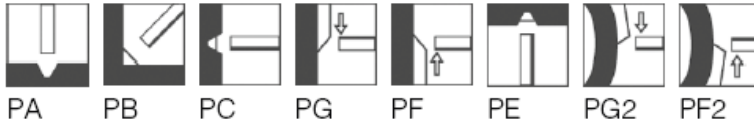
Current Conditions: - DC (-)

Storage: - Keep dry and avoid condensation.



Product Data Sheet

Welding Position:-



Packing Data

Size(mm) DxL	0.80 x 1000	0.90 x 1000	1.00 X1000	1.20 X 1000	1.60 x 1000	2.00 x 1000	2.40 x 1000	3.20 x 1000	4.00 x 1000
Net wt. per tube(kg)	5	5	5	5	5	5	5	5	5
Net wt. per Box(kg)	20	20	20	20	20	20	20	20	20
