

# GM 308L Si

## IDENTIFICATION

GM 308LSi, ER 308LSi

## CLASSIFICATION

AWS/SFA 5.9 ER308LSi

## DESCRIPTION

A solid, smooth wire primarily intended for welding the low carbon, 18% Cr, 10% Ni, type 304, austenitic stainless steels. Deposited weld metal has improved resistance to general corrosion. The deposited weld metal is of radiographic quality.

## CHEMICAL ANALYSIS (RANGE) %

C	Mn	Si	Cr	Ni	Cu	Mo	S	P
0.030 max	1.0 - 2.5	0.65 - 1.0	19.50 - 22.0	9.0 - 11.0	0.50 max	0.50 max	0.030 max	0.030 max

## MECHANICAL PROPERTIES (RANGE)

TS (MPa)	EL (%) (L=4D)	CVN Impact Value	
		Temp	Joules
530 - 650	35 - 45	20°C	100 - 140
		-100°C	40 - 80

## TYPICAL APPLICATIONS

- Suitable for welding normal carbon 304, 304L grades and Nb or Ti stabilized steels type 347 and 321 provided service temperatures are below 400°C.
- Widely used for chemical process plants.

## CORROSION RESISTANCE:

Good resistance to general and intergranular corrosion oxidizing acids. Good resistance to chlorise pitting corrosion.

**FERRITE** : Ferrite no. of undiluted weld metal is in the range 3 to 10.

## SHIELDING GAS

Size (mm)	Gas Used	Welding Current	Gas Flow
0.8, 1.0, 1.2	98% Ar + 2% O <sub>2</sub>	DC (+)	16 - 21 l/min
1.6, 2.0, 2.5, 3.20	Pure Ar	DC (-)	10 - 15 l/min

## PACKING PARAMETERS

Size (mm)	Weight / Spool (kg)
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0.8	12.5
1	12.5
1.2	12.5