



MWM 309LSi



Stainless Steel MIG Welding Wire – AWS A5.9/ASME SFA-A5.9: ER309LSi

Key Benefits

- Excellent welding properties and weld bead appearance
- Added Silicon level for increased weld puddle fluidity and toe wetting.
- Ductile and crack resistant surface
- Very good corrosion resistance

Typical applications

- Welding of wrought and cast steels of 23% Cr and 12% Ni grade.
- Welding of dissimilar steels
- Buffer layers on C-Mn steels

Conformity and Approvals

AWS A5.9:	ER309Si, ER309LSi
ASME SFA-A5.9:	ER309Si, ER309LSi
CWB/CSA W-48-14:	ER309LSi
EN ISO 14343-B:	SS309LSi
ABS:	E309Si, ER309LSi
ISO 14343-2009	SS309LSi

Welding Positions

All

Shielding Gas

97-98% Ar / Balance O₂
Flow rate: 30-50 CFH

Wire Composition as per AWS A5.9/A5.9M ER309LSi

Requirements - AWS ER309LSi Typical Wire Composition	%C	%Mn	%Si	%S	%P
	0.03 max. 0.017	1.0-2.5 1.86	0.65-1.00 0.85	0.03 max. 0.007	0.03 max. 0.026
Requirements - AWS ER309LSi Typical Wire Composition	%Cr	%Ni	%Mo	%Cu	%N ₂
	23.0-25.0 23.26	12.0-11.0 12.75	0.75 max. 0.030	0.75 max. 0.04	- 0.14

Mechanical Properties as required per AWS A5.9/A5.9M ER309LSi

	Yield Strength MPa (ksi)	Tensile Strength MPa (ksi)	Elongation (%)	Impact Energy (J)		FN (WRC-1992)
Typical Results (all weld metal) As Welded	450 (65)	600 (87)	32	+20°C	-110°C	7
				160	90	

Ordering Information

Product Number	Product (AWS Specification)	Dimension mm/inch	Single Pack Weight kg/lb	Box Weight kg/lb
MWM309LSI061	MWM 309LSi (ER 309LSi)	0.6 mm (0.023")	1 kg (2.2 lb)	20 kg (44.0 lb)
MWM309LSI081	MWM 309LSi (ER 309LSi)	0.8 mm (0.030")	1 kg (2.2 lb)	20 kg (44.0 lb)
MWM309LSI091	MWM 309LSi (ER 309LSi)	0.9 mm (0.035")	1 kg (2.2 lb)	20 kg (44.0 lb)
MWM309LSI085	MWM 309LSi (ER 309LSi)	0.8 mm (0.030")	5 kg (11.0 lb)	20 kg (44.0 lb)
MWM309LSI095	MWM 309LSi (ER 309LSi)	0.9 mm (0.035")	5 kg (11.0 lb)	20 kg (44.0 lb)
MWM309LSI0815	MWM 309LSi (ER 309LSi)	0.8 mm (0.030")	15 kg (33.0 lb)	15 kg (33.0 lb)
MWM309LSI0915	MWM 309LSi (ER 309LSi)	0.9 mm (0.035")	15 kg (33.0 lb)	15 kg (33.0 lb)
MWM309LSI1215	MWM 309LSi (ER 309LSi)	1.2 mm (0.045")	15 kg (33.0 lb)	15 kg (33.0 lb)

