

ER309LSi Solid Stainless Steel Mig Wire

Description

309LSi is a stainless steel MIG wire with high silicon levels to improve arc characteristics and improves weld edge wetting weld pool fluidity. 309LSi is suitable for joining stainless chromium-nickel steels and dissimilar metals in a range of applications including overlays and other dissimilar ferrous metals and stainless steel to mild steel applications. 309LSi has a reasonable corrosion resistance. Precision layer winding technologies ensure smooth, trouble-free feeding.

SHIELDING GAS:

98%Argon 2% C02

95%Argon 5% C02

CONFORMANCES:

AWS A5.9: ER309LSi

AS/NZS ISO 14343 B-SS309LSi

ISO 14343-A G 23 12 L Si

TYPICAL APPLICATIONS

ER309LSi is normally used for joints between non alloyed, low alloyed steels or mild steels to 300 and selected 400 series stainless steels where resistance to corrosion is of secondary importance. ER309LSi can be used as a buffer layer before hard facing, as well as a Stainless Steel overlay on mild and carbon steel

WIRE CHEMICAL COMPOSITION wt%

	C	Si	Mn	P	S	Cr	Ni	Mo	Cu
MAX	0.030	1.000	2.500	0.030	0.030	25.00	14.000	0.750	0.750
MIN	-	0.650	1.000	-	-	23.000	12.000	-	-
Typical	0.015	0.790	1.590	0.024	0.001	23.100	13.850	0.080	0.090

TYPICAL MECHANICAL PROPERTIES OF WELD METAL

Yield MPa	Tensile Strength MPa	Elongation %	Absorbed Energy (J)	Test Temp (C)
410	570	40	88	0

WELDING POSITIONS

All Positional

CURRENT RANGE DC+ (For Guidance Only)

Diameter	0.9mm	1.0mm	1.2mm
Current Range (A)	60-220	80-240	110-260
Voltage Range (V)	22-25	23-26	24-32
Gas Flow 98%Ar+2%C02	18-20 L/min	18-20 L/min	18-20 L/min

Pulse parameters: Peak current 300 - 400 A