



Etrichstraße 19-21 A-2542 KOTTINGBRUNN Austria.

MIG AND TIG STAINLESS STEEL WIRES.

Swiss Alloys® 309LSi

SPECIFICATIONS

AWS 5.9

ASME SFA 5.9

EN ISO 14343 EN steel no. 23 12 LSi

CLASSIFICATIONS

AWS ER309LSi

UNS S30988

DESCRIPTION / APPLICATION

Swiss Alloys ER309LSi is of the same chemical composition as ER309L, with higher silicon content to improve the bead appearance and increase welding ease. This filler metal is used for welding of similar alloys in wrought or cast form. Swiss Alloys ER309LHiSi is mostly used for welding dissimilar materials such as mild steel to stainless steel, as well as for a barrier layer in stainless overlays. The weld beads are exceptionally smooth due to good wetting.

Typical Chemical Analysis						
C	Mn	Si	Cr	Ni	S	P
0.03 max	1.0-2.5	0.65-1.00	23.0-25.0	12.0-14.0	0.03 max	0.03 max
Mo	Cu					
0.75 max	0.75 Max					

TYPICAL MECHANICAL PROPERTIES

Tensile strength: 89,900 psi 620 MPa

Yield strength: 60,500 psi 420 MPa

Elongation: 35%

Approvals CE, DB, TÜV

Typical Welding Parameters of Stainless steel wire			
Process	Diameter of Wire	Welding Voltage (V)	Welding Current (A)
TIG	0.80 mm	12 V - 15 V	60 A - 90A
	1.2 mm	13 V - 16 V	80 A - 110 A
	1.6 mm	14 V - 18 V	90 A - 130 A
	2.4 mm	15 V - 20 V	150 A - 220 A
	3.2 mm	15 V - 20 V	150 A - 220 A
MIG	1.0 mm	26 V - 29 V	150 A- 190 A
	1.2 mm	28 V - 32 V	180 A - 220 A
	1.6 mm	29 V - 33 V	200 A - 250 A