

# PRODUCT DATA SHEET

## MIG WIRE - PROWELD - 309LSi/(1.4332)

**Classification:** AWS / ASME – A/ SFA 5.9 ER 309LSi  
BS EN 14343: 2009 - G 23 12 L Si

**Approvals:** TUV, CE Marking

### Typical Applications:

Proweld 309LSi is a high alloyed stainless steel 23 Cr 12 Ni wire primarily used for surfacing of low alloy steels & dissimilar welding between mild steel /ferritic steels to austenitic stainless steels. The high alloy content and higher ferrite content offers a ductile and crack resistant weldment. The higher silicon content gives better arc stability and weld fluidity.

### Wire Composition: (%)

	C	Mn	Si	Cr	Ni	S	P	Mo
min	-	1.0	0.65	23	12	-	-	
max	0.03	2.5	1.00	25	14	0.02	0.03	0.30

### Mechanical properties (Typical as Weld):

Tensile Strength	650 N/mm <sup>2</sup>
Yield Strength	400 N/mm <sup>2</sup>
Elongation A5	35%
Impact energy(20° C)	120J
-196°C	55 J
Hardness	200 BHN

### Ferrite content:

Ferrite Number about 11 – WRC-92

### Welding Parameters:

Diameter (mm/in.)	Current (A)	Voltage (V)
0.80 / 0.030"	100-160	18-22
1.00 / 0.040"	140-200	18-24
1.20 / 0.045"	170-260	20-28
1.60 / 0.060"	220-350	24-36

Welding parameters such as Current, Voltage are just guidelines to users because it depends on application, section thickness of job, design of joints, arc travel speed etc.

### Shielding Gas:

M12 Argon+2% CO<sub>2</sub>.14-20 L/min  
M13 Argon+1-3% O<sub>2</sub>.14-20 L/min

### Corrosion resistance:

Superior to type 308L, when surfacing on mild steel a corrosion resistance equivalent to ASTM 304 is obtained at the first run.

### Packaging Detail:

Diameter : 0.80, 1.00, 1.20 , 1.60 mm

Packing \*\* : 12.5Kg (25 lbs), 15Kg (30 – 33lbs)  
Layer wound plastic spools i.e. SD300, Metallic basket (K300).  
5Kg (10lbs) layer wound plastic spools i.e. SD200.  
1Kg (2lbs) layer wound plastic spools i.e. SD100.  
Drum pack 100 kgs and 250 kgs (0.80, 1.00, 1.20mm)

\*Also available in AWS standard diameters.