

# PRODUCT DATA SHEET

## MIG WIRE - PROWELD - 316LSi/ (1.4430)

**Classification:** AWS / ASME – A/ SFA 5.9 ER 316LSi  
BS EN 14343: 2009 – G 19 12 3 L Si

**Approvals:** TUV, CWB, DB, CE Marking

### Typical Applications:

The typical application of Proweld 316LSi is for welding austenitic stainless steel of type 18 Cr 12 Ni 2.0 Mo or similar molybdenum allotted acid resisting steels. The filler metal is also suitable for welding titanium & niobium stabilized steels such as ASTM 316Ti in cases where the construction is used at temperature not exceeding 400°C. For higher temperatures, a niobium stabilized consumable such as 318Si is recommended. The higher silicon content improves bead appearance, better arc stability, weld metal flow.

### Wire Composition: (%)

	C	Mn	Si	Cr	Ni	S	P	Mo
Min	-	1.0	0.65	18	11	-	-	2
Max	0.03	2.5	1.00	20	14	0.02	0.03	3

### Mechanical properties (Typical as Weld):

Tensile Strength	600 N/mm <sup>2</sup>
Yield Strength	400 N/mm <sup>2</sup>
Elongation A5	40%
Impact energy(20° C)	110 J
-196°C	40J
Hardness	190BHN

### Ferrite content:

Ferrite Number about 8– 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 LPM  
M13 Argon+1-3% O<sub>2</sub>, 14-20 LPM

### Corrosion resistance:

Excellent resistance to corrosion, pitting and intergranular corrosion in general and dilute acidic conditions. The resistance to intergranular corrosion is good in chloride containing environments too. The PRE (Pitting Resistance Equivalent) is about 25.

### 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.