

PRODUCT DATA SHEET

MIG WIRE - PROWELD - 312/ (1.4337)

Classification: AWS / ASME – A/ SFA 5.9 ER 312
BS EN 14343: 2009 – G29 9

Typical Applications:

Proweld 312 is primarily used for welding difficult to weld steels. The deposition is 29 Cr /9 Ni austenitic/ferritic weld metal.

The weld metal exhibits excellent strength, heat and oxidation resistance even with dilution from difficult to weld materials, like tool and die spring steels, free cutting, high temperature steels. Also recommended for dissimilar joints and surfacing.

Wire Composition: (%)

	C	Mn	Si	Cr	Ni	S	P	Mo
min	-	1.0	0.30	28.0	8	-	-	
max	0.15	2.5	0.65	32.0	11	0.02	0.03	0.30

Mechanical properties (Typical as Weld):

Tensile Strength	760N/mm ²
Yield Strength	560 N/mm ²
Elongation A5	25%
Impact energy(20° C)	45J
Hardness	230BHN

Ferrite content:

Ferrite Number about 40– 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% CO₂,14-20 L/min
M13 Argon+1-3% O₂,14-20 L/min

Corrosion resistance:

Good resistance to general corrosion and to moist sulphuric environments.

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.