PRODUCT DATA SHEET

TIG WIRE - PROWELD - 316L/ (1.4430)

Classification: AWS / ASME – A/ SFA 5.9 ER 316L
BS EN 14343: 2009 – W 19.12. 3 L

Description:

The typical application of Proweld 316L 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 318 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	030	18	11	-	-	2
Max	0.03	2.5	0.65	20	14	0.02	0.03	3

Mechanical properties (Typical as Weld):

Tensile Strength	600 N/mm²
Yield Strength	400 N/mm²
Elongation A5	40%
Impact energy(20° C)	110 J
-196°C	40J
Hardness	190BHN

Ferrite content:
Ferrite Number about – WRC-92

Shielding Gas:

I1 Pure Argon 5-10 L/min
M13 Argon+1-3% $O_{2\,5}$, 5-10 L/min

Welding Parameters:

This information will be provided on request.

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 : 0.8,1.0.1.20 ,1.60, 2.0, 2.40, 3.20, 4.0 mm*
Length : 1000 mm (36")

Packing : 5 Kgs in Spiral Tubes/Plastic, then in a master Carton of 25 Kg(5x5)**

* Also available in AWS standard diameters

Marking:

Both ends embossed with grade and diameter for the diameter >=1.60mm.

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