



Product Data Sheet

SUPERMIG 310

SS MIG WELDING WIRE
Stainless and Heat resistant steels

Classification:

AWS A 5.9 : ER 310
EN ISO 14343 : G 25 20

Description: SUPERMIG 310 is a solid MAG welding wire, supplied precision layer wound, depositing a C-25 Chrome, 20 Nickel weld metal suitable for use with Ar + 2% O₂ or Ar + 0.5.....5% Co₂ mixed shielding gases.

SUPERMIG 310 weld metal has high temperature ductility, excellent resistance to oxidation at working temperature <1 100°C. It is used for the welding of 310, 314 austenitic stainless steel pipe, plate and fitting used in the fabrication of furnace and similar application working at elevated temperatures. It is used mainly for heat exchangers and hot water boilers.

Precision layer winding technologies ensure smooth, virtually trouble-free feeding.

Materials to be welded

AISI 310 ; 1.4845(X8CrNi25-21); 1.4841 (X15CrNiSi25-21) ; 1.1828 (X15CRNiSi 20-12)

Typical Chemical Composition (%)

C	Mn	Si	Cr	Ni	Mo	Cu	S	P
0.08-0.15	1.60 - 2.50	0.30- 0.65	25.00 - 28.00	20.00 – 22.50	0.50 max.	0.50 max.	0.015max.	0.03 max.

Typical All Weld Mechanical Properties

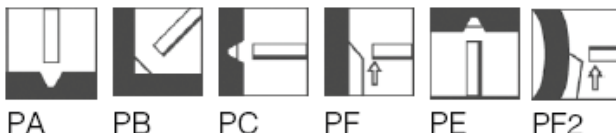
Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation A5 (%)	Impact Energy ISO – V (J) 20° C
≥350 >	_550 >	_30%	≥70

Welding Directions :- MIG welding can be performed as short, spray or pulsed arc. Short arc is preferably used for thin gauges, both for horizontal and positional welding. Spray arc increases the deposition rate. Welding with pulsed arc gives excellent possibilities for a good result in varying plate thicknesses in all positions. The highest flexibility using pulsed arc is achieved with 1.20 mm

Current Conditions:- DC (+)

Storage: - Keep dry and avoid condensation.

Welding position:-





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Recommended Welding Data:-

Diameter (mm)		0.8	1.0	1.2
		Operating range		
Ar+1~2%CO ₂	Amp	40~120	80~160	100~210
	Volt	15~20	16~22	17~22
Ar+1~2%O ₂	Amp	160~210	180~280	200~300
	Volt	24~28	24~30	24~30

Packing Data:

Size (mm)	0.60	0.80	0.9	0 1.0	0 1	.10	1.20	1 .60
Weight (kg)	12.50/15.00	12.50/15.00	12.50/15.00	12.50/15.00	12.50/15.00	12.50/15.00	12.50/15.00	12.50/15.00

Revised on: 23/05/2012



Product Data Sheet

SUPERTIG 310

SS TIG WELDING WIRE
Stainless and Heat resistant steels

Classification :

AWS A 5.9 : ER 310
EN ISO 14343 : W 25 20

Description: SUPERTIG 310 is a stainless TIG rod conforming to ER 310 with 25% Cr and 20% Ni. Suitable for welding steels with similar chemical compositions or dissimilar steels. The weld deposit is fully austenitic. Excellent high temperature corrosion resistance .

Typical Chemical Composition (%)

C	Mn	Si	Cr	Ni	Mo	Cu	S	P
0.08-0.15	1.50-2.20	0.30-0.65	25.00-28.00	20.00-22.50	0.75 max.	0.75 max.	0.03 max.	0.03 max.

Typical All Weld Mechanical Properties

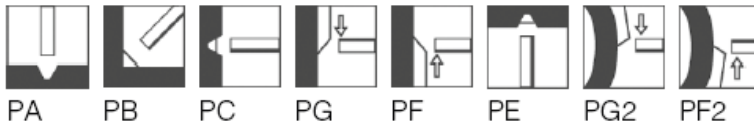
Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation A5 (%)	Impact Energy ISO-V(J) 20° C
≥ 350	≥ 550	≥ 30	≥ 47

Materials: - AISI 310; 1.4845 (X8CrNi25-21); 1.4841 (X15CrNiSi25-21); 1.4828 (X15CrNiSi20-12)

Current Conditions: - DC (-)

Storage: - Keep dry and avoid condensation.

Welding Position:-



Packing Data

Size(mm) DxL	0.80 x 1000	0.90 x 1000	1.00 X1000	1.20 X 1000	1.60 x 1000	2.00 x 1000	2.40 x 1000	3.20 x 1000	4.00 x 1000
Net wt. per tube(kg)	5	5	5	5	5	5	5	5	5
Net wt. per Box(kg)	20	20	20	20	20	20	20	20	20
