

Description

SFA 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.

SFA 310 weld metal has high temperature ductility, excellent resistance to oxidation at working temperature <1100°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)

Classification

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

Typical weld metal 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.	0,03 max.	0,015 max.

All weld metal mechanical properties (typical)

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

Recommended welding data

Operating range		Diameter (mm)		
		0.8	1.0	1.2
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	0.90	1.00	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

Welding positions

