

MIG / TIG 310



MIG/TIG 310 consumables are used primarily for welding similar wrought or cast 25% Cr-20% Ni (310) parent alloys with up to 0.25% carbon. Parent metal and weld metal are fully austenitic. The high alloy content of type 310 gives useful oxidation resistance up to peak temperatures of about 1200°C

for heat shields, furnace parts and ducting. Can be used for mixed welding, dissimilar joints, buffer layers and surfacing, as well as specialised applications requiring low magnetic permeability and for cryogenic installations.

CLASSIFICATIONS

AWS	A5.9	ER310
BS EN	12072	25 20
DIN	8556	SG X12 CrNi 25 20

CHEMICAL ANALYSIS

% Carbon	0.110	% Chromium	26.00
% Manganese	1.800	% Nickel	21.00
% Silicon	0.400	% Molybdenum	0.100
% Sulphur	0.005	% Copper	0.100
% Phosphorus	0.020		

**TYPICAL MECHANICAL PROPERTIES
ALL WELD METAL**

Tensile Strength	540 MPa
0.2% Proof Stress	355 MPa
Elongation on 4d	27%
Impact Energy -196°C	70J
Hardness cap/mid	185HV

Microstructure
Fully austenitic.

PACKING DATA

MIG (DC+)

Diameter (mm)	Current		Item Number	Pack Mass (Kg)
	Amps	Volts		
0.80	120	19	033-051	15
1.20	220	29	033-054	15

TIG (DC-)

Diameter (mm)	Current		Item Number	Pack Mass (Kg)
	Amps	Volts		
1.60	100	12	030-433	5
2.00	100	12	030-434	5
2.40	100	12	030-435	5
3.20	100	12	030-436	5

Suggested gas for welding : Stainshield (MIG), Argon (TIG)

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