

MIG / TIG 904L



MIG/TIG 904L consumables give a fully austenitic, low carbon weld metal with molybdenum and copper, with good resistance to corrosion in sulphuric, phosphoric and other inorganic and organic acids. They are not normally chosen for resistance to corrosion in concentrated nitric acid. For service in severe chloride pitting media, overmatching nickel-base weld metal is recommended. It is the preferred weld metal for some lower alloy austenitics such as Creusot UHB 34L and UHB 734L for

wet process phosphoric acid service. Applications include tanks and process vessels, piping systems, agitators and rotors and cast pumps and valves for use in the fertiliser, phosphoric, sulphuric and acetic acid plants, and in salt and seawater environments. It is also used in some offshore applications, including overlays on mild and low alloy steels.

CLASSIFICATIONS

AWS	A5.9	ER385
BS EN	12072	20 25 5 Cu L
DIN	8556	SG-X2CrNiMoCu 20 25 / 1.4519

CHEMICAL ANALYSIS

% Carbon	0.010	% Chromium	20.00
% Manganese	1.700	% Nickel	25.00
% Silicon	0.300	% Molybdenum	4.500
% Sulphur	0.001	% Copper	1.500
% Phosphorus	0.010		

**TYPICAL MECHANICAL PROPERTIES
ALL WELD METAL**

Tensile Strength	650 MPa
0.2% Proof Stress	490 MPa
Elongation on 4d	35%
Impact Energy 20°C	210J

Microstructure
In the as-welded condition the weld metal microstructure is fully austenitic.

PACKING DATA

MIG (DC+)

Diameter (mm)	Current		Item Number	Pack Mass (Kg)
	Amps	Volts		
1.00	200	26	033-105	15
1.20	230	30	033-106	15
1.60	280	32	033-107	15

TIG (DC-)

Diameter (mm)	Current		Item Number	Pack Mass (Kg)
	Amps	Volts		
1.60	100	12	030-465	5
2.00	100	12	030-466	5
2.40	100	12	030-467	5
3.20	100	12	030-468	5

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

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