

ULTRAMET 904L



Ultramet 904L gives 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 environments. It is also used in some offshore applications, including overlays on mild and low alloy steels.

CLASSIFICATIONS

AWS	A5.4	E385-16
BS EN	1600	E 20 25 5 Cu NL R 52
DIN	8556	E 20 25 5 L Cu R26

CHEMICAL ANALYSIS

% Carbon	0.025	% Nickel	25.00
% Manganese	2.000	% Molybdenum	5.000
% Silicon	0.400	% Copper	1.800
% Sulphur	0.005	% Niobium	0.100
% Phosphorus	0.020	% Nitrogen	0.080
% Chromium	21.00		

**TYPICAL MECHANICAL PROPERTIES
ALL WELD METAL**

Tensile Strength	620 MPa
0.2% Proof Stress	420 MPa
Elongation on 4d	38%
Impact Energy at -196°C	50J

Microstructure

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

PACKING DATA

(DC+ or AC (OCV 70V Min))

Diameter (mm)	Current (A)	Item Number	Canned Pack Mass (Kg)
2.50	60 – 90	078-104	5
3.20	75 – 120	078-106	5
4.00	100 – 155	078-108	5

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For more information contact the Afrox Customer Service Centre,
tel: 0860 020202 or e-mail: customer.service@afrox.boc.com
Website: www.afrox.com

