

SUPERMET 2506Cu



Supermet 2506Cu consumables are designed to match similar super duplex alloys, usually supplied as castings. The addition of copper improves corrosion resistance in sulphuric acid media and also increases strength and wear resistance, but toughness is reduced in comparison to alloys with <1%Cu. The composition is controlled to ensure a minimum Pitting Resistance Equivalent (PRE) of 40 to match the super-duplex alloys and provide excellent resistance to pitting in chloride media. Applications include pumps and valves, corrosion/wear resisting parts, and process equipment for use in offshore oil and gas industries, pulp, paper and textile industries, and chemical and petrochemical plant.

CLASSIFICATIONS

AWS	A5.4	E2553-16
BS EN	1600	E25 9 3 Cu N L R 52
BS	2926	(25.6.2.Cu.R)

CHEMICAL ANALYSIS

% Carbon	0.030	% Nickel	8.000
% Manganese	1.000	% Molybdenum	3.500
% Silicon	0.400	% Copper	1.700
% Sulphur	0.100	% Nitrogen	0.220
% Phosphorous	0.020	% PRE*	41.00
% Chromium	25.50		

**TYPICAL MECHANICAL PROPERTIES
ALL WELD METAL**

Tensile Strength	925 MPa
0.2% Proof Stress	750 MPa
Elongation on 4d	22%
Reduction of Area	25%
Impact Energy at 20°C	40J
Impact Energy at -30°C	25J

Microstructure

In the as-welded, or solution annealed condition, the microstructure is duplex with about 25-60% ferrite.

PACKING DATA

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

Diameter (mm)	Current (A)	Item Number	Canned Pack Mass (Kg)
3.20	75 - 120	078-371	5

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