

**SUPERCORE 2205P**

Supercore 2205P is an all position flux cored wire for welding 22% Cr standard duplex ferritic austenitic stainless steels. Duplex stainless steel pipe, plate, fittings and forgings have an approximate 50:50 microstructure of austenite with a ferrite matrix. This, coupled with general alloying level, confers:

- High strength compared with standard austenitic steels, e.g. type 316L.
- Good general corrosion resistance in a range of environments.



- High resistance to chloride induced stress corrosion cracking (CSCC).
- High resistance to pitting attack in chloride environments, e.g. seawater.

These alloys are finding widening application in the offshore oil/gas, chemical and petrochemical process industries, e.g. pipework systems, flowlines, risers, manifolds etc.

**CLASSIFICATIONS**

AWS	A5.22	E2209T1-4
BS EN	12073	T22 9 3 N L P M 2

**CHEMICAL ANALYSIS**

% Carbon	0.030	% Nickel	9.200
% Manganese	1.200	% Molybdenum	3.100
% Silicon	0.700	% Copper	<0.01
% Sulphur	<0.01	% Nitrogen	0.120
% Phosphorous	0.020	*PRE	35.00
% Chromium	23.00	*PRE (pitting resistance equivalent) = Cr + 3.3Mo + 16N	

**TYPICAL MECHANICAL PROPERTIES  
ALL WELD METAL**

Tensile Strength	800 MPa
0.2% Proof Stress	630 MPa
Elongation on 4d	32%
Impact Energy -20°C	60 J
Impact Energy -50°C	50 J

**Microstructure**

Multipass welds in the as-welded condition contain about 25-50% ferrite depending on dilution and heat input/cooling rate conditions.

**PACKING DATA**

(DC+)

Diameter (mm)	Current (A)		Stickout (mm)	Item Number	Pack Mass (Kg)
	Amps	Volts			
1.20	130 - 250	20 - 34	15 - 20	081-106	15

Suggested gas for FCW welding: Fluxshield

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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

