



SUPERCORE 347

Supercore 347 is recommended to weld titanium and niobium stabilised 18/8 stainless steel types 321 and 347. Also suitable for unstabilised grades such as 304/304L. Service temperatures are typically -100°C to about 400°C. Applications are similar to 308L and include food, brewery, pharmaceutical equipment, architectural and general fabrication, and nuclear engineering. For cryogenic applications requiring >0.38mm charpy lateral expansion at -196°C, use unstabilised weld metal with low carbon and controlled ferrite.

CLASSIFICATIONS

AWS	A5.22	E347T0-4
BS EN	12073	T19 9 Nb R M 3

CHEMICAL ANALYSIS

% Carbon	0.030	% Nickel	10.50
% Manganese	1.200	% Molybdenum	0.100
% Silicon	0.400	% Niobium	0.500
% Sulphur	0.010	% Copper	0.100
% Phosphorous	0.020	% Ferrite	8
% Chromium	19.00		

**TYPICAL MECHANICAL PROPERTIES
ALL WELD METAL**

Tensile Strength	600 MPa
0.2% Proof Stress	435 MPa
Elongation on 4d	47%
Impact Energy 20°C	90 J

Microstructure
Austenite with ferrite in the range 8-20FN. The solid wires tend to have lower ferrite than the MMA and FCW consumables, the ferrite falling in the range 8-15FN for the solid wires.

PACKING DATA

(DC+)

Diameter (mm)	Current (A)		Stickout (mm)	Item Number	Pack Mass (Kg)
	Amps	Volts			
1.20	120 - 280	22 - 34	15 - 20	081-104	12.5

Suggested Shielding Gas: Fluxshield
100% Co₂ can be used but with some loss of cosmetic appearance and increased spatter (For 100% Co₂ increase voltage by 2-3V).

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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

