

SMAW **For High Tensile Steel** **STABLEARC 18**

CLASSIFICATION : AWS A5.1 E7018

JIS Z312 D5016

WELDING POSITIONS :



- Basic Iron Powder Coating
- “Low” Hydrogen Status
- All Position Capabilities Except Vertical Down

Approval	
Lloyds Register Of Shipping	Grade 3,3YH15
American Bureau Of Shipping	Grade 3,3YHH

 DESCRIPTION AND APPLICATIONS

STABLEARC 18 is a smooth running, basic iron powder, low hydrogen electrode offering outstanding performance in all positions (except vertical down) on both AC and DC welding currents. The controlled C-Mn weld deposit chemistry of the STABLEARC 18 gives excellent low temperature toughness at temperature down to -20°C in the as welded and stress relieved conditions. With good operator appeal and low temperature impact properties the STABLEARC 18 will be readily be accepted for use on applications both in the fabrications shop and outside construction sites. Typical applications include the welding of pressure vessels, pipes, heavy structural grids and beams, tanks, earth moving and mining equipment, repair and maintenance.

 RECONDITIONING RECOMMENDATIONS

For the maintenance of the “H₁₀ and H₈” low hydrogen categories. The electrode should be rebake for maximum of 2 hours @ 300°C (570°F) in a vented oven and thereafter use from a hot box set at 100-120°C (210 - 250°F). Cardboard packs of STABLEARC 18 may lose their designated hydrogen status due to moisture re-absorption from the poor storage environments. Where electrodes have been exposed to moisture or where hydrogen control is important, the above procedure are recommended for recondition.

TYPICAL ALL WELD METAL COMPOSITION (Wt%)				
C	Mn	Si	P	S
0.06	1.10	0.5	0.010	0.013

TYPICAL ALL WELD METAL MECHANICAL PROPERTIES*			
YIELD STRESS	TENSILE STRENGTH	ELONGATION	CVN IMPACT VALUES
520 N/mm ²	590 N/mm ²	27%	100J @ 20°C

- * in “as welded” condition.

OPERATIONAL AND PACKAGING DATA				
ELECTRODE SIZE (mm)	ELECTRODE LENGTH (mm)	WELDING CURRENT RANGE * (amps)	PACKAGING (kg)	
			PKT	CTN
2.6	300	60 - 90	5	20
3.2	400	95 - 140	5	20
4.0	400	140 - 190	5	20
5.0	400	180 - 240	5	20

- * Recommended for DC+ or AC (minimum 70 OCV) operation

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