

MANUFACTURERS OF A DIVERSE RANGE OF ADVANCED WELDING CONSUMABLES

SECTION

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WI-0304 DS18 RD-360 Rev. 3, Date 01.08.2011

RD-360	BASIC LOW HYDROGEN ELECTRODE FOR WELDING STRUCTURAL STEELS EITHER ON SITE OR WORKSHOP FABRICATION								DATA SHEET NO. 18	
SPECIFICATION	AWS	A5.1		BS EI	N ISO 2	560-B		JIS	Z 3212	2
CLASSIFICATION	E70)16			E4916				05016	
PRODUCT DESCRIPTION	The design emphasis of the chemically basic flux is engineered to ensure the optimum weld metal properties demanded by the specification are fully met. The basic flux containing the appropriate alloying elements but minimal iron powder, is extruded onto a high purity ferritic core wire and bound with a blend of silicates that ensure both coating strength and a coating resistant to subsequent moisture absorption.									
WELDING FEATURES OF THE ELECTRODE	The chemical nature of the flux together with its controlled coating factor allows the electrode to be used at relatively low amps. This factor together with the fairly fluid but quick freezing slag facilitate vertical up welding including controlled penetration root runs. Overall the arc is very stable, slag detachability is good, fillet welds are slightly convex and metal recovery is some 98% with respect to weight of the core wire.									
APPLICATIONS AND MATERIALS TO BE WELDED	Medium and high tensile carbon-manganese steels with UTS of up to 510N/mm ² max. Typical grades: BS 1449 plate and sheet BS 4360 grades 43A and 43C Lloyds A & D ship steel BS 4360 grade 50B, Lloyds grades AH and DH BS 3059 and BS 3601 grade 320–410 API 5L A-B and X42, BS 4360-50B-50C-50D, BS 1501-151 430-490, BS 3602-410-460. Such steels are used in ship construction, bridge building and pressure vessel work as well as general construction work.									
WELD METAL ANALYSIS COMPOSITION % BY Wt.	MIN	Mn 15 1.6	Si - 0.75 0.35	S - 0.035 0.01	P - 0.035 0.01	Cr - 0.20 0.14	Ni - 0.30 0.03	Mo - 0.30 0.01	V - 0.08 0.01	Fe Bal.
WELD METAL PROPERTIES (ALL WELD METAL)	TYPICAL 0.1 1.0 PROPERTY Tensile strength 0.2% Proof stress Elongation on 4d Reduction of Area (RA) Impact energy -30°C		UNITS N/mm² N/mm² % % J		490 400 22 - 27	0.14	700 660 25 70 100			Bai. IERS
WELDING AMPERAGE AC or DC+	Ø (mm)	2.6	_	.2	4.0		5.0			
	MAX	85	1:	25	170		220			
OTHER DATA	Electrodes that have become damp should be re-dried at 150°C for 1 hour.									
APPROVED BY	LR – Grade 3Y									