RD-460

A VERSATILE RUTILE MEDIUM CELLULOSE-PLUS CONTENT MILD STEEL ELECTRODE FOR ALL POSITIONAL WELDING BUT PARTICULARLY ADVANTAGEOUS FOR FILLET WELDING

DATA SHEET NO. 8

SPECIFICATION	AWS A5.1	BS EN ISO 2560-B	JIS Z 3211
CLASSIFICATION	E6013	E4313	D4313

PRODUCT DESCRIPTION

The design emphasis of the flux is engineered to produce a fluid but quick freezing slag so facilitating all positional welding. The balanced rutile, cellulosic flux containing both alloying and deoxidizing elements is extruded on to a mild steel wire with a blend of silicates that ensures coating strength and stability.

WELDING FEATURES OF THE ELECTRODE

The electrode welds with a smooth stable arc on both AC and DC. Spatter is minimal. Weld seams are smooth, bright and evenly rippled. Initial arc strike and re-strike are instant. For flat and vertical down welding use amperages towards the top end and for vertical up and overhead towards the bottom of range. Slag detachability is excellent and metal recovery is up to 80% with respect to weight of core wire.

APPLICATIONS AND MATERIALS TO BE WELDED

All positional welding but used to particular advantage for fillet welding of the following and related steel specifications:

Mild and medium carbon-manganese steels up to 15 mm thick with a UTS of 500 N/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.

WELD METAL ANALYSIS COMPOSITION % BY Wt.

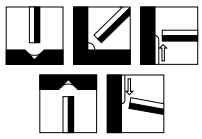
	C	Mn	Si	S	P	Cr	Ni	Mo	V	Fe
MIN	-	-	-	-	-	-	-	-	-	
MAX	0.2	1.2	1.0	-	-	0.2	0.3	0.3	0.08	
TYPICAL	0.09	0.5	0.35	0.02	0.02	0.06	0.04	0.01	0.01	Bal.

WELD METAL PROPERTIES (ALL WELD METAL)

PROPERTY	UNITS	MINIMUM	TYPICAL	OTHERS
Tensile strength	N/mm^2	430	530	
0.2% Proof stress	N/mm^2	330	440	
Elongation on 4d	%	17	29	
Reduction of Area (RA)	%	-	65	
Impact energy 0°C	J	-	72	

WELDING AMPERAGE AC or DC

Ø (mm)	2.0	2.6	3.2	4.0	5.0
MIN	20	60	80	120	160
MAX	50	110	140	190	230



OTHER DATA	Electrodes that have become damp should be re-dried at 110°C for 1 hour.
APPROVED BY	LR; ABS; NK; GL; BKI – Grade 2