RD-168

FLUX COATED ELECTRODE FOR STRUCTURAL STEELS THAT OFFERS SIGNIFICANT ADVANTAGES WHEN THICKER MILD-STEEL SECTIONS ARE INVOLVED

DATA SHEET NO. 9A

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

PRODUCT DESCRIPTION

A balanced rutile, iron powder, and cellulose flux formulation that contains the necessary alloying elements that enables increased metal recovery to be balanced with a quick freezing slag. The flux is extruded onto a mild steel core wire with a blend of silicates that ensures coating strength and stability.

WELDING FEATURES OF THE ELECTRODE

The arc is stable and smooth both in AC and DC. Initial arc strike and re-strike are instant. Slag is easy to removed and the weld is smooth and evenly rippled. As metal recovery is some 120% with respect to core wire weight, welding efficiency is increased.

APPLICATIONS AND MATERIALS TO BE WELDED

All positional welding but used to best advantage on thicker section 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.

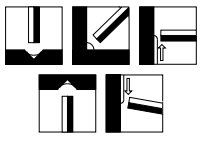
	C	Mn	Si	S	P	Cr	Ni	Mo	V	Fe
MIN	-	-	-	-	-	-	-	-	-	
MAX	0.2	1.2	1.0	-	-	0.2	0.3	0.3	0.08	
TYPICAL	0.05	0.5	0.15	0.01	0.01	0.02	0.03	0.01	0.01	Bal.

WELD METAL PROPERTIES (ALL WELD METAL)

PROPERTY	UNITS	MINIMUM	TYPICAL	OTHERS
Tensile strength	N/mm^2	430	480	
0.2% Proof stress	N/mm^2	330	400	
Elongation on 4d	%	17	30	
Impact energy 0 °C	J	-	100	
Impact energy -20 °C	J	-	80	

WELDING AMPERAGE AC or DC

Ø (mm)	3.2	4.0	5.0
MIN	110	160	190
MAX	160	200	250



OTHER DATA

Electrodes that have become damp should be re-dried at 110°C for 1 hour