


DM-727	A BALANCED ILLMENITE IRON POWDER, FLUX COATED ELECTRODE FOR HIGH EFFICIENCY FILLET WELDING OF RUSTY, SCALED, OR PRIMED STEEL PLATE				DATA SHEET NO. 6						
SPECIFICATION	AWS A5.1		BS EN ISO 2560-B								
CLASSIFICATION	E7027		E4927								
PRODUCT DESCRIPTION	<p>The illmenite provides rutile for arc stability and iron oxide to lower slag viscosity and the flux includes iron powder, plus alloying and deoxidising elements is extruded on to a mild steel core wire. The silicate binder ensures coating strength and stability.</p> <p>Metal recovery is some 180% with respect to core wire weight.</p>										
WELDING FEATURES OF THE ELECTRODE	<p>The arc is stable and smooth and the slag fairly fluid. These characteristics plus a high burn-off rate make the electrodes ideal for horizontal fillet welding and downhand welding.</p> <p>Rusty, scaled or primed plate surfaces are catered for by its efficient deoxidation which ensures defect free weld seams.</p>										
APPLICATIONS AND MATERIALS TO BE WELDED	<p>Fillet and butt welds involving the following materials: Mild and medium carbon-manganese steels up to 15 mm thick with a UTS of 500N/mm² 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.</p>										
WELD METAL ANALYSIS COMPOSITION % BY Wt.		C	Mn	Si	S	P	Cr	Ni	Mo	V	Fe
	MIN	-	-	-	-	-	-	-	-	-	
	MAX	0.15	1.6	0.75	0.035	0.035	0.2	0.3	0.3	0.08	
	TYPICAL	0.09	0.9	0.2	0.02	0.02	0.1	0.05	0.1	0.01	Bal.
WELD METAL PROPERTIES (ALL WELD METAL)	PROPERTY	UNITS	MINIMUM	TYPICAL	OTHERS						
	Tensile strength	N/mm ²	490	545							
	0.2% Proof stress	N/mm ²	400	445							
	Elongation on 4d	%	22	33							
	Reduction of Area (RA)	%	-	65							
	Impact energy -30°C	J	27	82							
WELDING AMPERAGE AC or DC	Ø (mm)	3.2		4.0		5.0					
	MIN	130	170		210						
	MAX	180	230		300						
OTHER DATA	Electrodes that have become damp should be re-dried at 150°C for 1 hour.										
RELATED PRODUCTS	Please contact our Technical Department for detail.										