


GA-27	A BALANCED ILLMENITE IRON POWDER FLUX COATED ELECTRODE FOR HIGH EFFICIENCY FILLET WELDING OF RUSTY, SCALED OR PRIMED STEEL PLATE				DATA SHEET NO. 14						
	SPECIFICATION	AWS A5.1	BS EN ISO 2560-B	JIS Z 3211							
CLASSIFICATION	E6027	E4327	D4327								
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. 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 fillet welds in the fillet welding and flat position 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> <p align="center">UNCONTROLLED</p>										
APPLICATIONS AND MATERIALS TO BE WELDED	<p>Fillet and butt welds involving the following materials:</p> <p>Mild and medium carbon-manganese steels up to 15mm thick with a UTS of 500N/mm² max.</p> <p>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	0.2	1.2	1.0	-	-	0.2	0.3	0.3	0.08	
	TYPICAL	0.1	0.6	0.3	0.02	0.02	0.02	0.05	0.01	0.01	Bal.
WELD METAL PROPERTIES (ALL WELD METAL)	<u>PROPERTY</u>	<u>UNITS</u>	<u>MINIMUM</u>	<u>TYPICAL</u>	<u>OTHERS</u>						
	Tensile strength	N/mm ²	430	545							
	0.2% Proof stress	N/mm ²	330	465							
	Elongation on 4d	%	22	30							
	Reduction of Area (RA)	%	-	70							
	Impact energy -30°C	J	27	70							
WELDING AMPERAGE AC or DC	Ø (mm)	3.2	4.0	5.0							
	MIN	130	180	220							
	MAX	160	200	250							
OTHER DATA	Electrodes that have become damp should be re-dried at 110°C for 1 hour.										
RELATED PRODUCTS	Please contact our Technical Department for detail.										