


HV-600B	LOW HYDROGEN - LOW ALLOY - HIGH EFFICIENCY HARDFACING ELECTRODE FOR BALANCED RESISTANCE TO ABRASION AND IMPACT LOADING				DATA SHEET NO. 114				
	SPECIFICATION	AWS A5.13	DIN 8555	JIS Z 3251					
CLASSIFICATION	EFe3	E6-UM-60-GP	DF3B – 600B						
PRODUCT DESCRIPTION	<p>The design emphasis of the chemically basic flux is engineered to ensure that the weld metal hardness levels demanded by the specification are fully met without detracting from the toughness levels associated with this class of alloy.</p> <p>The basic flux containing the appropriate alloying elements and a balanced addition of iron powder is extruded onto a high purity ferritic core wire using a balance of silicates that ensures both coating strength and resistance to moisture absorption.</p>								
WELDING FEATURES OF THE ELECTRODE	<p>The electrode is suitable for both AC and DC and may be used in all positions except vertical down. Arc stability is good as is slag detachability. Weld seams are smooth, evenly rippled and slightly convex in shape.</p> <p>The metal recovery of the electrode is some 120% with respect to weight of the core wire.</p>								
APPLICATIONS AND MATERIALS TO BE WELDED	<p>On high carbon steels HV-250B should be used as a buffer layer. The weld deposit has good resistance to abrasion, under normal circumstances is crack free, and will withstand a reasonable amount of impact loading. Used to particular advantage for: Bulldozer blades, crusher jaws, bucket lips and teeth involved in earth moving and mineral crushing. Where the main wear is abrasion, but with some impact resulting from rocks and compacted minerals. Under normal circumstances the weld metal is non-machinable.</p>								
WELD METAL ANALYSIS COMPOSITION % BY Wt.		C	Mn	Si	S	P	Cr	Mo	Fe
	MIN	0.3	0.5	-	-	-	4.0	-	
	MAX	1.0	1.5	1.0	0.03	0.03	7.0	1.0	
	TYPICAL	0.5	1.2	0.5	0.02	0.02	4.5	0.7	Bal.
WELD METAL HARDNESS (ALL WELD METAL)	AS WELDED 150°C PRE-HEAT		HRC	HV		Pre-heat and dilution may lower hardness on 1 st two layers but not on subsequent layers.			
	1 st Layer		50	520					
	2 nd Layer		55	600					
	3 rd Layer		58	660					
WELDING AMPERAGE AC or DC+	Ø (mm)	2.6	3.2	4.0	5.0				
	MIN	65	90	140	190				
	MAX	90	130	180	240				
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.								