


<b>HR-3300</b>	<b>RUTILE - HARD FACING ELECTRODE DEPOSITING A    NOMINAL 6Cr-1Mo-0.5Si WELD METAL WITH A    UNIQUE COMBINATION OF ABRASION    AND HEAT RESISTING PROPERTIES</b>				<b>DATA SHEET    NO.    127</b>				
SPECIFICATION	-								
CLASSIFICATION									
PRODUCT DESCRIPTION	The design emphasis of the alloyed weld metal ensures the desired hardness level to the specification is readily achieved as is the deposits maximum resistance to impact loading combined with medium resistance to abrasion. The flux contains the appropriate alloying elements plus iron powder addition and is extruded onto a ferritic wire with a balance of silicates that ensures both coating strength and resistance to moisture absorption.								
WELDING FEATURES OF THE ELECTRODE	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. The metal recovery of the electrode is some 120% with respect to weight of the core wire. The higher than normal silicon promotes weld metal fluidity allowing precise build up of edges.								
APPLICATIONS AND MATERIALS TO BE WELDED	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. The high Cr and Mo levels increase resistance to oxidation at elevated temperatures giving advantages over conventional martensitic types.								
WELD METAL ANALYSIS COMPOSITION % BY Wt.		C	Mn	Si	S	P	Cr	Mo	Fe
	MIN	0.5	-	-	-	-	6.0	0.5	
	MAX	1.5	2.0	1.0	0.02	0.03	9.0	2.0	
	TYPICAL	0.7	1.0	0.5	0.015	0.02	7.0	1.0	Bal.
WELD METAL HARDNESS (ALL WELD METAL)	AS WELDED 150°C INTERPASS		HRC 58 ~ 60	HV 650 ~ 700	Typical hardness assuming at least three layers on mild steel base plate				
Heat input, cooling rate, and dilution will affect hardness in the first two layers but no significant affect in next layers									
WELDING AMPERAGE AC or DC+	Ø (mm)	2.6	3.2	4.0	5.0				
	MIN	80	100	130	180				
	MAX	100	140	190	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.								