

## MANUFACTURERS OF A DIVERSE RANGE OF ADVANCED WELDING CONSUMABLES

SECTION 9

WI-0304 DS116A HV-750, Rev. 1, Date 01.01.2011

HV-750	HARDFACING ELECTRODE DEPOSITING WELD METAL HIGH IN CHROME CARBIDE PROVIDING							ING	DATA SHEET NO.
	EXCELLENT RESISTANCE TO ABRASION							116A	
SPECIFICATION									
CLASSIFICATION									
PRODUCT DESCRIPTION	The design emphasis of the flux is designed to ensure a slag solidification range that allows the chrome carbide particles to be evenly distributed within the austenitic alloy matric, so ensuring complete uniformity of hardness.								
	The chemically basic flux contains the appropriate alloying elements and is bound with a blend of silicates that ensures both coating strength and resistance to moisture absorption.								
WELDING FEATURES	The electrode welds with a smooth stable arc and easily strikes and re-strikes. Weld appearance is bright, almost of polished appearance, smoothly contoured and slag detachability is excellent.								
OF THE ELECTRODE	The ease of re-strike and slag characteristics allow the electrode to be used for special pattern welding, eg: lattice or button type procedures.								
APPLICATIONS AND MATERIALS TO BE WELDED	Suitable for surfacing a wide range of steels including 13Mn types. Because thermal contractional stresses will cause stress relieving cross-cracking, build-ups should be limited to 3 layers, preferably two when restraint is high.								
	The deposit has excellent resistance to abrasion against minerals, sand and sludges which leads to its extensive use in the earth moving, cement, dredging and steel industries.								
	For build-ups on carbon and low alloy steels or 13Mn steel, NSB-307 should be used as a buffer layer.								
WELD METAL ANALYSIS COMPOSITION % BY Wt.		С	Mn	Si	Cr	Мо	Fe		
	MIN :	3.5	1.0	-	25	-			
	MAX 4	4.5	1.6	1.0	35	0.75			
	TYPICAL 4	4.0	1.1	0.7	32	0.15	Bal.		
WELD METAL HARDNESS (ALL WELD METAL)	AS WELDED 150 °C PRE-HEAT		HRC			HV			OTHERS
	1 <sup>st</sup> Layer		48 – 52			480 – 550			
	2 <sup>nd</sup> Layer		54 – 58			580 – 660			
	3 <sup>rd</sup> Layer		56 – 60			620 – 700			
	Actual hardness will be affected on base material composition, number of layers, heat input and welding conditions								
WELDING AMPERAGE AC or DC+	Ø (mm)		3.2			1.0 5.0		0	
	MIN		140		1	180		0	
	MAX		170		2	220 250		0	
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.								