HMN

BASIC FLUX COATED LOW HYDROGEN ELECTRODE DEPOSITING 14% Mn WELD METAL FOR SURFACING WHEN IMPACT ABRASION IS INVOLVED

DATA SHEET NO. 136

SPECIFICATION	AWS A5.13	JIS Z 3251
CLASSIFICATION	EFeMn-B	DFMA -200- B

PRODUCT DESCRIPTION

The design of the electrode is synthetic, ie: a mild steel core wire with the alloying elements contained in the flux. The weld deposit is austenitic and metal recovery is some 135% with respect to weight of the core wire. A blend of silicates is used to bind the flux that ensures both coating strength and resistance to moisture absorption.

WELDING FEATURES OF THE ELECTRODE

The electrode is stable on both AC and DC. Initial arc strike is easy, as is restriking. The weld seams are smooth, bright and convex in shape. Slag is readily detachable.

To prevent micro solidification cracking, interpass temperature should be kept to a minimum and this may be achieved by interpass cooling.

APPLICATIONS AND MATERIALS TO BE WELDED

The electrode may be used to weld Hadfield 13/14% manganese steel or similar, or surfacing mild steel components. As deposited the weld is soft and ductile but under impact loading, it rapidly work hardens and thus resistant to wear by friction and abrasion.

Recommended for rail tracks, crossing parts, crusher rolls, bucket teeth and similar.

WELD METAL ANALYSIS COMPOSITION % BY Wt.

	C	Mn	Si	P	S	Fe
MIN	0.5	12	-	-	-	
MAX	1.0	18	1.3	-	-	
TYPICAL	0.6	16	0.6	0.02	0.02	Bal.

WELD METAL HARDNESS (ALL WELD METAL)

Hardness Valves relate to no pre-heat and minimum interpass temperature.

H.V.200 (as welded) depending on application.

The weld metal can work harden to H.V.510

WELDING AMPERE AC or DC+

Ø (mm)	3.2	4.0	5.0
MIN	90	140	190
MAX	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.