



WB4212E M.M.A. WELDING ELECTRODE

Classifications	AWS A5.4-92 : E410NiMo-25		BSEN1600-97:E13 4 B 6 3							
Product Description	Medium coated, mild steel core wire, basic electrode with a metal powder addition to the coating. Having exceptional deslag and arc stability, this electrode produces a recovery of ~ 140%.									
Applications	Suitable for the welding of high strength Martensitic stainless steels having better resistance to corrosion, hydro-cavitation, sulphide-induced S.C.C. and good sub-zero toughness compared with standard 12%Cr steels. Developed primary for CA-6NM castings. Additional material grades: - BS3100 425C11, ASTM F6NM-CA6NM, DIN 14351 1.4313 G-X5CrNi 13 4 & AFNOR Z6 CND 1304-M. Components: - Valve bodies, compressor cones, impellers and high pressure pipe in power generation.									
All-Weld Metal Composition (Weight %)		C	Mn	Si	S	P	Mo	Cr	Ni	Cu
	min.	0.03	0.50	0.30	-	-	0.4	11.0	4.0	-
	max.	0.06	1.00	0.90	0.020	0.025	0.7	12.5	5.0	0.050
Typical All-Weld Metal Mechanical Properties	Ultimate Tensile Strength		N/mm ²		910					
	Yield Stress/0.2% Proof Stress		N/mm ²		783					
	Elongation on 5D		%		21					
	Impact Energy CV @ +20°C		Joules		48					
	stress relieved @ 605°C / 1Hr									
	Hardness		HV10		265					

Electrode Dia (mm)	1.6mm	2.0mm	2.5mm	3.2mm	4.0mm	5.0mm	6.0mm
Electrode Length (mm)	-	-	350	350	350	350	-
Current Range (Amps)	min.	-	70	90	120	160	-
	max.	-	110	140	180	220	-
Packaging Information							
Kg Per Packet	-	-	5	5	5	5	-
Approx. Pieces Per Kg	-	-	36	17	11	7	-
Storage and Re-baking	<p>Storage It is recommended that the WB range of electrodes is stored in a dry heated store at a minimum temperature of 18°C, and a maximum relative humidity of 60%. To avoid damage to the coatings no more than 6 cartons should be staked on top of another.</p> <p>Re-drying Re-dry @ 350°C for 2 hours and then transfer to holding oven and hold @ 100 - 200°C, or 50-100°C in heated quiver.</p>						

Current Conditions AC (OCV70) /DC + and Welding Positions

