


<b>NCM-625</b>	<b>A CHEMICALLY BASIC FLUX COATED MMA ELECTRODE DEPOSITING A NICKEL BASED ALLOY HIGH IN BOTH CHROMIUM AND MOLYBDENUM</b>			<b>DATA SHEET NO. 90</b>								
	SPECIFICATION	AWS A5.11	BS EN ISO 14172	JIS Z 3224								
CLASSIFICATION	ENiCrMo-3	E Ni 6625	DNiCrMo-3									
PRODUCT DESCRIPTION	<p>The chemically basic flux is extruded onto a high purity nickel chromium core wire. The flux contains the remaining alloying elements together with alloys for deoxidation and grain refinement.</p> <p>The blend of silicates used during electrode production ensure both coating strength and resistance to subsequent moisture absorption.</p>											
WELDING FEATURES OF THE ELECTRODE	<p>The electrode is suitable for use on both AC and DC+ and welds with great arc stability and thus control of the molten weld pool. Slag detachability is good.</p> <p>The weld beads are bright and evenly rippled with fillet welds slightly convex.</p> <p>Strike and re-strike should be made with the established back step technique.</p>											
APPLICATIONS AND MATERIALS TO BE WELDED	<p>Welding the following materials: ASTM / ASME UNS N06625 A494 Cu 6Mo cast.</p> <p>Proprietary Alloys: INCONEL 625 (Inco) NICROFER 6020h Mo, 6022H Mo (VDM).</p> <p>May also be used for superaustenitic alloys such as: AVESTA 254SMo, Alloy 28, Alloy 825, 904L and similar.</p> <p>Also for 9% Ni cryogenic steels and dissimilar welds.</p>											
WELD METAL ANALYSIS COMPOSITION % BY Wt.	C	Mn	Si	S	P	Cr	Ni	Mo	Nb	Fe	Cu	Co
MIN	-	-	-	-	-	20	55	8.0	3.15	-	-	-
MAX	0.1	1.0	0.75	0.02	0.03	23	-	10	4.15	7.0	0.5	0.12
TYPICAL	0.04	0.7	0.6	0.01	0.01	22	58	9.0	3.5	5.0	0.03	0.04
WELD METAL PROPERTIES (ALL WELD METAL)	PROPERTY		UNITS	MINIMUM	TYPICAL	OTHERS						
	Tensile strength		N/mm <sup>2</sup>	760	820	HV AS WELDED						
	0.2% Proof stress		N/mm <sup>2</sup>	-	490	250						
	Elongation on 4d		%	30	35	HV WORK HARDENED						
	Reduction of Area (RA)		%	-	32	450						
Impact energy -196 °C		J	-	30								
WELDING AMPERAGE AC or DC+	Ø (mm)	3.2	4.0	5.0								
	MIN	90	130	170								
	MAX	130	180	200								
OTHER DATA	Electrodes that have become damp should be re-dried at 180 °C for 1 hour.											
RELATED PRODUCTS	Please contact our Technical Department for detail.											