


NCM-30	A CHEMICALLY BASIC FLUX COATED MMA ELECTRODE DEPOSITING A NICKEL BASED ALLOY HIGH IN BOTH CHROMIUM AND MOLYBDENUM				DATA SHEET NO. 94									
SPECIFICATION	AWS A5.11			BS EN ISO 14172										
CLASSIFICATION	ENiCrMo-11			E Ni 6030										
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>Typical specifications for the NiCrMo alloys to be welded include: ASTM B581, B582, B619, B622 and B626 all of which have the UNS N06030. Proprietary alloys : Hastelloy G-30 (Haynes International, Inc.)</p> <p>They are also used for the welding of steel clad with these alloys and for the dissimilar welds between NiCrMo alloys and a wide range of steels including stainless types.</p>													
WELD METAL ANALYSIS COMPOSITION % BY Wt.		C	Mn	Si	S	P	Cr	Ni	Mo	Nb	W	Cu	Co	Fe
MIN		-	-	-	-	-	28	-	4.0	0.3	1.5	1.0	-	13
MAX		0.03	1.5	1.0	0.02	0.04	31.5	Bal	6.0	1.5	4.0	2.4	5.0	17
TYPICAL		0.02	1.1	0.4	0.01	0.02	30	42	5.0	1.0	2.0	1.2	0.03	15
WELD METAL PROPERTIES (ALL WELD METAL)	PROPERTY	UNITS	MINIMUM	TYPICAL	OTHERS									
	Tensile strength	N/mm ²	585	650										
	0.2% Proof stress	N/mm ²	-	480										
	Elongation on 4d	%	25	35										
	Reduction of Area (RA)	%	-	-										
	Impact energy -196 °C	J	-	40										
WELDING AMPERAGE AC or DC+	Ø (mm)	2.6	3.2	4.0	5.0									
MIN		60	90	130	170									
MAX		100	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.													