


NCO	BASIC FLUX COATED ELECTRODE DEPOSITING A NICKEL BASED ALLOY WITH A HIGH CHROME CONTENT AND LOWER BUT SIGNIFICANT LEVELS OF OTHER SPECIAL ELEMENTS				DATA SHEET NO. 87							
	SPECIFICATION	AWS A5.11	BS EN ISO 14172	JIS Z 3224								
CLASSIFICATION	ENiCrFe-2	E Ni 6092	DNiCrFe-2									
PRODUCT DESCRIPTION	<p>The chemically basic flux is extruded onto a fully alloyed core wire with respect to nickel and chromium.</p> <p>The flux also contains alloys for deoxidation and grain refinement and 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 will weld on AC but is used to best advantage on DC+. The arc is stable and forceful and should be used with short arc technique.</p> <p>The fluid slag lends itself to positional welding. The slag, under most circumstances, is easily detachable.</p> <p>The weld appearance is bright and fillet welds are convex.</p>											
APPLICATIONS AND MATERIALS TO BE WELDED	<p>For welding the following materials to withstand service temperature up to 900°C: INCONEL 600 INCOLOY 800 INCOLOY DS (trade names - special metals).</p> <p>May also be used to weld semi-cryogenic steels containing 3% - 5% nickel in service at temperature down to -110°C.</p> <p>The composition of the weld metal does not match the specification of any proprietary brand of high nickel material but it is closely related to INCONEL 600.</p>											
WELD METAL ANALYSIS COMPOSITION % BY Wt.		C	Mn	Si	S	P	Cr	Ni	Mo	Nb	Fe	Cu
	MIN	-	1.0	-	-	-	13	62	0.5	0.5	-	-
	MAX	0.1	3.5	0.75	0.02	0.03	17	-	2.5	3.0	12	0.5
	TYPICAL	0.04	2.8	0.3	0.01	0.02	16	69	2.3	1.0	10	0.1
WELD METAL PROPERTIES (ALL WELD METAL)	PROPERTY		UNITS		MINIMUM		TYPICAL		OTHERS			
	Tensile strength		N/mm ²		550		626		HV 200 – 210			
	0.2% Proof stress		N/mm ²		-		420					
	Elongation on 4d		%		30		41					
	Reduction of Area (RA)		%		-		40					
Impact energy -196 °C		J		-		80						
WELDING AMPERAGE AC or DC+	Ø (mm)	2.6		3.2		4.0						
	MIN	50		80		120						
	MAX	90		130		170						
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.											