


NSB-347	FOR WELDING STABILISED AUSTENITIC STAINLESSS STEELS CONTAINING A NOMINAL 19 Cr and 10Ni					DATA SHEET NO. 76						
	SPECIFICATION	AWS A5.4		BS EN 1600		JIS Z 3221						
CLASSIFICATION	E347-16		E 19 9 Nb R		D347-16							
PRODUCT DESCRIPTION	<p>A metallurgically advanced rutile based flux formulated with balanced additions of chemically basic, amphoteric and acid minerals, together with small alloy additions to compensate for arc losses.</p> <p>The flux is concentrically extruded onto a fully alloyed core wire and bound by a blend of silicates that assures both coating strength and resistance to subsequent moisture absorption.</p>											
WELDING FEATURES OF THE ELECTRODE	<p>This unique flux formulation ensures excellent arc stability, ease of initial arc strike and re-strike minimal spatter on AC and virtually none on DC+. The resultant weld seams are smooth, evenly rippled and free from undercut while slag detachability is excellent. Metal recovery is some 103% with respect to core wire weight.</p>											
APPLICATIONS AND MATERIALS TO BE WELDED	<p>Applications for the electrode are to be found in the Chemical, Petro-Chemical and Cryogenic Processing and Storage Industries as well as the Food, Brewery and Pharmaceutical Industries using the following materials:</p> <p>ASTM-ASME 321 347 CF8C (cast) UNS S32100 S34700</p> <p>NSB-347 is designed to weld Nb and Ti Stabilised Austenitic Stainless Steels at service temperatures between 100°C and 400°C.</p>											
WELD METAL ANALYSIS COMPOSITION % BY Wt.		C	Mn	Si	S	P	Cr	Ni	Mo	Nb (+Ta)	Fe	FN
	MIN	-	0.5	-	-	-	18	9.0	-	8xC		4
	MAX	0.08	2.5	1.0	0.03	0.04	21	11	0.75	1.0		12
	TYPICAL	0.02	1.6	0.7	0.01	0.02	19.5	10.0	0.15	0.8	Bal.	7
WELD METAL PROPERTIES (ALL WELD METAL)	PROPERTY		UNITS		MINIMUM		TYPICAL		OTHERS			
	Tensile strength		N/mm ²		520		620		H.V. 215			
	0.2% Proof stress		N/mm ²		-		510					
	Elongation on 4d		%		30		40					
	Reduction of Area (RA)		%		-		-					
	Impact energy 20°C		J		-		75					
WELDING AMPERAGE AC or DC+	Ø (mm)	2.0	2.6	3.2	4.0	5.0						
	MIN	35	65	80	120	160						
	MAX	80	100	125	170	210						
OTHER DATA	Electrodes that have become damp should be re-dried at 150°C for 1hour.											
RELATED PRODUCTS	Please contact our Technical Department for detail.											