

<b>NSB-308</b>	FOR WELDING AUSTENITIC STAINLESS STEELS CONTAINING A NOMINAL 19Cr and 10Ni						<b>DATA SHEET NO. 60</b>																																												
	SPECIFICATION	AWS A5.4			BS EN 1600			JIS Z 3221																																											
CLASSIFICATION	E308-16			E 19 9 R			D308-16																																												
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> <table border="0"> <tr> <td>ASTM</td> <td>304</td> <td>CF3</td> <td>CF8</td> <td colspan="9"></td> </tr> <tr> <td>UNS</td> <td>S30403</td> <td>S30400</td> <td>S30453</td> <td colspan="9"></td> </tr> <tr> <td>Plus ASTM</td> <td colspan="3">301, 302 and 303</td> <td colspan="9"></td> </tr> </table>												ASTM	304	CF3	CF8										UNS	S30403	S30400	S30453										Plus ASTM	301, 302 and 303											
ASTM	304	CF3	CF8																																																
UNS	S30403	S30400	S30453																																																
Plus ASTM	301, 302 and 303																																																		
WELD METAL ANALYSIS COMPOSITION % BY Wt.		C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Fe	FN																																							
	MIN	-	0.5	-	-	-	18.0	9.0	-	-		3.0																																							
	MAX	0.08	2.5	1.0	0.03	0.04	21.0	11.0	0.75	0.75		5.0																																							
	TYPICAL	0.05	1.3	0.6	0.01	0.03	19.0	10.5	0.20	0.34	Bal.	4.0																																							
WELD METAL PROPERTIES (ALL WELD METAL)	<u>PROPERTY</u>		<u>UNITS</u>		<u>MINIMUM</u>		<u>TYPICAL</u>		<u>OTHERS</u>																																										
	Tensile strength		N/mm <sup>2</sup>		550		600																																												
	0.2% Proof stress		N/mm <sup>2</sup>		-		400																																												
	Elongation on 4d		%		35		45																																												
	Reduction of Area (RA)		%		-		43																																												
Impact energy 20 °C		J		-		80																																													
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 1 hour.																																																		
RELATED PRODUCTS	Please contact our Technical Department for detail.																																																		