


NSD-308	FOR WELDING AUSTENITIC STAINLESS STEELS CONTAINING A NOMINAL 19Cr AND 10Ni					DATA SHEET NO. 59																									
SPECIFICATION	AWS A5.4		BS EN ISO 3581-A		JIS Z 3221																										
CLASSIFICATION	E308-15		E 19 9 B		D308-15																										
PRODUCT DESCRIPTION	<p>A chemically basic flux with a low level of silicious 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>Suitable for use on DC+ only the arc is very forceful but the nature of the molten slag allows easy vertical up and overhead welding.</p> <p>Ideal for site welding as the extra shielding gas from the basic minerals ensures safety against porosity, even in windy conditions.</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" data-bbox="448 1122 1029 1245"> <tr> <td>ASTM</td> <td>304</td> <td>CF3</td> <td>CF8</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>UNS</td> <td>S30400</td> <td>S30453</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Plus ASTM</td> <td colspan="3">301, 302, and 303</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <div style="border: 2px solid red; padding: 5px; display: inline-block; color: red; font-weight: bold; margin-left: 20px;">UNCONTROLLED</div>							ASTM	304	CF3	CF8					UNS	S30400	S30453						Plus ASTM	301, 302, and 303						
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WELD METAL ANALYSIS COMPOSITION % BY Wt.		C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Fe	FN																			
	MIN	-	0.5	-	-	-	18	9.0	-	-		3																			
	MAX	0.08	2.5	1.0	0.03	0.04	21	11	0.75	0.75		10																			
	TYPICAL	0.04	1.0	0.6	0.01	0.02	19	10.5	0.10	0.2	Bal.	6																			
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 ²	550	600																											
	0.2% Proof stress	N/mm ²	-	400																											
	Elongation on 4d	%	30	45																											
	Reduction of Area (RA)	%	-	43																											
	Impact energy -196 °C	J	-	40																											
WELDING AMPERAGE DC+	Ø (mm)	2.0	2.6	3.2	4.0	5.0																									
	MIN	35	65	80	120	170																									
	MAX	80	100	125	170	250																									
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.																														