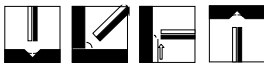


<b>NSB-309L</b>	<b>FOR WELDING LOW CARBON AUSTENITIC STAINLESS STEELS CONTAINING A NOMINAL 23Cr-12Ni USED FOR DISSIMILAR WELDS BETWEEN STAINLESS AND C-Mn STEELS</b>					<b>DATA SHEET NO. 65</b>						
SPECIFICATION	AWS A5.4	BS EN 1600			JIS Z 3221							
CLASSIFICATION	E309L-16	E 23 12 L R			D309L-16							
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.</p> <p>Transition welds between stainless steel and ferritic steel welding clad plate or as a buffer layer on ferritic steel before completing with a more conventional low carbon austenitic stainless steel, such as 304L.</p>											
WELD METAL ANALYSIS COMPOSITION % BY Wt.		C	Mn	Si	S	P	Cr	Ni	Mo	Cu	Fe	FN
	MIN	-	0.5	-	-	-	22	12	-	-		8
	MAX	0.04	2.5	1.0	0.03	0.04	25	14	0.75	0.75		20
	TYPICAL	0.02	1.4	0.8	0.01	0.02	24	13	0.10	0.25	Bal.	15
WELD METAL PROPERTIES (ALL WELD METAL)	PROPERTY		UNITS		MINIMUM		TYPICAL		OTHERS			
	Tensile strength		N/mm <sup>2</sup>		520		570					
	0.2% Proof stress		N/mm <sup>2</sup>		-		500		H.V. 220			
	Elongation on 4d		%		30		42					
	Reduction of Area (RA)		%		-		50					
	Impact energy 20°C		J		-		50					
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.											