NSN-308

FOR WELDING AUSTENITIC STAINLESS STEELS CONTAINING A NOMINAL 19Cr and 10Ni

DATA SHEET NO. 60

SPECIFICATION	AWS A5.4	EN ISO 3581-A	JIS Z 3221
CLASSIFICATION	E308-16	E 19 9 R	D308-16

PRODUCT DESCRIPTION

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.

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.

WELDING FEATURES OF THE ELECTRODE

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.

APPLICATIONS AND MATERIALS TO BE WELDED

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:

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	9.0	-	-		3
Max.	0.08	2.5	1.0	0.03	0.04	21	11	0.75	0.75		10
Typical	0.05	1.3	0.6	0.01	0.03	19	10.5	0.20	0.34	Bal.	6

WELD METAL PROPERTIES (ALL WELD METAL)

PROPERTY	UNITS	MINIMUM	TYPICAL	OTHERS
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 20 °C	J	-	80	

WELDING AMPERAGE AC or DC+

Ø x Length (mm)	2.0 x 300	2.6 x 300	3.2 x 350	4.0 x 350	5.0 x 350
Min.	40	60	75	120	160
Max.	60	90	125	170	220

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.