

FL 838

CATEGORY SAW Submerged arc

TYPE Agglomerated flux for SAW welding stainless steels and Nickel based alloys.

APPLICATIONS Vessels, tanks, boilers, steam turbines, shafts, valves, cladding steel rollers with stainless steel and Nickel based alloys

PROPERTIES Excellent welding properties with stainless steel wires and nickel alloys with neutral action on weld metal chemistry. This basic flux is also preferred for use with niobium stabilized welding wires that usually creates problems by leaving slag residues on the weld seam.

Basicity: About 2,0 (according to boniszewski)
Current: DC+ by preference upto 900 Ampere (1 wire)
Grain size: Acc. DIN EN 760: 2-16

CLASSIFICATION EN ISO 14174: SA AF 2 0 64(4)DC H5
760: SA AF 2 DC

SUITABLE FOR FL 838 can be used for a weight range of wire types such as: stainless steel, and nickel based wires ranging from :308L, 316L, 347, 317L, Duplex 2209, Super Duplex 2507 and 2594, 1.4410, 9% Nickel steels, Alloy 625, and practically all other simmlar grades.

APPROVALS CE approved

WELDING POSITIONS:



ANALYSIS ACCORDING EN ISO 15792-1:

With wire type	C	Si	Mn	Cr	Ni	Mo	Nb	N	Fe	Cu
SA 308L	<0.03	0,4-0,7	1,0-1,5	18,5-20,0	9,0-10,0					
SA 2209	<0.03	0,4-0,7	1,2-1,7	21,5-23,5	8,0-9,0	2,8-3,2		0,18		0,1-0,2
SA 2594	<0.03	0,4-0,7	0,3-0,6	24,0-26,0	9,0-10,0	3,5-4,5		0,25		0,1-0,2
SA 317L	<0.03	0,4-0,7	1,4-2,4	18,5-20,5	13,5-15,0	3,5-4,0		<0,06		
SA Nicro 625	<0.035	0,3-0,6	0,6-1,2	20,0-22,0	Rem	8,5-9,5	3,0-3,5		0,3	

MECHANICAL PROPERTIES

AW with wire type	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HRC / HV
				20°C	-60°C	-196°C	
SA 308L	>400	>580	>30	>90		>40	
SA 2209	>570	>750	>25	>100	>60		
SA 2594	>680	>870	>25	>90	>40		
SA 317L	>360	>520	>30	>70	>45	>40	
SA Nicro 625	>450	>700	>30	>65	>45	>28	

AW: as welded

WELDING PARAMETERS

Welding Parameters			
D (mm)	Voltage (V)	Current (A)	Speed cm/min
2.4	29-33	350-450	35-60
3.2	29-33	400-600	35-60
4.0	30-36	500-850	35-60

REDRYING TEMPERATURE 250-350°C / 1-2hr (if needed)

PACKING

15 kg PTFE perfectly sealed bags or 25 kg metallic buckets with a gasket seal ring.
