

FL 880

CATEGORY	SAW Submerged arc
TYPE	Fused 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 fused 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 1.3 (according to boniszewski) Current: DC by preference upto 900 Ampere (1 wire) Grain size: Acc. DIN EN 760: 1-16

CLASSIFICATION	EN ISO 14174: SF CS 2 5742 DC 14174: SF CS 1 63 DC
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SUITABLE FOR	FL 880 can be used for a weight range of applications: black and white joints as steel to stainless steel, creep resistant steels, stainless and nickel based wires ranging from : AISI 410, 410 NiMo, 308L, 316L, 347, 309L, 309LNb, Duplex 2209, Alloy 625, Alloy C-276 and practically all other similar grades. Excellent results are also obtained by using FL 880 with S2 Mo, SA CrMo5, P91/92 and Stellite (Cobalt based) type of wires. Wire diameter for NiCrMo alloys should be limited till 2,0 mm.
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APPROVALS	CE approved
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WELDING POSITIONS:



ANALYSIS ACCORDING EN ISO 15792-1:

With wire type	C	Si	Mn	Cr	Ni	Mo	Nb	N	V	W
SA 308L	<0.03	<1.0	<1.6	18.5-20.5	9-11					
SA 347	<0.06	<1.0	<1.6	18.5-20.5	9-11		12x%C			
SA 316L	<0.03	<1.0	<1.6	17.5-19.5	11-14	>2.5				
SA 318	<0.06	<1.0	<1.6	17.5-19.5	12-14		12x%C			
SA 309L	<0.03	<1.0	<1.6	22-24.5	12-14					
SA 2209	<0.03	<1.0	<1.6	20.5-23.5		>2.5		<0.2		
S2 Mo	<0.08	<0.5	<1.0			0.5				
SA CrMo5	<0.08	<0.7	<0.6	5.5		0.6				
SA CrMo9	<0.15	<0.8	<1.0	8-10		>1.2			<0.3	
SA CrMoW12	<0.2	<0.6	<1.0	11		1.0			0.3	0.5
SA Nicro 625	<0.04	<0.6	<0.5	20-22.5	>58	8-10				
SA Alloy 276	<0.025	<0.4	<1.0	14.5-16	>50	15-17				4

MECHANICAL PROPERTIES

AW with wire	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	>340	>540	>30	>70		>40	
SA 347	>360	>570	>35	>80		>50	
SA 2209	>550	>750	>25	>80	>40		
SA Nicro 625	>440	>740	>35	>80		>60	

AW: as welded

WELDING PARAMETERS

Welding Parameters

D (mm)	Voltage (V)	Current (A)	Speed cm/min
2.4	29-33	300-400	35-60
3.2	29-33	350-500	35-60
4.0	30-36	400-600	35-60

REDRYING TEMPERATURE 150-250°C / 1-2hr (usually not required)

PACKING 15 kg PTFE perfectly sealed bags
