

FL 8111

CATEGORY SAW Submerged arc

TYPE Fluoride basic agglomerated flux for stainless steel SAW welding.

APPLICATIONS Sub arc flux suitable for a wide range of applications in offshore and general steelwork, cladding valves, shafts, tanks, steel mill rollers etc.

PROPERTIES The grain size and the composition of this flux is chosen to offer best possible performance with stainless steel wires as listed below. FL 8111 contains silicate, carbonate, metal oxide, fluoride, iron alloy and pure Fe. Special chosen procedures as drying at low temperature, and sintering with high temperature making this flux unique. It adopts DC, reversed polarity and DC+. FL 8111 can be used with flux cored and solid wires by adapting parameters only and offers a steady electrical arc, excellent slag-removal, high welding speed with a smooth surface without residues crack of air holes.

Basicity: 1.5 (according to boniszewski)
Current: DC- and DC+
Grain size: 2.0-0.28mm (10-60 meshes).

CLASSIFICATION EN ISO 14174: SA FB 1 65 AC H5

SUITABLE FOR Submerged arc welding with stainless steel wires, AISI 410, 410NiMo, 308L, 316L, 2209 duplex, 347, 309L, 309LMo, 308H, super duplex, zeron 100, SAF 2507

WELDING POSITIONS:



ALL WELD METAL ANALYSIS (%)

With wire type	C	Mn	Si	Cr	Ni	Mo	Cu	Nb	N
SA 308L	0.025	1.6	0.7	21	10.0				
SA 308H	0.05	1.6	0.75	19.10	9.59				
SA 309Mo	0.08	1.56	0.8	22.5	11.6	2.1			
SA 316L	0.025	1.6	0.6	19.8	12.6	2.7			
SA 347L	0.02	1.4	0.7	20.5	9.7			0.60	
SA 2594	0.03	0.7	0.6	25	9.2	3.8	1.7		0.23
SA 410NiMoN	0.19	1.8	0.9	12.8	3.9				0.07
SA 420	0.28	0.6	0.45	13.2					
SA 430	0.04	0.7	0.55	17.2					

For Niobium containing wires and thin stainless steel sheets slag residues are hard to remove, FL 880 fused flux is recommended instead.

NOMINAL FLUX ANALYSIS

SiO ₂ +TiO ₂ +Al ₂ O ₃	CaO+MgO	CaF ₂	S	P
45-60	20-35	<20	<0.06	<0.06

REDRYING TEMPERATURE At 300 - 350°C for 2 hours.

PACKING In plastic / paper bags of 25 kg.