

FL 188F

CATEGORY SAW Submerged arc

TYPE Agglomerated semi-basic flux suitable for carbon alloy steel welding in single and multipass technique and in single or multi-wire applications.

APPLICATIONS Boiler works, pipes, ship building, structural steel works, tanks and pressure vessels, offshore applications etc..

PROPERTIES The weld deposit produced in combination with corresponding sub-arc wires meets outstanding mechanical properties and in particular high toughness at low temperature. Excellent slag removal in fillet and groove welds.
Basicity: About 1,3 (according to boniszewski)
Current: DC or AC, in single or multi-wires up to 1000 Ampere per wire
Grain size: According to EN 760: 2-20 specification

CLASSIFICATION

AWS	5.17: F7A4-EH14 5.17: F7A0-EA2-A2
EN ISO	14174: SA AB 1 67 AC H5
DIN	BFB 165AC12MHP5

SUITABLE FOR Unalloyed steels: St 33 – St 52, Ship building: A, E, AH, EH , Boiler steels: HI-HIII, 17Mn4, 19Mn5, Pipe steels: St 37.0/4 – St 52.0/4, Fine-grain steels: StE 255 – StE 420, X70

APPROVALS CE approved

WELDING POSITIONS:



WELD DEPOSIT WEIGHT %

Wire type	C	Mn	Si	Cu	Mo
S1	0.03-0.06	0.6-1.0	0.1-0.5	<0.3	-
S2	0.03-0.05	1.0-1.6	0.2-0.6	<0.3	-
S2Si	0.03-0.05	1.0-1.6	0.25-0.65	<0.3	-
S2Mo	0.04-0.08	1.1-1.4	0.2-0.6	<0.3	0.4-0.65

MECHANICAL PROPERTIES

Wire type EN ISO: 14171-A	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HRc / HV
				-30°C	-40°C	-60°C	
S1	>350	440-550	>22	>27			
S2	>420	510-650	>22	>50	>27		
S2Si	>430	510-650	>22	>50	>27		
S2Mo	>490	570-690	>20	>27			

REDRYING TEMPERATURE At 350°C for 2 hours to obtain diffusible hydrogen 5 ml/100 gr. Max.

PACKING In plastic bags of 25 kg, steel drums of 200 kg or Big bags of 500-1000 kg