

FL 188

CATEGORY SAW Arc Submerged

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. The flux is suitable for single and multilayer welding of longitudinal and circumferential and fillet welds. It can be used for single, tandem, twin and multi wire welding systems. Excellent slag removal in narrow groove welds of thick wall sections.

- Basicity ~1,7 (according to boniszewski)
- Current: DC or AC, in single or multi-wires up to 1000 Ampere per wire
- Grain size acc. EN ISO 14174: 2 - 16

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 DNV-GL, CE, Lloyds in progress.

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