

FL 180

CATEGORY	SAW Arc Submerged
TYPE	Agglomerated rutile flux additive in Mn and Si, suitable for carbon steel welding with two or three passes.
APPLICATIONS	Light boiler works, beams, pipes, ship building, structural steel works, small tanks and gas cylinders etc..
PROPERTIES	<p>Excellent slag removal in fillet and root passes. It can be used in single or multi-wires at high speed with excellent bead aspect. Ceweld S4 wire in combination with this flux is suitable only for fillet welding in single pass. Excellent slag removal in fillet and groove welds.</p> <p>Basicity: About 0,4 (according to boniszewski) Current: DC or AC, in single or multi-wires up to 1200 Ampere per wire Grain size: According to EN 760: 2-20 specification</p>

CLASSIFICATION	AWS	5.17: F6A2-EL12 5.17: F7A3-EM12K
	EN ISO	14174: SA AR 1 88 AC
	DIN	BAR 188AC10KM

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
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APPROVALS	CE approved
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WELDING POSITIONS:



NOMINAL FLUX COMPOSITION

MnO	TiO ₂	CaO	FeF ₂	Fe ₂ O ₃	SiO ₂	Al ₂ O ₃	MgO	P ₂ O ₅	CaF ₂
13	10	0,5	-	-	19	42	4	-	7

MECHANICAL PROPERTIES

AW Wire type	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HRc / HV
				0°C	-20°C	-60°C	
S1	>400	510-650	>22	>40	>27		
S2	>400	520-650	>22	>50	>27		
S2Si	>400	520-650	>22	>50	>27		
S4	>400	540-650	>22	>40	>27		

AW: as welded

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