



PITTARC FL180F



Main features: Agglomerated rutile flux additive in manganese and silicon, suitable for carbon steel welding with two or three passes. Excellent slag removal in fillet and groove welds. It can be used in single or multi-wires at high speed with excellent bead aspect. FL180F in combination with wire type S4 is suitable only for fillet welding in single pass. The main applications of this flux are: structural steelworks, small tanks, light boiler works, beams, ship-building, pipes, gas cylinder, etc.

Basicity index about 0,4 (according to Boniszewski)

Classification

ISO 14174	: S A AR 1 87 AC
ISO 14171	: S 4T A AR S1 – S 4T 0 AR S2 – S 4T 0 AR S2Si – S 4T 0 AR S4
	: S 4T 0 AR S2NiCu (PITTARC SH2)
AWS A5.17	: F7A0-EL12 / F7A0-EM12 / F7A0-EM12K / F7A0-EH14
AWS A5.23	: F7AZ-EG-G (PITTARC SH2)

Current DC o AC, in single or multi-wires up to 1200 Amp. per electrode.

Grain size according to ISO 14174: 2-20 (0,2-20 mm.)

Density about 1,1 kg./dm³

Rebaking at 350 °C for 2 hours to obtain diffusible hydrogen 5 ml/100 gr. max.

Packaging in plastic bags of 25 kg.

Main constituents CaO + CaF₂ + MgO = 17% - MnO + FeO = 17% - SiO₂ = 19% - Al₂O₃ + TiO₂ + ZrO₂ = 52%

Chemical composition of all weld metal (typical values %)

In combination with wire	C%	Mn%	Si%	Cu%	Ni%	Cr%
PITTARC S1	0,03 ÷ 0,05	0,90 ÷ 1,40	0,60 ÷ 1,00	–	–	–
PITTARC S2	0,03 ÷ 0,05	1,10 ÷ 1,50	0,50 ÷ 0,90	–	–	–
PITTARC S2Si	0,03 ÷ 0,05	1,10 ÷ 1,60	0,60 ÷ 1,20	–	–	–
PITTARC S4	0,03 ÷ 0,05	1,40 ÷ 2,00	0,60 ÷ 1,00	–	–	–
PITTARC SH2	0,03 ÷ 0,05	1,20 ÷ 1,60	0,60 ÷ 1,00	0,40 ÷ 0,60	0,60 ÷ 0,90	0,20 ÷ 0,40

Mechanical properties of all weld metal (single values are typical values)

In combination with wire	Yield Strength Rs [N/mm ²]	Tensile Strength Rm [N/mm ²]	Elongation A5d [%]	Impact Values ISO-V [Joule]	
				0 °C	- 20 °C
PITTARC S1	≥ 400	520 ÷ 650	≥ 22	≥ 40	≥ 27
PITTARC S2	≥ 400	520 ÷ 650	≥ 22	≥ 50	≥ 27
PITTARC S2Si	≥ 400	520 ÷ 650	≥ 22	≥ 50	≥ 27
PITTARC S4	≥ 400	540 ÷ 650	≥ 22	≥ 40	≥ 27
PITTARC SH2	≥ 470	550 ÷ 690	≥ 20	≥ 30	-

Mechanical properties of weld metal in as welded conditions.

The above mentioned data may change without prior notice.

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