

OK Flux 10.81

SAW

Type

Acid

EN 760: SA AR 1 97 AC

Description

OK Flux 10.81 is an acid agglomerated Si- and Mn-alloying flux for submerged arc welding, most suitable for applications where the dilution of base metal is high, e.g. in fillet welding and butt welding of thin and medium thick plates with a small number of passes. The excellent welding properties associated with the acid slag system of OK Flux 10.81 permit high travel speeds in butt welding, i.e. the spiral welding of thin-walled pipes and fillet welding, where good bead shape, excellent slag removal and top-class surface finish are essential.

Density

approx. 1.25 kg/dm³

Basicity index

0.6

Flux consumption, kg flux/kg wire

Voltage	DC+	AC
26	0.6	0.5
30	0.8	0.65
34	1.05	0.9
38	1.35	1.25

Typical all weld metal composition, %

Wire	C	Si	Mn	Cr	Ni	Mo
OK Autrod 12.10	0.06	0.8	1.2	-	-	-
OK Autrod 12.20	0.07	0.8	1.45	-	-	-
OK Autrod 12.22	0.07	0.9	1.5	-	-	-
OK Autrod 12.30	0.08	0.8	1.75	-	-	-

Typical mech. properties all weld metal

Wire	Yield stress MPa	Tensile strength MPa	Charpy V °C	J
OK Autrod 12.10	450	540	+20 0	50 30
OK Autrod 12.20	510	610	+20 0 -18	80 60 40
OK Autrod 12.22	530	610	+20	60
OK Autrod 12.30	540	640	+20 0	75 60

Approvals

Wire	ABS	LR	DNV	BV	GL	RS	Ü	DB	VdTÜV
OK Autrod 12.10							x	x	x
OK Autrod 12.20	2TM 2YTM	2TM 2YTM	IITYM	A2 2YTM	2YTM		x	x	x
OK Autrod 12.30							x	x	x

Other approvals may be applicable. Please contact ESAB.

Classifications

Wire	EN 756	SFA/AWS A5.17
OK Autrod 12.10	S 42 A AR S1	F7AZ-EL12/F7PZ-EL12
OK Autrod 12.20	S 46 0 AR S2	F7A0-EM12/F7PZ-EM12
OK Autrod 12.22	S 50 A AR S2Si	F7AZ-EM12K/F7PZ-EM12K
OK Autrod 12.30	S 50 0 AR S3	