

OP 1300A

SAW Fluxes Hardfacing

OP 1300A is an agglomerated alloy bearing flux used for hardfacing in combination with low alloy OE-S2 and OE-S2Mo wires. Applications include the hardfacing of machine gear parts, rails, and support rolls of caterpillars, etc. The alloying effect of the flux depends, to a large degree, on the welding parameters chosen. For instance, optimum welding parameters for a 4 mm wire electrode are approximately 600A, 32V, 50 cm/min. OP 1300A is suitable for use on both DC+ and AC. Damp flux should be re-dried at 300-350°C. Grain size according to EN 760: 2-20.

Wire	Classification
	EN 760: SA CS 3 87 CCRMo AC

Wire	Approvals	Grades
------	-----------	--------

Flux Analysis	
CaO + MgO	30 %
Al ₂ O ₃ + MnO	20 %
CaF ₂	10 %
SiO ₂ + TiO ₂	40 %

Basicity to Boniszewski

Analysis of all-weld metal (Typical values in %)

Wire	C	Mn	Si	Cr	Ni	Mo	Nb	N	Cu
OE-S2 -1st	0.10	1.20	0.50	1.10	-	0.10	-	-	-
OE-S2 -2nd	0.10	1.30	0.60	1.40	-	0.20	-	-	-
OE-S2 -3rd	0.10	1.50	0.70	1.80	-	0.30	-	-	-
OE-S2Mo -1st	0.10	1.20	0.50	1.30	-	0.30	-	-	-
OE-S2Mo -2nd	0.10	1.30	0.70	2	-	0.50	-	-	-
OE-S2Mo -3rd	0.10	1.40	0.80	2.10	-	0.60	-	-	-

All-weld metal Mechanical Properties

Wire	Heat Treatment	Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation A5 (%)	Hardness
OE-S2 -1st	As Welded	-	-	-	230 HB
OE-S2 -2nd	As Welded	-	-	-	280 HB
OE-S2 -3rd	As Welded	-	-	-	290 HB
OE-S2Mo -1st	As Welded	-	-	-	260 HB
OE-S2Mo -2nd	As Welded	-	-	-	350 HB
OE-S2Mo -3rd	As Welded	-	-	-	360 HB

Packaging data

25kg heavy duty sealed polythene sacks

Further forms of delivery on request.

Current condition

AC; DC+