

## SAW Basic and Semi-basic Fluxes C-Mn and low alloy steels

OP 126 is an agglomerated basic type fluxes for welding high-tensile, fine-grain steels as well as steels which are toughness at sub-zero temperatures and resistant to aging.

The neutral behaviour of OP 126 in terms of silicon and manganese pick-up and burn-out means that it should be welded with wires such as OE-SD3. The flux is particularly well- suited to weld with tandem and multi-wire processes. Excellent CTOD fracture toughness is obtained with OE-SD3 and OP 126 is widely used for welding offshore applications. The flux can be welded on DC+ and AC. Damp flux should be re-dried at 300-350°C. Grain size according to EN 760: 2-20.

Wire	Classification
OE-SD3	AWS A5.17: F7A8 EH12K
	EN 760: S A FB 1 55 AC H5

Wire	Approvals	Grades
OE-SD3	DNV	

see Appendix, Classification Society Approvals, for details pag. 521

Flux Analysis	
Mn	4 %
MgO	28 %
CaFe2	25 %
CaO	18 %
SiO2	15 %

Basicity to Boniszewski 2,7

### Typical Applications

Wire	Materials
OE-SD3	ASME: EN:S(P)235-S(P)420

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

Wire	C	Mn	Si	Cr	Ni	Mo	Nb	N	Cu
OE-SD3	0.05	1.30	0.25	-	-	-	-	-	-

### All-weld metal Mechanical Properties

Wire	Heat Treatment	Yield Strength N/mm <sup>2</sup>	Tensile Strength N/mm <sup>2</sup>	Elongation A5 (%)
OE-SD3	As Welded	≥ 450	540 - 640	≥ 25

### All-weld metal Mechanical Properties - Cv

Wire	Heat Treatment	Charpy V Notch Impact Toughness (J)							
		+20	0	- 20	- 30	- 40	- 60	- 80	- 101
OE-SD3	As Welded	200 min	180 min	140 min	-	100 min	70 min	-	-

### Packaging data

25kg heavy duty sealed polythene sacks

Further forms of delivery on request.

### Current condition

DC+; AC