

SAW Fluxes Stainless and Heat resistant steels

OP F500 is a special agglomerated flux for welding austenitic stainless steels including stabilised compositions. OP F500 is neutral and it is used for welding both single wire and multiwire. Suitable for welding thin plates at high travel speeds. Excellent slag detachability even from hot plates.

Damp flux should be re-dried at 300-350°C.

Grain size according to EN 760: 2-20.

Wire	Classification
	EN 760: S A FB 2 53 AC

Wire	Approvals	Grades
OE-316L	TÜV	

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

Flux Analysis	
Al ₂ O ₃	37 %
SiO ₂	7 %
CaO + CaF ₂ + MgO	54 %

Basicity to Boniszewski 2,2

Typical Applications

Wire	Materials
OE-308L	ASME:AISI 304 - 304L - 302 EN:X 5 Cr Ni 18 8 (1.4301), X 2 Cr Ni 18 8 (1.4300)
OE-308H	ASME: AISI 304H EN:X 2 Cr Ni 18 9 (1.4306)
OE-309LMo	ASME: *Cladding of carbon steel and low alloy steel EN: *Cladding of carbon steel and low alloy steel
OE-316L	ASME: ASTM A351 Grades CF3M, CF3MA EN:X 2 Cr Ni Mo 18 10 (1.4404), X 2 Cr Ni Mo 18 12 (1.4435), X 5 Cr Ni Mo 18 10 (1.4401)
OE-318	ASME: AISI 318L EN:X 10 Cr Ni Mo Nb 18 10 (1.4580), X 10 Cr Ni Mo Ti 18 12 (1. 4573), X 10 Cr Ni Mo Nb 18 12 (1.4583)
OE-347	ASME: ASTM A336 Grades F321, F347 EN:X 10 Cr Ni Ti 18 9 (1.4541), X 12 Cr Ni Ti 18 9 (1.4870), X 10 Cr Ni Nb 18 9 (1.4550), X 5 Cr Ni Nb (1.4543)
OE-S 22 09	ASME:A182 Grade F51, UNS S31803 - S31500 - S31200 - S32304 EN:X 2 Cr Ni Mo N 22 5 8 (1.4462)
OE-904L	ASME: AISI 904L; URANUS B6; EN: 1.4539 (X1NiCrMoCu25-20-5); 1.4439 (X2CrNiMoN17-13-5); 1.4537 (X1CrNiMoCuN25-25-5)

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

Wire	C	Mn	Si	Cr	Ni	Mo	Nb	N	Cu
OE-308L	0.03	2	0.80	18	9	-	-	-	0.35
OE-309LMo	0.03	2	0.80	21	15	3	-	-	-
OE-316L	0.03	2	0.80	18	10	2.50	-	0.06	-
OE-318	0.07	2	0.80	18	10	2.50	-	-	-
OE-347	0.07	2	0.80	18	9	-	1	0.06	0.35
OE-S 22 09	0.03	1.50	0.80	21.50	8	3	-	0.18	-
OE-904L	0.025	2	0.80	19	24	4	-	-	1.50

All-weld metal Mechanical Properties

Wire	Heat Treatment	Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation A5 (%)
OE-308L	As Welded	≥ 350	≥ 500	≥ 35
OE-309LMo	As Welded	≥ 370	≥ 600	≥ 25
OE-316L	As Welded	≥ 350	≥ 525	≥ 30
OE-318	As Welded	≥ 390	≥ 600	≥ 30
OE-347	As Welded	≥ 500	≥ 575	≥ 30
OE-S 22 09	As Welded	≥ 400	≥ 690	≥ 25
OE-904L	As Welded	≥ 420	≥ 570	≥ 30

All-weld metal Mechanical Properties - Cv

Wire	Heat Treatment	Charpy V Notch Impact Toughness (J)							
		+20	0	- 20	- 30	- 40	- 60	- 80	- 101
OE-308L	As Welded	75 min	-	-	-	-	-	-	-
OE-309LMo	As Welded	65 min	-	-	-	-	-	-	-
OE-316L	As Welded	75 min	-	-	-	-	-	-	-
OE-318	As Welded	-	-	-	-	-	100 min	-	-
OE-347	As Welded	-	-	-	-	-	70 min	-	-
OE-904L	As Welded	80 min	-	-	-	-	-	-	-

Packaging data

25kg heavy duty sealed polythene sacks

Further forms of delivery on request.

Current condition

DC+; AC