

SAW Fluxes Stainless and Heat resistant steels

OP XNi is a fully basic agglomerated submerged-arc welding flux used in combination with high nickel alloy wires such as OE-S600, OE-S625 and OE-S C276.

The special formula enhances the weld bead profile with excellent and easy slag detachability. The flux shows a very high hot cracking resistance behaviour.

OP X Ni is suitable for weld seams and weld overlay in petrochemical, chemical and nuclear applications.

Damp flux should be re-dried at 300-350°C x 2 hr min. Grain size according to EN 760: 2-20.

Wire	Classification
	EN 760: SA AB 2 AC H5

Wire	Approvals	Grades

Flux Analysis	
CaO + MgO	18 %
Al ₂ O ₃ + MnO	47 %
CaF ₂	20 %
SiO ₂ + TiO ₂	6 %

Basicity to Boniszewski 5

Typical Applications

Wire	Materials
OE-S600	EN: 2.4816; 1.4876; 1.4958
OE-S600	ASME: UNS N06600; UNS N08800; UNS N08810
OE-S625	ASME: SA 353-70; SA 553-70; UNS N06625; UNS N08825;
OE-S625	EN: 2.4816; 1.4876; 1.4958; X7Ni9 (1.5663); X8Ni9 (1.5662)
OE-S C276	SA 353-70; SA 553-70; X7Ni9 (1.5663); X8Ni9 (1.5662)

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

Wire	C	Mn	Si	Cr	Ni	Mo	Nb	N	Cu
OE-S625	0.02	2	0.35	21.50	Rem	3.20	3.20	-	-
OE-S C276	0.015	4	0.40	20	Rem	-	2.20	-	-

All-weld metal Mechanical Properties

Wire	Heat Treatment	Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation A5 (%)
OE-S600	As Welded	≥ 350	≥ 600	≥ 42
OE-S625	As Welded	≥ 460	≥ 730	≥ 42
OE-S C276	As Welded	≥ 350	≥ 600	≥ 42

All-weld metal Mechanical Properties - Cv

Wire	Heat Treatment	Charpy V Notch Impact Toughness (J)							
		+20	0	- 20	- 30	- 40	- 50	- 60	- 196
OE-S600	As Welded	-	-	-	-	-	-	-	95 min
OE-S625	As Welded	-	-	-	-	-	-	-	80 min
OE-S C276	As Welded	-	-	-	-	-	-	-	80 min

Packaging data

Metallic drum 30kg

Further forms of delivery on request.

Current condition

DC+; DC- up to 900A