

SUPRANOX RS 347 is a rutile coated electrode for welding chromium-nickel alloys of similar composition stabilized either with Nb or Ti also suited for ferritic stainless and heat resistant Cr-steels.

Suitable for welding of high temperature gaskets and expansion joints, rocket engine parts, aircraft collector rings and exhaust manifolds and chemical production equipment.

Outstanding weldability, spatter free and a self-releasing slag, resulting in a very smooth bead appearance and excellent mechanical properties at high temperatures. The weld metal transfer is in fine droplets producing finely rippled concave fillet welds with an outstanding weld bead aspect. The Nb+Ta in the weld metal is meant to compensate the sublimation of titanium at the liquidus temperature of the weld pool. This addition reduces the possibility of intergranular chromium carbide precipitation and thus increases resistance to intergranular corrosion. Good striking and restriking. Under wet corrosive conditions, suitable for operating temperatures <400°C, non-scaling <800°C.

Semi-basic electrode for welding type AISI 347 and 321 stainless steels generally stabilized with titanium.

Classification	
EN	3581-A: E 19 9 Nb R 12
AWS	A5.4: E 347-16

Approvals	Grade
TÜV	●
CE	

Chemical analysis (Typical values in %)

C	Mn	Si	P	S	Cr	Ni	Nb	Ferrite
0.05	0.8	0.6	≤ 0.03	≤ 0.02	19.5	10	0.4	5-10

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)
				20 °C
As Welded	≥ 350	≥ 550	≥ 30	≥ 47

Materials

AISI 347 - 321

1.4541 (X6CrNiTi18-10); 1.4301 (X4CrNi18-10); 1.4550 (X6CrNiNb18-10);

Storage

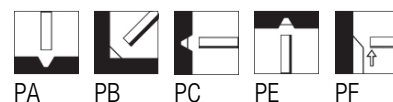
Keep dry and avoid condensation.

Re-drying not generally required.

If necessary 250-300 °C for 1 hour, 5 times max.

Current condition and welding position

AC; DC+



Packaging data

Diam. (mm)	Length (mm)	Current (A)	Approx. weightn(kg/1000)	GASP		VPMD	
				PC	Code	PC	Code
2.5	300	50-80	18.7	190	W000288183	90	W000380162
3.2	350	60-120	35.0	120	W000288184	55	W000380170
4.0	350	100-140	52.5	80	W000288185	40	W000380264
5.0	350	130-180	82.6	50	W000288186	25	W000380265