

SUPRANOX RS 307 is a rutile-coated MMA electrode suitable for joining, buffering, maintenance and repairing. Used for difficult-to-weld steels and austenitic-ferritic, dissimilar steel, joining as well as hardfacing, buffer layer and for joining manganese hard steels, e.g. X120Mn12.

The weld metal is highly crack-resistant and non-scaling < 850°C. The hardness of the all-weld metal is 180 HB which works hardens up to 300 HB under impact loads. Highest operating temperature for dissimilar steels joints is 300°C, above, SUPRANEL 182 is recommended. Stainless, fully austenitic chromium-nickel-manganese weld metal, small amounts of delta ferrite are possible. Excellent weldability with a spatter free arc, self-releasing slag combined with a very smooth bead appearance.

Classification	
EN	14700 : E Fe10
EN	3581-A: E 18 8 Mn R 1 2
AWS	A5.4: ~E 307-16

Approvals	Grade
DB	●
TÜV	●

CE

Chemical analysis (Typical values in %)

C	Mn	Si	Cr	Ni
0.12	5	1	18	9

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)	
				+20 °C	-60 °C
As Welded	≥ 350	≥ 600	≥ 30	≥ 60	≥ 32

Materials

Oteluri dificil de sudat; Oteluri manganoase X120Mn12 (1.3401); table de blindaje

Imbinari disimalare (Otel carbon cu otel inoxidabil)

Storage

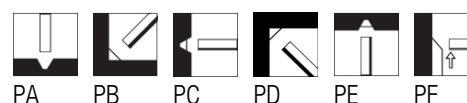
Keep dry and avoid condensation.

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)	VPMD	
				PC	Code
2.5	300	50-80	15.6	110	W000258459
3.2	300	80-130	26.8	60	W000258460
4.0	350	120-160	51.0	40	W000258461