

## MMA Electrodes Stainless and Heat resistant steels

SUPRANOX 318 is a rutile coated MMA electrode for welding similar stabilised austenitic Cr-Ni-Mo steels. The weld metal transfer is in fine droplets, nearly spatter free with a generally self-releasing slag, producing finely rippled concave fillet welds with an outstanding weld bead aspect. Good striking and restriking. Under wet corrosive conditions suitable for operating temperatures <400°C.

Classification	
EN	1600: E 19 12 3 Nb R 1 2
AWS	A5.4: E 318-16

Approvals	Grade
DB	●
TÜV	●

CE

### Chemical analysis (Typical values in %)

C	Mn	Si	Cr	Ni	Mo	Nb	Ferrite
≤ 0.03	0.8	0.9	19	11.5	2.7	0.4	5-15

### 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	≥ 550	≥ 30	≥ 50	≥ 32

### Materials

1.4581 (GX5CrNiMoNb19-10) - 1.4436 (X4CrNiMo17-13-3)

1.4571 (X6CrNiMoTi17-12-2) - 1.4401 (X4CrNiMo17-12-2)

1.4580 (X6CrNiMoNb17-12-2) - 1.4408 (GX5CrNiMo19-11)

1.4583 (X10CrNiMoNb18-12)

### Storage

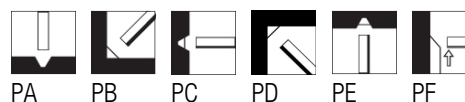
Keep dry and avoid condensation.

Re-drying not generally required.

If necessary: 300-350 °C for 2 hours, 5 times max.

### Current condition and welding position

AC; DC+



### Packaging data

Diam. (mm)	Length (mm)	Current (A)	Approx. weight (kg/1000)	VPMD	
				PC	Code
2.0	300	40-55	11.5	150	●
2.5	300	55-70	18.6	90	●
3.2	350	75-105	36.5	55	●
4.0	350	100-130	52.3	35	●