

# SUPRANOX E 22.9.3N

## MMA Electrodes Stainless and Heat resistant steels

Rutile coated MMA electrode for welding stainless ferritic-austenitic Cr-Ni-Mo steels (Duplex-steel). The high-strength and ductile weld metal exhibits good resistance to pitting, crevice corrosion and stress corrosion cracking in chloride-bearing media. Fine metal droplet transfer, good fusion of joint faces, finely rippled bead surface, easy slag removal, easy arc striking and restriking. For operating temperatures of up to +250 °C.

Classification	
EN	1600: E 22 9 3 N L R 12

Approvals	Grades
DNV	
LRS	

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

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

C	Mn	Si	P	S	Cr	Ni	Mo	Nb	Cu	N	Ferrite
≤ 0.04	1.60	1	≤ 0.025	≤ 0.020	22.50	9	3	-	-	0.15	35-45

### All-weld metal Mechanical Properties

Heat Treatment	Yield Strength N/mm <sup>2</sup>	Tensile Strength N/mm <sup>2</sup>	Elongation A5 (%)	Impact Energy ISO - V (J) + 20 °C	Hardness
As Welded	≥ 450	≥ 550	≥ 20	≥ 50	-

### Materials

1.4462 (X2CrNiMoN22-5-3)

UNS S31803 - S31500 - S31200 - S32304

### Storage and redrying

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

DC+; AC



### Packaging data

Diameter (mm)	Length (mm)	Current (A)	Electrode average weight (g)	Weld metal weight per electrode (g)
2,5	300	50-80	17,3	10,4
3,2	350	70-120	32,9	19,7
4,0	350	90-150	50,8	30,5