

MMA Electrodes Stainless and Heat resistant steels

Rutile coated MMA electrode for joining dissimilar steels and depositing cladding on ferritic steels. The weld metal consists of austenitic Cr-Ni-Mo steel and small amounts of delta-ferrite are possible. It is non-scaling up to +850 °C. The weld metal is highly crack-resistant and therefore suited to joining difficult-to-weld steels and depositing stress-relaxing buffer layers on crack sensitive base metal or prior to hard facing deposits. Highest operating temperature for dissimilar steel joints is +300 °C. In case of higher temperatures, use SUPRANEL 600 electrodes. Weld metal work-hardens. Vacuum packaging.

Classification	
EN	1600: E 18 8 Mn R 12

Approvals	Grades
DB	
TÜV	

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
0.14	6	1.20	≤ 0.025	≤ 0.020	18	8	-	-	-	-	-

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation A5 (%)	Impact Energy ISO - V (J) + 20 °C	Hardness
As Welded	≥ 450	≥ 650	≥ 35	≥ 60	-

Materials

Armour plate; Dissimilar Steels
X120Mn12 (1.3401)

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	65-80	15,6	9,4
3,2	300	80-135	26,8	16,1
4,0	350	120-160	51,0	30,6