

MMA Electrodes Stainless and Heat resistant steels

Rutile coated high-efficiency MMA electrode for welding dissimilar steels (ferritic to austenitic steels) and depositing austenitic cladding, having a metal recovery of 160 %. The weld metal consists of austenitic Cr-Ni-Mn steel and small amounts of delta-ferrite are possible. It is non-scaling up to +850 °C. The weld metal is highly resistant to cracking, 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.

Classification

DIN	8555: E8-UM - 200 KPRZ
EN	1600: E 18 8 Mn R 73

Approvals

Grades

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

C	Mn	Si	P	S	Cr	Ni	Mo	Nb	Cu	N	Ferrite
0.10	6	1	≤ 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	350	80-120	31,9	28,0
3,2	350	100-160	51,9	46,0
4,0	450	160-220	97,4	87,0
5,0	450	190-240	159,3	143,4