

MMA Electrodes Hardfacing

Basic coated austenitic manganese steel MMA electrode for wear resisting hard facing deposits. Weld metal will increase in hardness by cold-working (approx. 400-500 HB), it is therefore particularly suited for parts which are subjected mainly to wear caused by heavy impact and shock. During welding, the workpieces should not become too hot and, if necessary, be allowed to cool down. When welding large workpieces made of austenitic manganese steel, such as crusher jaw plates, it is advisable to weld them in a water bath. High welding currents and wide-weave beads must be avoided. When building up various layers, it is good practice to deposit a buffer layer with Citochromax N weld metal. When making joint welds on austenitic manganese steel (e.g. 1.3401), it is preferable to use Citochromax N electrodes. Suitable for hardfacing and repair welding of wear resisting parts made of austenitic manganese steel, such as crusher jaw plates, crusher cones, pulverizing hammers, beating arms and others.

Classification	
DIN	DIN 8555: ~E 7 - UM - 200 KP
EN	14700: E Fe9

Approvals	Grades

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

C	Mn	Si	P	S	Cr	Ni	Mo	Nb	Fe	W	Cu
0.60	15	-	-	-	4.50	4.80	-	-	Rem	-	-


All-weld metal Mechanical Properties

Heat Treatment	Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation A5 (%)	Impact Energy ISO - V (J)	Hardness
As Welded	-	-	-	-	175-225 HB

Storage and redrying

Keep dry and avoid condensation.
Re-drying recommended at 300-350 °C for 2 hours, 5 times max.

Current condition and welding position

DC+

PA PB

Packaging data

Diameter (mm)	Length (mm)	Current (A)	Electrode average weight (g)	Weld metal weight per electrode (g)
3,2	450	110-135	48,4	29,0
4,0	450	140-175	70,3	42,2