

MMA Electrodes High-strength steels

Basic coated MMA electrode for reliable, crack-free and tough welded joints on steels with a yield strength <555 MPa. The weld metal is of extremely high metallurgical purity, is ageing-resistant, retaining good CVN toughness to -60°C and CTOD tested. Very low hydrogen content. Due to the double coating of the 2.5 mm and 3.2 mm sizes, the arc is both stable and concentrated, even at lower welding currents when positional welding, with good gap bridging characteristics. Welds are of X-ray quality. For sour gas applications, the nickel content is restricted to <1.0% max. On request, TENACITO 65R can be supplied to special quality assurance requirements, including KTA 1408.2.

Classification	
EN	757: E 55 6 Mn1NiMo B T 4 2 H5
AWS	A5.5: E 9018-G H4

Approvals	Grade
ABS	E9018G
DB	●
RMRS	5Y50HHH
TÜV	●

CE

Chemical analysis (Typical values in %)

C	Mn	Si	P	S	Ni	Mo
0.05	1.6	0.3	≤ 0.012	≤ 0.012	0.9	0.35

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	≥ 550	630-750	≥ 20	≥ 150	≥ 47
605 °C x 40 h	≥ 500	630-700	≥ 20	≥ 150	≥ 50

Materials

A508 Cl.2, A533 Cl.1Gr. B, 13MnNiMo5-4, 17MnMoV6-4; L245-L555

S(P)355-S(P)555, 20MnMoNi5-5, 15NiCuMoNb5, 22NiMoCr3-7

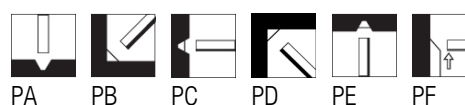
Storage

Keep dry and avoid condensation.

HD ≤ 5: Re-dry at 340-360 °C for 2 hours, 5 times max.

Current condition and welding position

DC+



Packaging data

Diam. (mm)	Length (mm)	Current (A)	Approx. weight (kg/1000)	CBOX		VPMD	
				PC	Code	PC	Code
2.5	350	65-95	20.6	225	●	110	●
3.2	350	90-140	34.1	125	●	60	●
4.0	450	140-185	68.7	80	●	35	●
5.0	450	180-240	111.7	45	●	20	●