TENACITO 38R

OERLIKON

MMA Electrodes
C-Mn and low-alloy steels

Basic coated MMA electrode for reliable, crack-free and tough welded joints on steels with a yield strength <460MPa. The weld metal is of extremely high metallurgical purity, is ageing-resistant, retaining ISO-V toughness down 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. Good gap bridging characteristics. Welds are of X-ray quality. On request, TENACITO 38R can be supplied to special quality assurance requirements.

Classification	
EN ISO	2560-A: E 46 6 1Ni B 4 2 H5
EN	499: E 46 6 1Ni B 4 2 H5
AWS	A5.5: E 7018-G H4

Approvals	Grade
ABS	3Y
BV	5Y
DB	●
DNV	5Y H5
GL	6Y42 H5
LRS	5Y40m H5
RMRS	5Y46HHH
TÜV	●

CE

Chemical analysis (Typical values in %)

C	Mn	Si	P	S	Ni
0.06	1.3	0.4	≤ 0.012	≤ 0.015	0.95

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	≥ 460	530-650	≥ 25	≥ 180	≥ 110
580 °C x 15 h	≥ 420	500-650	≥ 25	≥ 180	≥ 90

Materials

S(P)235-S(P)460; GP240-GP280; L245-L450

Storage

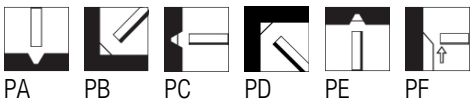
Keep dry and avoid condensation.

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

HD ≤ 10: Re-dry at 300-350 °C for 2 hours, 5 times max

Current condition and welding position

DC+



PA PB PC PD PE PF

Packaging data

Diam. (mm)	Length (mm)	Current (A)	Approx. weight (kg/1000)	CBOX		VPMD	
				PC	Code	PC	Code
2.5	350	65-95	18.7	225	●	110	●
3.2	350	90-140	34.7	125	●	60	●
4.0	450	140-185	68.2	80	●	35	●
5.0	450	180-250	111.3	45	●	20	●