TENACITO 38R

OERLIKON

MMA Electrodes
C-Mn and low-alloy steels

Basic coated electrode producing tough and crack-free welded joints. Weld deposit is of extremely high metallurgical purity and very low hydrogen content. Owing to its double coating (up to 3,2 mm), the electrode features a stable and concentrated arc, making it well-suited for positional welding. Welds are of X-ray quality. CTOD-tested for offshore applications. On request, electrodes may be supplied with special quality assurance according to KTA 1408.2.

Classification	
AWS	A5.5: E7018-G-H4
EN	499: E 46 6 1 Ni B 42 H 5
EN ISO	2560-A: E 46 6 1Ni B 42 H5

Approvals	Grades
ABS	
BV	
DB	
DNV	
GL	
LRS	
RS	
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	V	N	Cu
0.06	1.20	0.30	≤ 0.012	≤ 0.015	-	0.95	-	-	-	-	-

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength N/mm²	Tensile Strength N/mm²	Elongation A5 (%)	Impact Energy ISO - V (J) - 60 °C	Hardness
PWHT 580 °C x 15 h	≥ 420	500-650	≥ 25	≥ 90	-
As Welded	≥ 460	530-650	≥ 25	≥ 110	-

Materials

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

Storage and redrying

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+

Packaging data

Diameter (mm)	Length (mm)	Current (A)	Electrode average weight (g)	Weld metal weight per electrode (g)
2,5	350	65-95	18,4	12,3
3,2	350	90-140	34,2	21,2
4,0	450	140-185	67,7	43,2
5,0	450	180-250	105,6	37,0