## Arc Welding Rods

## MMA Electrodes C-Mn and low-alloy steels

Rutile medium coated electrode for a wide variety of mild steel fabrication applications. It has exceptional overall operability resulting in high quality weld deposits and welder appeal. Excellent in the overhead position and for fillet welding in the horizontal vertical position. Smooth even metal transfer, low spatter and self - releasing slag. Smooth weld bead appearance.

Classification						
AWS	A5.1: E6013					
EN	499: E 38 0 R 12					
EN ISO	2560-A: E 38 0 R 12					

Approvals	Grades
ABS	
BV	
DNV	
LRS	
MOD	

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
0.08	0.50	0.50	-	-	-	-	-	-	-	-	-

**All-weld metal Mechanical Properties** 

Heat Treatment	Yield Strength N/mm <sup>2</sup>	Tensile Strength N/mm²	Elongation A5 (%)	Impact Energy ISO - V (J) 0 °C	Hardness
As Welded	≥ 380	470-600	≥ 22	≥ 50	-

## **Materials**

S(P)235 to S(P)355; GP240; GP280

## Storage and redrying

Keep dry and avoid condensation. Re-drying not generally required. If necessary: 100-110 °C for 1 hour.

Current condition and welding position							
DC+;	DC-; AC	;					
PA	PB	PC	PF	PE	PF2		

**Packaging data** 

Diameter (mm)	Length (mm)	Current (A)	Electrode average weight (g)	Weld metal weight per electrode (g)
2,0	300	40-60	11,0	6,6
2,5	350	60-85	17,2	10,3
3,2	350	90-130	30,5	18,3
4,0	450	140-180	60,0	36,0
5,0	450	180-240	102,7	61,0