

CATEGORY SMAW Stick Electrodes

TYPE CEWELD AquaForce MG is a stick electrode for wet under water welding.

APPLICATIONS Welding standard ship steel grades A, B & D in submerged condition according the requirements of AWS D3.6M-99. Developed for joining anodes to under water objects, plate doubling in ship repair, sealing sheet, pile profiles etc. Tested up to a water depth of 20 m.

PROPERTIES CEWELD AquaForce MG offers a high deposition rate with remarkable welding properties in all positions and is capable of producing beautiful flat weld beads with deep penetration and above all not sensitive for porosity and or inclusions. Filled welds exceeding an A-height of 4,0 mm are easy to achieve in one single layer for high productivity, and can be used in all positions, especially suitable for vertical down (PG) position. The newly designed underwater slag system offers a remarkable self-lifting slag and is double coated to provide maximum resistance to moisture. Excellent mechanical properties with yield strength exceeding 500 MPa in sweet and salt water makes AquaForce MG the preferred choice by professional divers.

CLASSIFICATION

AWS	A 5.1: E 6013
AWS	A 5.35 UWA 6013 2A
EN ISO	2560-A: E 42 0 RR 4 1
DIN	2302 E 42 0 Z RR 10 fr (PA,PB,PC,PD,PE,PG)

SUITABLE FOR Reh ≤ 420 MPa (60 ksi) ISO 15608: 1.1, 1.2
 1.0035, 1.0570, 1.0461, 1.0562, 1.4620, 1.0565, 1.0345, 1.0425, 1.0481, 1.0308 to 1.0581, 1.0307, 1.0582, 1.0440, 1.0472, 1.0475, 1.0476, 1.0416, 1.0551
 S235JR-S355JR, S235JO-S355JO, S235J2-S355J2, S275N-S420N, S275M-S420M, P235GH-P355GH, P355N, P285NH-P420NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L415NB, L245MB-L415MB, GE200-GE240
 ASTM: A 106 Gr. A, B, C; A 181 Gr. 60, 70; A 283 Gr. A, C; A 285 Gr. A, B, C; A 414 Gr. A, B, C, D, E, F, G; A 501 Gr. B; A 516 Gr. 55, 60, 65, 70; A 573 Gr. 58, 65, 70; A 588 Gr. A, B; A 633 Gr. A, C, D; A 662 Gr. A, B, C; A 678 Gr. A, B; A 711 Gr. 1013; API 5 L Gr. B, X42, X52, X56, X60

APPROVALS CE

WELDING POSITIONS: 

TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)

C	Si	Mn	P	S
0.8	0.4	0.6	0.025	0.025

ALL WELD MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} MPa	R _m MPa	A ₅ (%)	Impact Energy (J) ISO-V 0°C
As Welded /	420	590		44

WELDING PARAMETERS / PACKING

REDRYING TEMPERATURE Not required

GAS ACCORDING EN 14175