

## AquaForce LC

**CATEGORIE** SMAW beklede elektroden

**TYPE** The first Basic under water welding electrode with extreme low carbon content.

**APPLICATIONS** Welding standard ship steel grades A, B & D in submerged conditions in case standard well known underwater electrodes fail to offer proper ductility and crack resistance exceeding the requirements for AWS D3.6M-99.

**PROPERTIES** **AquaForce LC** is the first **Basic** electrode that was developed with "Hydrophobic sand" to offer maximum moisture resistance. **AquaForce LC** is currently the only available electrode that is able to produce flat (not concave) welds with deeper penetration in all positions including PB, PC, PD, PE and PG position. The special (Armcore) ultra low carbon core wire of this electrode reduces the hardness from 195 HV to 165 HV hardness in the pure weldmetal caused by the high cooling rate (T8-5) when welding under water. AquaForce LC`s unique Basic coating reduces Oxygen content in the weldmetal to obtain better ductility than can be achieved with standard wet welding rutile electrodes.

**CLASSIFICATION** AWS A 5.1: ~E 6018  
EN ISO 2560-A: E 38 2 B 14

**SUITABLE FOR**

DIN:	-	W.Nr.:
Unalloyed steels:	St 33 to St 52.3	1.0035 to 1.0570
Boiler plates:	HI, HII, 17 Mn4	1.0345, 1.0425, 1.0481
Pipe steels:	St 35 to St 52.4	1.0308 to 1.0581
-	StE 210.7 to StE 360.7	1.0307 to 1.0582
Shipbuilding plates:	A, B, D	1.0440, 1.0472, 1.0475
Steel castings:	GS-38 to GS-52	1.0416 to 1.0551
Thin sheets:	1623/1	

**APPROVALS** CE approved

**WELDING POSITIONS:**



**ALL WELD METAL ANALYSIS % (NOMINAL)**

C	Mn	Si	P	S
<0.05	0,45	0,20	<0.025	<0.025

**MECHANICAL PROPERTIES (ALL WELD METAL)**

Heat Treatment	R <sub>p0,2</sub> (N/mm <sup>2</sup> )	R <sub>m</sub> (N/mm <sup>2</sup> )	A <sub>5</sub> (%)	Impact Energy (J) ISO-V			Hardness HV (all weld)
				0°C	-20°C	-40°C	
AW	>460	480-590		>32	>27		169

AW: as welded

**WELDING PARAMETERS / PACKING**

Welding Parameters			Packing		
D (mm)	Length (mm)	Current (A) (DC+)	kg / can	pcs / pack	kg / 6 pack
3.2	350	140-180	2.8	80	16.8
4.0	350	150-210	2.8	55	16.8

**REDRYING TEMPERATURE** not required