

AquaForce LC

CATEGORY SMAW Stick Electrodes

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 _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	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