

AquaForce HR

CATEGORY SMAW Stick Electrodes

TYPE High deposition electrode for under water (wet) 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 shiprepair, sealing sheet pile profiles etc.

PROPERTIES AquaForce HR is a high recovery wet welding electrode that is double coated to offer maximum moisture and electrical resistance. AquaForce HR is able to produce beautiful flat filled welds with deep penetration without porosity. Filled welds exceeding an A height of 4,0 mm are easy to achieve in one single layer for high productivity. AquaForce HR can be used in all positions, especially suitable for vertical down (PG) position.

CLASSIFICATION

AWS	A 5.1: E 7014
EN ISO	2560-A: E 42 2 R 4 1
DIN	2302: E 42 2 - R 6 sa

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 (TYPICAL)

C	Mn	Si	P	S
0,075	0,75	0,60	<0,025	<0,025

MECHANICAL PROPERTIES

Heat Treatment	RP0,2 (MPa)	Rm (MPa)	A5 (%)	Impact Energy (J) ISO-V			Hardness HRc / HV
				+20°C	0°C	-20°C	
AW	>420	510-610		>47	>27		

AW: as welded

WELDING PARAMETERS / PACKING

Welding Parameters			Packing	
D (mm)	Length (mm)	Current (A)	kg / can	pcs / can
4.0	350	180-220	3.0	59

REDRYING TEMPERATURE not recommended