

CATEGORY SMAW Stick Electrodes

TYPE CEWELD® AquaForce HR is a high deposition 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 20m

PROPERTIES CEWELD® AquaForce HR is a high recovery underwater electrode that is double coated to provide maximum resistance to moisture. CEWELD® AquaForce HR is capable of producing 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. CEWELD® AquaForce HR can be used in all positions, especially suitable for vertical down (PG) position.

CLASSIFICATION

| | |
|--------|--|
| AWS | A 5.1: E 7014 |
| AWS | A 5.35 UWA 7014 1A |
| EN ISO | 2560-A: E 42 0 R 4 1 |
| DIN | 2302: E 42 0 Z R 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



TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)

| C | Si | Mn | P | S |
|-------|-----|------|-------|-------|
| 0.075 | 0.6 | 0.75 | 0.025 | 0.025 |

ALL WELD MECHANICAL PROPERTIES

| Heat Treatment | R _{p0,2} MPa | R _m MPa | A ₅ (%) | RT | Impact Energy (J) ISO-V | 0°C |
|----------------|-----------------------|--------------------|--------------------|----|-------------------------|-----|
| As Welded / | 480 | 580 | | 58 | | 42 |

WELDING PARAMETERS / PACKING

| WELDING PARAMETERS | | WELDING PARAMETERS | | WELDING PARAMETERS | | PACKING | | PACKING | |
|--------------------|-------------|--------------------|----|--------------------|-----------|----------|-----------|----------|-----------|
| D (MM) | LENGTH (MM) | CURRENT (A) | RT | KG / CAN | PCS / CAN | KG / CAN | PCS / CAN | KG / CAN | PCS / CAN |
| 4.0 | 350 | 180-220 | | 3.0 | 59 | | | | |

REDRYING TEMPERATURE Not required

GAS ACCORDING EN 14175