

# CEWELD E 7018-A1

**TYPE** Basic low hydrogen electrode with 0.5% Mo. ( Type E Mo, A1 )

**APPLICATIONS** CEWELD® E 7018-A1 provides a 0.5%Mo alloyed weld metal. CEWELD® E 7018-A1 can also be used for heat-treated welds. The range of applications extends from joint welding of similar heat-resistant steels and cast steel to joint welding of high-strength structural, fine-grained and pipeline steels with a yield strength of up to 460 MPa.

**PROPERTIES** CEWELD® E 7018-A1 is approved for application temperatures up to 550 °C in the long-term range and shows excellent notched bar impact work at temperatures - 40°C. It is characterized by low moisture absorption and guarantees a low diffusible hydrogen content in the weld metal as well as a yield of 115 %.

**CLASSIFICATION**

|        |                      |
|--------|----------------------|
| AWS    | A 5.5: E 7018-A1     |
| EN ISO | 3580-A: E Mo B 42 H5 |
| F-nr   | 4                    |
| FM     | 3                    |

**SUITABLE FOR** **Typ 0,5Mo ISO 15608: ≤ 460 MPa ; 1.1, 1.2,(~1.3)**  
 1.5415, 1.0481, 1.0482  
**15 Mo3, 16Mo3**, 20MnMoNi4-5, 15NiCuMoNb5, S235JR-S355JR, S235JO-S355JO, S450JO, S235J2-S355J2, S275N-S460N, S275M-S460M, P235GH-P355GH, P355N, P285NH-P460NH, P195TR1-P265TR1, P195TR2-P265TR2, P195GH-P265GH, L245NB-L415NB, L450QB, L245MB-L450MB, GE200-GE300  
 ASTM: A 29 Gr. 1013, 1016; A 106 Gr. C; A, B; A 182 Gr. F1; A 234 Gr. WP1; A 283 Gr. B, C, D; A 335 Gr. P1; A 501 Gr. B; A 533 Gr. B, C; A 510 Gr. 1013; A 512 Gr. 1021, 1026; A 513 Gr. 1021, 1026; A 516 Gr. 70; A 633 Gr. C; A 678 Gr. B; A 709 Gr. 36, 50; A 711 Gr. 1013;  
 API 5 L B, X42, X52, X60, X65

**APPROVALS** CE

**WELDING POSITIONS**



**TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)**

| C    | Si  | Mn  | P     | S    | Mo  |
|------|-----|-----|-------|------|-----|
| 0.09 | 0.5 | 0.8 | 0.025 | 0.02 | 0.5 |

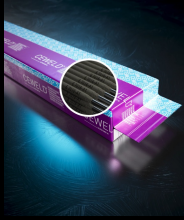
**MECHANICAL PROPERTIES**

| Heat Treatment | Rp0,2 (MPa) | Rm (MPa) | A5 (%) | Impact Energy (J) ISO-V |     | Hardness |
|----------------|-------------|----------|--------|-------------------------|-----|----------|
|                |             |          |        | -20°C                   | RT  |          |
| As Welded      | 570         | 630      | 25     | 50                      | 120 | HRc      |

**REDRYING** 400°C / 1 hr

**CURRENT TYPE:** AC, DC+

**GAS ACC. EN ISO 14175**



# CEWELD E 7018-A1

E 7018-A1 2,5 X 350MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Can       | 2,4     | 8720663401182 |

E 7018-A1 3,2 X 350MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Can       | 2,4     | 8720663401205 |

E 7018-A1 4,0 X 450MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Can       | 3,2     | 8720663401229 |