



# CEWELD AA M CrMo1V

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------|----------------------|--------------------|-------------------------|-----|----------|------|
| TYPE                                                                                                                                                                                                                                                                                  | Seamless metal cored wire for M21 shielding gas. (Typ CrMo1V, 1.7745)                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                    |                         |                      |                    |                         |     |          |      |
| TOEPASSINGEN                                                                                                                                                                                                                                                                          | CEWELD® AA MCrMo1V is a metal flux cored wire with excellent weld pool handling.<br>The main areas of application are: Foundries, production welding                                                                                                                                                                                                                                                                                                                                                                    |                                                    |                         |                      |                    |                         |     |          |      |
| EIGENSCHAPPEN                                                                                                                                                                                                                                                                         | CEWELD® AA MCrMo1V shows low spatter loss, extremely crack resistant. Suitable for economical welding of CrMoV steels up to 550 °C. Due to the seamless manufacturing process, the hydrogen content is below 3 ml/100 g weld metal even after prolonged storage. Good gap bridging properties. In the current range (PF) of 85 - 175 A, suitable for vertical piercing seams.                                                                                                                                           |                                                    |                         |                      |                    |                         |     |          |      |
| CLASSIFICATIE                                                                                                                                                                                                                                                                         | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | A 5.28: ER80T15-GM2M H4, A 5.36: E80T15-M21PY-G-H4 |                         |                      |                    |                         |     |          |      |
|                                                                                                                                                                                                                                                                                       | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 17634-A: T Z M M 1 H5                              |                         |                      |                    |                         |     |          |      |
|                                                                                                                                                                                                                                                                                       | W.Nr.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ~1.7745                                            |                         |                      |                    |                         |     |          |      |
|                                                                                                                                                                                                                                                                                       | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 6                                                  |                         |                      |                    |                         |     |          |      |
|                                                                                                                                                                                                                                                                                       | FM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 4                                                  |                         |                      |                    |                         |     |          |      |
| GESCHIKT VOOR                                                                                                                                                                                                                                                                         | 1%Cr 0,5%Mo, ISO 15608: ~5,1 (0,75 % < Cr < 1,5 % und Mo < 0,7 % und ~0,3% V)<br>1.7335, 1.7262, 1.7728, 1.7218, 1.7225, 1.7258, 1.7354, 1.7357, 1.7745, 1.7706, 1.7733<br>13CrMo4-5, 15CrMo5, 15 CrMoV 5 10, 16CrMoV4, 25CrMo4, 42CrMo4, 24CrMo5, G22CrMo5-4, G17CrMo5-5, 24CrMoV5-5, G17CrMoV5-10<br>ASTM A 182 Gr. F12; A 193 Gr. B7; A 213 Gr. T12; A 217 Gr. WC6; A 234 Gr. WP11; A335 Gr. P11, P12; A 336 Gr. F11, F12; A 426 Gr. CP12                                                                            |                                                    |                         |                      |                    |                         |     |          |      |
| GOEDKEURINGEN                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                    |                         |                      |                    |                         |     |          |      |
| LASPOSITIES                                                                                                                                                                                                                                                                           |       |                                                    |                         |                      |                    |                         |     |          |      |
| TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%)                                                                                                                                                                                                                                           | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Si                                                 | Mn                      | P                    | S                  | Cr                      | Ni  | Mo       | V    |
|                                                                                                                                                                                                                                                                                       | 0.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 0.3                                                | 0.9                     | 0.015                | 0.015              | 1.1                     | 0.3 | 1        | 0.25 |
| MECHANISCHE WAARDEN                                                                                                                                                                                                                                                                   | Heat Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                    | R <sub>P0,2</sub> (MPa) | R <sub>m</sub> (MPa) | A <sub>5</sub> (%) | Impact Energy (J) ISO-V |     | Hardness |      |
|                                                                                                                                                                                                                                                                                       | 690°C±15°C 6h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                    | 550                     | 700                  | 20                 | RT                      |     | HRc      |      |
| HERDROGEN                                                                                                                                                                                                                                                                             | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                    |                         |                      |                    |                         |     |          |      |
| Heat Treatment: Quenched and tempered ( 30 min at 950° C / oil and 16 h at 700°C furnace cooling to 300° C ) Rp0,2 >440 MPa Rm 590-780 MPa A5 > 15 Quenched and tempered ( 30 min at 950° C / air and 16 h at 700°C furnace cooling to 300° C ) Rp0,2 >440 MPa Rm 590-780 MPa A5 > 15 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                    |                         |                      |                    |                         |     |          |      |
| GAS ACC. EN ISO 14175                                                                                                                                                                                                                                                                 | M21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                    |                         |                      |                    |                         |     |          |      |