

# CEWELD ER 70S-B2L

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                    |      |                         |                      |        |          |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------|-------------------------|----------------------|--------|----------|
| TYPE                                        | Low alloyed welding wire for high tensile strength and creep resistant steels. (1¼Cr/½ Mo, B2L Type)                                                                                                                                                                                                                                                                                                                                                                                                                    |                    |      |                         |                      |        |          |
| TOEPASSINGEN                                | CEWELD® ER 70S-B2L is a low carbon variant of the ER80S-B2 and was developed for welding 1¼Cr/½ Mo steel, which requires a lower hardness in the welded condition. Typical applications can be found in power plant construction, pressure pipe, turbine and boiler construction as well as mountain bikes, vehicle frames, stock cars and creep-resistant steels.                                                                                                                                                      |                    |      |                         |                      |        |          |
| EIGENSCHAPPEN                               | CEWELD® ER 70S-B2L is identical to ER80S-B2, with the exception of the reduced carbon content. This results in lower hardness and strength values, which reduces the tendency to crack, especially if the weld seams are not heat-treated. These steels are usually used for operating temperatures up to 550°C. The low proportion of accompanying elements (Sn, As, Sb, P) in the wire ensures a low Bruscato factor (X < 10 ppm) and therefore insensitivity to temper embrittlement.                                |                    |      |                         |                      |        |          |
| CLASSIFICATIE                               | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | A 5.28: ER 70S-B2L |      |                         |                      |        |          |
|                                             | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 21952-B: G 1CML    |      |                         |                      |        |          |
|                                             | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 6                  |      |                         |                      |        |          |
|                                             | FM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 5                  |      |                         |                      |        |          |
| GESCHIKT VOOR                               | For similar 1.25%Cr-0.5%Mo-alloyed, heat-resistant, ferritic steels.<br>1.7335, 1.7242, 1.7337, 1.7357<br>13CrMo 4-5, 13CrMo 4-4, 16 CrMo4, 16CrMo 4-4, GS-17CrMo 5-5, G17CrMo5-5<br><b>ASTM:</b> A182 grades F11/F12, A199/A200 T11, A217 grades,WC6/WC11, A234 grades WP11/WP12, A335 grades P11/P12, A387 grades 11/12<br><b>BSI/AFNOR:</b> K12073, K11598, K 11568, J 12073, J 12072, J 11872, K11564                                                                                                               |                    |      |                         |                      |        |          |
| GOEDKEURINGEN                               | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                    |      |                         |                      |        |          |
| LASPOSITIES                                 |       |                    |      |                         |                      |        |          |
| TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Si                 | Mn   | P                       | S                    | Cr     | Mo       |
|                                             | 0.04                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 0.45               | 0.55 | 0.015                   | 0.015                | 1.3    | 0.6      |
| MECHANISCHE WAARDEN                         | Heat Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                    |      | R <sub>P0,2</sub> (MPa) | R <sub>m</sub> (MPa) | A5 (%) | Hardness |
|                                             | 620°C±15°C 1h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                    |      | 420                     | 570                  | 20     | HRc      |
| HERDROGEN                                   | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                    |      |                         |                      |        |          |
| GAS ACC. EN ISO 14175                       | M21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                    |      |                         |                      |        |          |