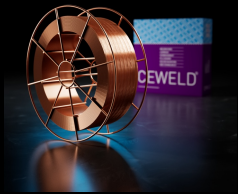




# CEWELD AA M460

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                 |                      |                    |                         |       |       |          |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|----------------------|--------------------|-------------------------|-------|-------|----------|
| TYPE                                        | Seamless metal-powder cored wire without slag for M21.(E 70C-6M, T 46 6 M)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                 |                      |                    |                         |       |       |          |
| APPLICATIONS                                | CEWELD AA M460 is suitable for welding applications such as MAG orbital or robotic welding. It has a wide range of approvals. This means that one wire can cover multiple applications up to a yield strength of 460 MPa. Applications include steel construction, shipbuilding, pressure vessel and mechanical engineering, pipeline construction, offshore, crane construction, heavy transport, lifting equipment, etc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                 |                      |                    |                         |       |       |          |
| PROPERTIES                                  | CEWELD AA M460 is a seamless metal powder cored wire with a remarkably stable arc with virtually no spatter. Excellent for use in automated welding machines.<br>CEWELD AA M460 can also be used for constructions that require heat treatment after welding and still offers very good mechanical properties, class 5Y46. Low hydrogen content HD<3 ml/100g even after long storage. CTOD tested at -20°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                 |                      |                    |                         |       |       |          |
| CLASSIFICATION                              | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | A 5.18: E70C-6M H4, A 5.36: E81T15-M21A8-CS1-H4 |                      |                    |                         |       |       |          |
|                                             | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 17632-A: T 46 6 M M21 1 H5                      |                      |                    |                         |       |       |          |
|                                             | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 6                                               |                      |                    |                         |       |       |          |
|                                             | FM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 1                                               |                      |                    |                         |       |       |          |
| SUITABLE FOR                                | <b>ReH ≤ 460 MPa (67 ksi) ISO 15608: 1.2 (275 &lt; ReH &lt; 360 MPa), 1.3 (ReH &gt; 360 MPa &lt; 460 MPa)</b><br>1.0409, 1.0421, 1.0426, 1.0429, 1.0430, 1.0436, 1.0473, 1.0481, 1.0482, 1.0484, 1.0505, 1.0545, 1.0546, 1.0562, 1.0566, 1.0570, 1.0578, 1.0581, 1.0582, 1.1138, 1.5419, 1.8948, 1.8900, 1.8901, 1.8902, 1.8903, 1.8905, 1.8907, 1.8910, 1.8912, 1.8915, 1.8917, 1.8930, 1.8932, 1.8935, 1.8937, 1.8970, 1.8971, 1.8972<br>10Ni14, 12Ni14, 13MnNi6-3, 15NiMn6,<br>S235JR-S355JR, S235JO-S355JO, S450JO, S235J2-S355J2, S275N-S460N, S275M-S460M, P235GH- P355GH, P275NL1-P460NL1, P215NL, P265NL, P355N, P285NH-P460NH, P195TR1-P265TR1, P195TR2- P265TR2, P195GH-P265GH, L245NB-L415NB, L450QB, L245MB-L450MB, GE200-GE240<br>AH32, AH36, AH40; DH32, DH36, DH40; EH32, EH36, EH40; FH32, FH36, FH40<br>ASTM A 203 Gr. D, E; A 350 Gr. LF1, LF2, LF3; A 420 Gr. WPL3, WPL6; A 516 Gr. 60, 65, 70; A 572 Gr. 42, 50, 55, 60, 65; A 633 Gr. A, D, E; A 662 Gr. A, B, C; A 707 Gr. L1, L2, L3; A 738 Gr. A; A 841 A, B, C; API 5 L X52, X60, X65, X52Q, X60Q, X65Q<br>Oceanfit 52, Oceanfit 60, Oceanfit 65, Oceanfit 355, Oceanfit 420, Oceanfit 460, alform plate 460M; durostat 400, 450, durostat B2 |                                                 |                      |                    |                         |       |       |          |
| APPROVALS                                   | TÜV: (12706), CE, Lloyds, DNV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                 |                      |                    |                         |       |       |          |
| WELDING POSITIONS                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                 |                      |                    |                         |       |       |          |
| TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Si                                              | Mn                   | P                  | S                       |       |       |          |
|                                             | 0.05                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 0.7                                             | 1.5                  | 0.015              | 0.015                   |       |       |          |
| MECHANICAL PROPERTIES                       | Heat Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | R <sub>p0.2</sub> (MPa)                         | R <sub>m</sub> (MPa) | A <sub>5</sub> (%) | Impact Energy (J) ISO-V |       |       | Hardness |
|                                             | As Welded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 510                                             | 620                  | 24                 | -20°C                   | -40°C | -60°C | HRc      |
|                                             | 580°C±15°C 2h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 475                                             | 620                  | 26                 | 70                      | 60    | 55    | HRc      |
| REDRYING                                    | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                 |                      |                    |                         |       |       |          |
| GAS ACC. EN ISO 14175                       | M21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                 |                      |                    |                         |       |       |          |



# CEWELD AA M460

## AA M460 1,0MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| BS-300    | 16      | 8720663423368 |
| D-200     | 5       | 8720663423313 |

## AA M460 1,2MM

| Packaging | KG/unit  | EanCode       |
|-----------|----------|---------------|
| BS-300    | 16       | 8720663423375 |
| D-200     | 20 (4x5) | 8720663423320 |
| Drum      | 300      | 8720663423344 |

## AA M460 1,6MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| D-760     | 270     | 8720663423337 |
| Drum      | 250     | 8720663423351 |
| K-300     | 16      | 8720663423382 |