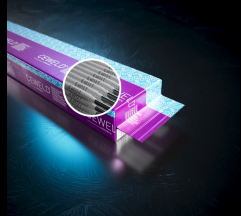


# CEWELD E 6013 T

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         |                      |                    |                         |      |      |      |          |      |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------|--------------------|-------------------------|------|------|------|----------|------|
| TYPE                                        | Thick coated rutile electrode for SMAW welding. ( Type E 42 0 )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         |                      |                    |                         |      |      |      |          |      |
| APPLICATIONS                                | CEWELD® E 6013 T is a thick coated electrode for joining and surfacing steel structures of all kinds in mechanical engineering, body and wagon building, fabrication of vessels and containers and in shipbuilding.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                         |                      |                    |                         |      |      |      |          |      |
| PROPERTIES                                  | CEWELD® E 6013 T is eminently weldable and possesses excellent welding properties in all positions except vertically down. Easy strike, no spatter losses. Very easy slag removal. Smooth, finely rippled seam surface and low fume.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                         |                      |                    |                         |      |      |      |          |      |
| CLASSIFICATION                              | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | A 5.1: E 6013           |                      |                    |                         |      |      |      |          |      |
|                                             | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2560-A: E 42 0 RR 12    |                      |                    |                         |      |      |      |          |      |
|                                             | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2                       |                      |                    |                         |      |      |      |          |      |
|                                             | FM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1                       |                      |                    |                         |      |      |      |          |      |
| SUITABLE FOR                                | <p><b>Rp&lt; 420 MPa (60ksi) ISO 15608: 1.1( ReH &lt; 275 MPa ), 1.2 (275 &lt; ReH &lt; 360 MPa), 1.3 (ReH &gt; 360 MPa &lt; 420 MPa)</b></p> <p>1.0035, 1.0038, 1.0039, 1.0044, 1.0112, 1.0116, 1.0130, 1.0145, 1.0253, 1.0254, 1.0255, 1.0258, 1.0259, 1.0319, 1.0345, 1.0345, 1.0345, 1.0348, 1.0352, 1.0418, 1.0420, 1.0425, 1.0425, 1.0425, 1.0451, 1.0452, 1.0453, 1.0457, 1.0459, 1.0460, 1.0460, 1.0461, 1.0486, 1.0490, 1.0491, 1.0619, 1.1100, 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, 1.8902, 1.8912, 1.8932</p> <p>S235JR-S355JR, S235JO-S355JO, P195TR1-P265TR1, P195GH-P265GH, L245NB-L360NB, L245MB-L360MB, L415NB, L415MB, WStE 380, WStE 420, S420NL</p> <p>A, B, D</p> <p><b>ASTM</b> A 106, Gr. A, B; A 283 Gr. A, C; A 285 Gr. A, B, C; A 501, Gr. B; A 573, Gr. 58, 65, 70; A 633, Gr. A, C; A 711 Gr. 1013; API 5 L Gr. B, X42, X52, X60</p> |                         |                      |                    |                         |      |      |      |          |      |
| APPROVALS                                   | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                         |                      |                    |                         |      |      |      |          |      |
| WELDING POSITIONS                           | <div></div>                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                         |                      |                    |                         |      |      |      |          |      |
| TYPICAL CHEMICAL ANALYSIS OF WELD METAL (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Si                      | Mn                   | P                  | S                       | Cr   | Ni   | Mo   | V        | Fe   |
|                                             | 0.08                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 0.4                     | 0.6                  | 0.02               | 0.02                    | 0.04 | 0.05 | 0.02 | 0.015    | Rem. |
| 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 |      |
|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         |                      |                    | 0°C                     |      |      |      |          |      |
|                                             | As Welded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 450                     | 570                  | 25                 | 66                      |      |      |      | HRc      |      |
| REDRYING                                    | 140°C / 2 hr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                         |                      |                    |                         |      |      |      |          |      |
| GAS ACC. EN ISO 14175                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         |                      |                    |                         |      |      |      |          |      |



# CEWELD E 6013 T

E 6013 T 1,6 X 250MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Can       | 2,0     | 8720663400628 |

E 6013 T 2,0 X 300MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Vacuum    | 1,8     | 8720682050583 |

E 6013 T 2,5 X 350MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Vacuum    | 2,0     | 8720682050590 |

E 6013 T 3,2 X 450MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Vacuum    | 2,8     | 8720682050606 |

E 6013 T 4,0 X 450MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Vacuum    | 3,0     | 8720682050613 |

E 6013 T 5,0 X 450MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Vacuum    | 2,3     | 8720682050620 |