



# CEWELD 320 Tig

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                |     |                         |       |                      |    |        |          |     |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|-----|-------------------------|-------|----------------------|----|--------|----------|-----|
| TYPE                                              | Solid stainless steel rods for high corrosive environments                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                |     |                         |       |                      |    |        |          |     |
| APPLICATIONS                                      | CEWELD® 320 Tig is used in a variety of industries, including chemical processing, petrochemical and refining, marine, pharmaceutical and food processing. End use applications include storage tanks, mixing tanks, agitators, pump and valve parts, food processing equipment, fasteners and fittings                                                                                                                                                                                                                                                                                              |                |     |                         |       |                      |    |        |          |     |
| PROPERTIES                                        | CEWELD® 320 Tig was designed specifically to withstand sulfuric acid. Its nickel, chromium, molybdenum and copper levels all provide excellent general corrosion resistance. Restricted carbon plus columbium stabilization permits welded fabrications to be used in corrosive environments, normally without post-weld heat treatment. At 33% nickel, CEWELD® 320 Tig has practical immunity to chloride stress corrosion cracking. This alloy is often chosen to solve SCC problems, which may occur with 316L stainless                                                                          |                |     |                         |       |                      |    |        |          |     |
| CLASSIFICATION                                    | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | A 5.9: ER320   |     |                         |       |                      |    |        |          |     |
|                                                   | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 14343-B: W 320 |     |                         |       |                      |    |        |          |     |
|                                                   | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 6              |     |                         |       |                      |    |        |          |     |
|                                                   | FM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 5              |     |                         |       |                      |    |        |          |     |
| SUITABLE FOR                                      | Alloy 20, Carpenter 20, 320                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                |     |                         |       |                      |    |        |          |     |
| APPROVALS                                         | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                |     |                         |       |                      |    |        |          |     |
| WELDING POSITIONS                                 |        |                |     |                         |       |                      |    |        |          |     |
| TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Si             | Mn  | P                       | S     | Cr                   | Ni | Mo     | Nb       | Cu  |
|                                                   | 0.014                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0.5            | 1.6 | 0.007                   | 0.007 | 20                   | 34 | 2.5    | 0.25     | 3.5 |
| MECHANICAL PROPERTIES                             | Heat Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                |     | R <sub>P0,2</sub> (MPa) |       | R <sub>m</sub> (MPa) |    | A5 (%) | Hardness |     |
|                                                   | As Welded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                |     | 400                     |       | 590                  |    | 35     | HRc      |     |
| REDRYING                                          | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                |     |                         |       |                      |    |        |          |     |
| GAS ACC. EN ISO 14175                             | I1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                |     |                         |       |                      |    |        |          |     |



## CEWELD 320 Tig

320 TIG 2,4 X 1000MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Tube      | 5       | 8720682050187 |

320 TIG 1,6 X 914MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Tube      | 5       | 8720663415479 |