



# CEWELD 904L Tig

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         |                      |                    |                         |    |    |          |     |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------|--------------------|-------------------------|----|----|----------|-----|
| TYPE                                              | Solid stainless steel austenitic filler metal with excelent corrosion resistance for Tig welding                                                                                                                                                                                                                                                                                                                                                                                                   |                         |                      |                    |                         |    |    |          |     |
| APPLICATIONS                                      | CEWELD® 904L Tig is a corrosion-resistant, solid chromium-nickel-molybdenum-copper wire for welding austenitic stainless alloys with 20% Cr, 25% Ni, 5% Mo, 1.5% Cu, and low carbon content. Typical applications include process vessels and tanks, piping systems, agitators and rotors, as well as cast pumps and valves for the production of fertilizers, phosphoric, sulfur, and acetic acids. It is also suitable for brackish and seawater environments and in some offshore applications. |                         |                      |                    |                         |    |    |          |     |
| PROPERTIES                                        | CEWELD® 904L Tig can also be used to join Type 317L materials when improved corrosion resistance in certain media is required. To reduce the tendency to crack and hot crack, the low-melting components such as carbon, silicon, and phosphorus in this alloy are limited to a lower content. Good general corrosion resistance similar to that of similar steels/ cast steels, especially in reducing environments. Max. operating temperature 350°C.                                            |                         |                      |                    |                         |    |    |          |     |
| CLASSIFICATION                                    | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | A 5.9: ER385            |                      |                    |                         |    |    |          |     |
|                                                   | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 14343-A: W 20 25 5 Cu L |                      |                    |                         |    |    |          |     |
|                                                   | W.Nr.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1.4539                  |                      |                    |                         |    |    |          |     |
|                                                   | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 6                       |                      |                    |                         |    |    |          |     |
|                                                   | FM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5                       |                      |                    |                         |    |    |          |     |
| SUITABLE FOR                                      | 1.4539 / 904L CrNiMoCu / 20 25 5 Cu L<br>1.4465, 1.4500, 1.4505, 1.4506, 1.4519, 1.4531, 1.4536, 1.4537, 1.4538, 1.4539, 1.4573, 1.4585, 1.4586<br>X1CrNiMoN25-25-2, X1NiCrMoCu 25-20-5, X1CrNiMoCuN 25-25-5, X2NiCrMoCuN25-20-5, X2NiCrMoCuN20-18, X4NiCrMoCuNb 20-18-2, X5NiCrMoCuTi20-18, X5NiCrMoCuNb22-18<br>ASTM A182,<br>UNS N08904, S31726<br>Uranus B6, AISI 904L, Z2NCDU25-20,                                                                                                           |                         |                      |                    |                         |    |    |          |     |
| APPROVALS                                         | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                         |                      |                    |                         |    |    |          |     |
| WELDING POSITIONS                                 |                                                                                                                                                                                                                                                                                                                                                                                                                 |                         |                      |                    |                         |    |    |          |     |
| TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Si                      | Mn                   | P                  | S                       | Cr | Ni | Mo       | Cu  |
|                                                   | 0.019                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 0.35                    | 2                    | 0.01               | 0.01                    | 20 | 25 | 4.5      | 1.6 |
| 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 |     |
|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         |                      |                    | RT                      |    |    |          |     |
|                                                   | As Welded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 410                     | 600                  | 35                 | 120                     |    |    | HRc      |     |
| REDRYING                                          | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                         |                      |                    |                         |    |    |          |     |
| GAS ACC. EN ISO 14175                             | I1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                         |                      |                    |                         |    |    |          |     |



# CEWELD 904L Tig

904L TIG 1,2 X 1000MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Tube      | 5       | 8720663415349 |

904L TIG 1,6 X 1000MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Tube      | 5       | 8720663415356 |

904L TIG 2,0 X 1000MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Tube      | 5       | 8720663415363 |

904L TIG 2,4 X 1000MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Tube      | 5       | 8720663415370 |

904L TIG 3,2 X 1000MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Tube      | 5       | 8720663415387 |