



# CEWELD 2209 Duplex Tig

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                         |                      |                    |                         |       |          |    |      |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------|--------------------|-------------------------|-------|----------|----|------|
| TYPE                                              | Solid drawn wire rod for welding Duplex stainless steels.(Type 2209, 1.4462)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                         |                      |                    |                         |       |          |    |      |
| APPLICATIONS                                      | CEWELD® 2209 Duplex Tig is used for pipe welding and in general fabrication in the offshore oil and gas industry and in the chemical process industry. It is also suitable for cladding steels to obtain corrosion-resistant layers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                         |                      |                    |                         |       |          |    |      |
| PROPERTIES                                        | CEWELD® 2209 Duplex Tig exhibits corrosion resistance similar to that of grade 904L in most applications. In addition to high strength and toughness properties, CEWELD® 2209 Duplex Tig also exhibits excellent resistance to stress corrosion cracking and pitting (PREN > 35). The operating temperature range is from −40 °C to +250 °C. Ferrite content 30-60 FN (WRC)                                                                                                                                                                                                                                                                                                                                   |                         |                      |                    |                         |       |          |    |      |
| CLASSIFICATION                                    | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | A 5.9: ER2209           |                      |                    |                         |       |          |    |      |
|                                                   | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 14343-A: W 22 9 3 N L   |                      |                    |                         |       |          |    |      |
|                                                   | W.Nr.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1.4462                  |                      |                    |                         |       |          |    |      |
|                                                   | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 6                       |                      |                    |                         |       |          |    |      |
|                                                   | FM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 5                       |                      |                    |                         |       |          |    |      |
| SUITABLE FOR                                      | ISO 15608: 10.1-10.2 Austenitic > 24 % Cr ≤ 4% Ni, DUPLEX 2209, 22%Cr 9%Ni 3%Mo<br>1.4162, 1.4362, 1.4417, 1.4460, 1.4462, 1.4463, 1.4583<br>X 2 CrNiMoSi 19 5, X 2 CrNiN 23 4, X 2 CrNiMoN 22 5 3, X10CrNiMoNb18-12, X2CrMnNiN21-5-1<br>316LN, 318LN<br>UNS S31803, S32205, S32304<br>SAF 2205 Fafer 4462, NKCr22, SM22Cr, Falc 223 UR 45N & UR 45N+, 2101, 2205, UR 35 N SAF 2304<br>mix 1.4462 X2CrNiMoN22-5-3 mit P235GH/ P265GH, S255N, P295GH, S355N, 16Mo3                                                                                                                                                                                                                                             |                         |                      |                    |                         |       |          |    |      |
| APPROVALS                                         | TÜV: (12396), CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                         |                      |                    |                         |       |          |    |      |
| WELDING POSITIONS                                 | <div> PA</div> <div> PB</div> <div> PC</div> <div> PD</div> <div> PE</div> <div> PF</div> <div> PG</div> |                         |                      |                    |                         |       |          |    |      |
| TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Si                      | Mn                   | P                  | S                       | Cr    | Ni       | Mo | N    |
|                                                   | 0.02                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.5                     | 1.6                  | 0.01               | 0.01                    | 23    | 9        | 3  | 0.15 |
| 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                      | -60°C |          |    |      |
|                                                   | As Welded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 725                     | 810                  | 30                 | 140                     | 85    | HRc      |    |      |
| REDRYING                                          | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                         |                      |                    |                         |       |          |    |      |
| GAS ACC. EN ISO 14175                             | I1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                         |                      |                    |                         |       |          |    |      |



# CEWELD 2209 Duplex Tig

2209 DUPLEX TIG 1,0 X  
1000MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Tube      | 5       | 8720663414540 |

2209 DUPLEX TIG 1,2 X  
1000MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Tube      | 5       | 8720663414557 |

2209 DUPLEX TIG 1,6 X  
1000MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Tube      | 5       | 8720663414564 |

2209 DUPLEX TIG 2,0 X  
1000MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Tube      | 5       | 8720663414571 |

2209 DUPLEX TIG 2,4 X  
1000MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Tube      | 5       | 8720663414588 |

2209 DUPLEX TIG 3,2 X  
1000MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Tube      | 5       | 8720663414595 |

2209 DUPLEX TIG 4,0 X  
1000MM

| Packaging | KG/unit | EanCode       |
|-----------|---------|---------------|
| Tube      | 5       | 8720663414618 |