



# CEWELD 2594 Tig (Super Duplex)

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                         |                      |                    |                         |    |       |     |          |     |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------|--------------------|-------------------------|----|-------|-----|----------|-----|
| TYPE                                              | Tig filler metal for welding Super Duplex types of stainless steels.                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                         |                      |                    |                         |    |       |     |          |     |
| TOEPASSINGEN                                      | Welding austenitic-ferritic, stainless alloys of the 25% Cr, 7% Ni, 4% Mo, low C types. Welding wrought, forged or cast super duplex stainless steels for service in the as-welded Condition. Heterogeneous welding between super duplex stainless steels and dissimilar welds between other stainless and mild or low alloyed steels. The alloy is widely used in applications in which corrosion resistance is of the utmost importance. The pulp & paper industry, offshore and gas industry are areas of interest. |                         |                      |                    |                         |    |       |     |          |     |
| EIGENSCHAPPEN                                     | 2594 offers high intergranular-corrosion, pitting and stress-corrosion resistance with exceptional mechanical strength properties.                                                                                                                                                                                                                                                                                                                                                                                     |                         |                      |                    |                         |    |       |     |          |     |
| CLASSIFICATIE                                     | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | A 5.9: ER2594           |                      |                    |                         |    |       |     |          |     |
|                                                   | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 14343-A: W 25 9 4 N L   |                      |                    |                         |    |       |     |          |     |
|                                                   | W.Nr.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 1.4410                  |                      |                    |                         |    |       |     |          |     |
|                                                   | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 6                       |                      |                    |                         |    |       |     |          |     |
|                                                   | FM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 5                       |                      |                    |                         |    |       |     |          |     |
| GESCHIKT VOOR                                     | 1.4507, 1.4410, 1.4468, 1.4515, 1.4517, 1.4501, 1.4467, 1,4569, 1.4508<br>X2 CrNiMoCuN 25-6-3, X2 CrNiMoN 25-7-4, GX2 CrNiMoN 25-6-3, GX2 CrNiMoCuN 26-6-3, GX2 CrNiMoCuN 25-6-3-3, X2 CrNiMoCuWN 25-7-4, X2CrMnNiMoN26-5-4, X 2 CrNiMoN 26 7 4, GX2CrNiMoCuWN25-8-4<br>UNS S32520, S32550, S32750, S39274, S39277, S39553, S32760, J93380<br>Ferralium 255, SAF 2507, ZERON 100, UR 76 N, SM22Cr, SAF 2507, Alloy 2507, Alloy 2594, Super Duplex                                                                      |                         |                      |                    |                         |    |       |     |          |     |
| GOEDKEURINGEN                                     | CE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |                      |                    |                         |    |       |     |          |     |
| LASPOSITIES                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |                      |                    |                         |    |       |     |          |     |
| TYPICAL CHEMICAL ANALYSIS OF THE FILLER METAL (%) | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Si                      | Mn                   | P                  | S                       | Cr | Ni    | Mo  | N        | W   |
|                                                   | 0.02                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 0.6                     | 1.2                  | 0.01               | 0.01                    | 25 | 9     | 3.5 | 0.2      | 0.4 |
| MECHANISCHE WAARDEN                               | Heat Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | R <sub>P0,2</sub> (MPa) | R <sub>m</sub> (MPa) | A <sub>5</sub> (%) | Impact Energy (J) ISO-V |    |       |     | Hardness |     |
|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                         |                      |                    | -20°C                   |    | -40°C |     |          |     |
|                                                   | As Welded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 620                     | 780                  | 26                 | 60                      |    | 50    |     | HRc      |     |
| HERDROGEN                                         | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                         |                      |                    |                         |    |       |     |          |     |
| GAS ACC. EN ISO 14175                             | I1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                         |                      |                    |                         |    |       |     |          |     |