



# CEWELD ERTi-12 Tig

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                 |                         |                      |                    |          |      |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------|----------------------|--------------------|----------|------|
| TYPE                                              | Titanium Tig welding wire grade 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                 |                         |                      |                    |          |      |
| APPLICATIONS                                      | This alloy finds his applications in chemical industry and offers excellent Weldability. Often recommended for pressure vessels and piping for its superior strength alone.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                 |                         |                      |                    |          |      |
| PROPERTIES                                        | ERTi-12. Grade 12 (Ti 0.8Ni0.3Mo) is an intermediate strength grade originally developed to provide enhanced crevice-corrosion resistance in high temperature brines, but at lower cost than Grade 7. The improved performance is believed to be the result of Ni++ and Mo++ ions that alter the surface electrochemistry of the material in the crevice or under a surface deposit. Grade 12 has better elevated temperature properties than Grade 2 or 3 and is sometimes specified for pressure vessels or piping for its superior strength alone.                                                                                                                                                  |                                 |                         |                      |                    |          |      |
| CLASSIFICATION                                    | AWS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | A 5.16: ERTi-12                 |                         |                      |                    |          |      |
|                                                   | EN ISO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 24034: S Ti 3401 / TiNi0,7Mo0,3 |                         |                      |                    |          |      |
|                                                   | W.Nr.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ~3.7105                         |                         |                      |                    |          |      |
|                                                   | F-nr                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 51                              |                         |                      |                    |          |      |
| SUITABLE FOR                                      | 3.7105<br>Titanium grade 12, Grade 7, Grade 2 and Grade 3<br>R56400<br>Ti3AL-1,5Mn                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                 |                         |                      |                    |          |      |
| APPROVALS                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                 |                         |                      |                    |          |      |
| 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | H                               | N                       | O                    | Fe                 | Ni       | Ti   |
|                                                   | 0.02                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 0.005                           | 0.01                    | 0.12                 | 0.1                | 0.8      | Rem. |
| MECHANICAL PROPERTIES                             | Heat Treatment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                 | R <sub>P0,2</sub> (MPa) | R <sub>m</sub> (MPa) | A <sub>5</sub> (%) | Hardness |      |
|                                                   | As Welded                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                 | 345                     | 480                  | 20                 | HRc      |      |
| REDRYING                                          | Not required                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                 |                         |                      |                    |          |      |
| GAS ACC. EN ISO 14175                             | I1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                 |                         |                      |                    |          |      |



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|                          |           |         |               |
|--------------------------|-----------|---------|---------------|
| ERTI-12 TIG 1,6 X 1000MM | Packaging | KG/unit | EanCode       |
|                          | Tube      | 2,5     | 8720663406477 |
| ERTI-12 TIG 2,0 X 1000MM | Packaging | KG/unit | EanCode       |
|                          | Tube      | 2,5     | 8720663406484 |
| ERTI-12 TIG 2,4 X 1000MM | Packaging | KG/unit | EanCode       |
|                          | Tube      | 2,5     | 8720663406491 |
| ERTI-12 TIG 3.2 X 1000MM | Packaging | KG/unit | EanCode       |
|                          | Tube      | 2,5     | 8720663406507 |