

## ER Ti 7

**CATEGORY** GMAW-GTAW Solid wires

**TYPE** Solid drawn Titanium Grade 7 welding wire.

**APPLICATIONS** Grade 7 has the same mechanical properties as Grade 2. The 0.12 wt% palladium addition improves corrosion performance under mildly reducing conditions or where crevice or under-deposit corrosion is a problem. ERTi-7 can be considered for welding Grade 2 or 16 where improved corrosion performance is desired.

**PROPERTIES** The weld deposit is ductile and offers excellent corrosion resistance in oxidizing environments. The unique combination of mechanical strength and corrosion resistance makes the alloy a preferred choice in many applications to prevent or solve problems. The wire is cleaned in a very special way to obtain porosity free and a ductile weld deposit.

**CLASSIFICATION**

|            |                 |
|------------|-----------------|
| AWS        | A 5.16: ER Ti 7 |
|            | UNS: R52401     |
| EN ISO     | 24034:STi-2401  |
| DIN: W.Nr. | 3.7235          |
| DIN        | 1737:           |

**SUITABLE FOR** Titanium grade 7, Grade 2, Grade 16

**WELDING POSITIONS:**



**ALL WELD METAL WEIGHT %**

| C     | O         | N      | H      | Fe    | Al | V | Pd        |
|-------|-----------|--------|--------|-------|----|---|-----------|
| <0.03 | 0.08-0.16 | <0.015 | <0.008 | <0.12 | -  | - | 0.12-0.25 |

**MECHANICAL PROPERTIES**

| Heat Treatment | R <sub>p0,2</sub><br>(N/mm <sup>2</sup> ) | R <sub>m</sub><br>(N/mm <sup>2</sup> ) | A <sub>5</sub><br>(%) | Impact Energy (J) ISO-V |       |       | Hardness<br>HRc / HV |
|----------------|---|--|-----------------------|-------------------------|-------|-------|----------------------|
|                |   |  |                       | -20°C                   | -40°C | -60°C |                      |
| as welded      | 275                                       | 400                                    | 20                    |                         |       |       |                      |

**WELDING PARAMETERS / PACKING**

| D (mm) | Welding Parameters |             | Packing<br>kg / tube |
|--------|--------------------|-------------|----------------------|
|        | Length (mm)        | Current (A) |                      |
| 1.6    | 1000               |             | 5                    |
| 2.0    | 1000               |             | 5                    |
| 2.4    | 1000               |             | 5                    |
| 3.2    | 1000               |             | 5                    |

**REDRYING TEMPERATURE** not required

**NOTE** Also available as spooled wire :0.8 mm, 1.0 mm and 1.2 mm (D-100 / D-200 / D-300)