

## Ti5

### Comparable specifications

**ASME SFA-5.16 / AWS A5.16:** ERTi-5  
**EN ISO 24034:** S Ti 6402 (TiAl6V4B)  
**AMS 4954:** 6Al - 4V

### Description and applications\*

\* *Illustrative, not-exhaustive list*

This solid titanium welding wire offers a sound combination of mechanical strength and corrosion resistance, making it a preferred choice in many applications. Excellent weldability and its resistance to corrosion, similar to Titanium Grade 2, make it perfect to be used in oxidizing environments. It can be heat treated to obtain a higher strength or toughness.

This grade is mainly used for:

- aerospace applications into the making of landing gears and compressor blades;
- medical applications, thanks to the fact that it's biocompatible;
- thanks to its corrosion resistance it is also used for propeller shafts, underwater connectors, and other marine components such as piping system;
- widely used in the chemical industry to weld equipment continuously exposed to aggressive chemicals.

### Weldable base materials\*

\* *Illustrative, not-exhaustive list*

Pure titanium and titanium alloys with similar chemical composition; Titanium grades 2-5.

### All-weld metal mech. properties\*

\* *For reference only values*

**Tensile strength (Rm):**  $\geq 890$  N/mm<sup>2</sup>    **Yield Strength (Rp<sub>0.2</sub>):**  $\geq 820$  N/mm<sup>2</sup>  
**Elongation (A5d):**  $\geq 10\%$

### Chemical composition\*

\* *For reference only values*

C	O	N	H	Fe	Al	V	Y	Ti
max	0.12	max	max	max	5.50	3.50	max	rem.
0.05	0.18	0.03	0.015	0.22	6.75	4.50	0.005	

### Standard packaging data\*

Welding process	Product type	Ø mm (inches)	Packing type
GMAW **	filler wire	0.80 - 1.20 (0.030 - 0.047)	spools BS300 / D300
GTAW **	filler rod (1000 mm)	1.60 - 4.00 (1/16 - 5/32)	cardboard boxes / tubes

\* *Other sizes and packing types are available upon request*

\*\* *GMAW: gas metal arc welding; GTAW: gas tungsten arc welding*

### Marking

Each filler rod for GTAW welding is durably marked with an identification traceable to the unique product type. Welding filler materials wound on spools or in coils are durably marked on the coil or spool with an identification traceable to the unique product type.

The outside of each unit package is suitably labelled with at minimum the following data: grade, diameter, heat, lot no., classifications.

Customized labels are available upon request.

### Lot classification

All our productions fulfil the **Class S3** requirements acc. to EN ISO 14344.