Masterweld MWTi-5

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*

MWTi-5 provides excellent weldability and can be heat-treated to achieve higher strength or toughness. It is commonly used in aircraft components such as landing gear, wing spars, and compressor blades. Its corrosion resistance is comparable to Grade 2, making it ideal for applications requiring both high strength and resistance to oxidation, particularly in shafts, high-strength bolting, and keys.

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): ≥ 890 N/mm^2 **Yield Strength ($Rp_{0.2}$):** ≥ 820 N/mm^2
Elongation (A5d): ≥ 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	

Lot classification

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