Titanium Welding Wire

ER Ti-5

Category BTWI-BPTW Solid wires

Type Solid Titanium based welding wire (Grade 5) with extreme high strenght.

Applications Aerospace, marine, chemical plants, process plants, power generation, oil and gas extraction, medical and sports.

Properties Excelent weldability, and can be heat treated to a higher strength or toughness. Grade 5 is used in aircraft components such as landing gear, wing spars, and compressor blades. Its corrosion resistance is generally comparable to Grade 2 and it is often used in corrosion service where higher strength is required, particularly in shafts, high strength bolting, and keys.

The weld deposit is ductile and offers excellent corrosion resistance in oxidizing environments. The unique combination of mechanical strenght and corrosion resistance makes the alloy a prefered choice in many applications to prefend 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 5

UNS: R56400

Suitable for Titanium grade 5, UNS R56400, AMS 4954

Welding positions:

Weld deposit weight %

C	O	N	H	Fe	Al	V	Pd
< 0.05	0.12 - 0.20	< 0.03	< 0.015	< 0.22	5.5 - 6.7	3.5 - 4.5	--

Mechanical properties

Heat Treatment	RP0,2 (N/mm^2)	Rm (N/mm^2)	A5 (%)	Impact Energy (J) ISO-V			Hardness
				-20°C	-40°C	-60°C	HRc / HV
	>890	>810	--	--	--	--	--

Welding parameters / packing

Welding Parameters			Packing
Dia. (mm)	Length (mm)	Current (A)	kg / tube
1.6	914 -1000mm		5
2.0	914 -1000mm		5
2.4	914 -1000mm		5
3.0	914 -1000mm		5
3.2	914 -1000mm		5
3.5	914 -1000mm		5
4.0	914 -1000mm		5

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