



TIG/MIG SOLID TITANIUM WELDING WIRES/RODS



ERTi-5

American Welding Society

Type:	Solid Titanium based welding wire (Grade 5) with extreme high strength.
Applications:	Aerospace, marine, chemical plants, process plants, power generation, oil and gas extraction, medical and sports.
Properties:	<p>Excellent 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.</p> <p>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.</p>
Classification:	AWS A 5.16: ER Ti 5 EN ISO 24034: STi-6402c DIN: W.Nr. 3.7165 DIN 1737:
Suitable for:	Titanium grade 5, UNS R56400, AMS 4954
Welding Positions:	

WELD DEPOSIT WEIGHT %

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

MECHANICAL PROPERTIES

Heat Treatment	RP 0.2 (N/mm ²)	Rm (N/mm ²)	A5 (%)	Impact Energy (J) ISO-V			Hardness HRc/HV
				-20°C	-40°C	-60°C	
as welded	>890	>810	--	-	-	-	-

WELDING PARAMETERS/PACKING

Welding Parameters			Packing
Dia. (mm)	Length (mm)	Current (A)	kg/tube
1.0	1000		5
1.2	1000		5
1.6	1000		5
2.0	1000		5
2.4	1000		5
3.2	1000		5

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