




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:	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. 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 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)