

MIG & TIG

Oxford Alloy® Ti-5

AWS ERTi-5 • Titanium

Key Features

- ❖ Used for welding 6% Aluminum – 4% Vanadium alloys. Commonly referred to as 6AL/4V
- ❖ The weld deposits of exhibit high fatigue strength, toughness, ductility and are heat treatable.
- ❖ Widely used in the cryogenic, petrochemical and aircraft industry.

Conformances

AWS/ASME SFA 5.16

ERTi-5

UNS R56402

Chemical Composition - As required per AWS 5.16

C	O	H	N	Al	V	Fe
0.05 max	0.12- 0.20	0.015 max	0.03 max	5.5- 6.75	3.5- 4.5	0.22 max
Ti						
Bal						

Mechanical Properties - As required by AWS 5.16

	Tensile Strength MPa (ksi)	Yield Strength MPa (ksi)	Elongation %
AWS Requirements	Not Specified		
Typical Results - As welded	895 (130)	830 (120)	10



Typical Welding Parameters

Diameter		Process	Volt	Amps	Shielding Gas
in	(mm)				
1/16	1.6	GTAW	16	180	100% Argon
3/32	2.4	GTAW	17	190	100% Argon
1/8	3.2	GTAW	19	205	100% Argon

Diameters & Packaging

Oxford Alloys USA			Oxford Alloys Asia Pacific		
Diameter (in)	Form	Packaging (lbs)	Diameter (mm)	Form	Packaging (kgs)
1/16	GTAW	5 lb tube 20 lb carton	1.6	GTAW	2 kg tube 8 kg carton
3/32	GTAW	5 lb tube 20 lb carton	2.4	GTAW	2 kg tube 8 kg carton
1/8	GTAW	5 lb tube 20 lb carton	3.2	GTAW	2 kg tube 8 kg carton

Actual test results may vary. Refer test result disclaimer on page 160.