

## Titanium and Zirconium TIG Wire

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### Oxford Alloy<sup>®</sup> Ti-7

**SPECIFICATIONS**

AWS 5.16  
 ASME SFA 5.16

**CLASSIFICATIONS**

AWS ERTi-7  
 UNS R52401

**DESCRIPTION / APPLICATION**

Oxford Alloy ERTi-7 can be welded by the gas tungsten arc, plasma arc, and gas metal arc processes. The procedures and equipment are generally similar to those used for welding stainless steel or aluminum. Titanium and titanium alloys are extremely reactive above 1000 °F, however, additional precautions, exceeding those required during the welding of austenitic stainless steel or aluminum alloys, must be taken to shield the weld and hot root side of the joint from air. In welding titanium or titanium alloys, only argon and helium, and occasionally a mixture of these two gases, are used for shielding. The filler metal composition is usually matched to the grade of titanium being welded. The filler metal and the base metal should be meticulously cleaned at the time of welding. Grease and oil accumulated during forming and machining must also be removed before welding to avoid weld contamination.

AWS Chemical Composition						
C	O	H	N	Fe	Pd	Ti
0.03 max	0.08- 0.16	0.008 max	0.015 max	0.12 max	0.12- 0.25	Bal

**TYPICAL MECHANICAL PROPERTIES**

Tensile strength: 50,025 psi 345 MPa  
Yield strength: 39,875 psi 275 MPa  
Elongation: 20%

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Please contact our sales department for more information at 800-562-3355 or 225-273-4800.

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