

Oxford Alloy® Ti-7

AWS ERTi-7 • Titanium



Key Features

- ❖ Titanium grade 7 has outstanding corrosion resistance and useful strength at low density.
- ❖ A small addition of palladium has been made to this alloy for a substantial increase in corrosion resistance.
- ❖ Typical applications include reactor autoclaves, piping and fittings, valves, heat exchangers and condensers.

Conformances

AWS/ASME SFA 5.16
ERTi-7
UNS R52401

Chemical Composition - As required per AWS 5.16

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

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	345 (50)	275 (40)	20

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.