Oxford Alloy® Ti-1

AWS ERTi-1 • Titanium

Key Features

- Commercially Pure Titanium with good balance of strength, formability and weldability.
- Typical applications include cryogenic and petrochemical applications such as chemical process heat exchangers, pressure vessels and piping systems, pulp bleaching systems, electro chemical and chemical storage tanks.

Conformances

AWS/ASME SFA 5.16
ERTi-1
UNS R50100

Chemical Composition - As required per AWS 5.16						
C	O	H	N	Fe	Ti	
0.03 max	0.03-0.10	0.005 max	0.012 max	0.08 max	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	240 (35)	170 (25)	24

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.