

Grade 4 Titanium is a commercially pure (CP) titanium grade and has the highest strength of all CP titanium. It has good ductility and moderate formability with a good strength to weight ratio.

## Dimensional

Thickness	Maximum Width
0.025" - 0.003" (.635 - .08mm)	17.5" (444.5mm) as rolled edge 17.0" (431.8mm) with a slit edge
0.0029" - 0.001" (.079 - .0254mm)	16.5" (419.1mm) as rolled edge 16.0" (406.4mm) with a slit edge
0.0009" - 0.0004" (.025 - .01mm)	15.5" (393.7mm) as rolled edge 15.5" (393.7mm) with a slit edge
0.00039" - 0.00008" (.099 - .002mm)	4.25" (107.95mm) as rolled edge 4.0" (101.6mm) with a slit edge

## Typical Mechanical Properties (Annealed)

UTS ksi (MPa)	YS ksi (MPa)	Elongation %
99 (680)	81 (560)	Information only

## Chemical Composition (wt %)

Element	Minimum	Maximum	Element	Minimum	Maximum
N	-	.05	O	-	.40
C	-	.10	Residual - each	-	.1
H	-	.015	Residual - total	-	.4
Fe	-	.50	Titanium	Balance	

## Physical Properties

Density (ii)	0.163 lb/in <sup>3</sup> (4.48 g/cm <sup>3</sup> )
Beta Transus	1740°F (950°C)
Melting (liquidus) Point	3034°F (1668°C)
Thermal Conductivity (i)	9.80 Btu hr <sup>-1</sup> ft <sup>-1</sup> °F <sup>-1</sup> (16.95 W m <sup>-1</sup> K <sup>-1</sup> )
Electrical Resistivity (i)	24 μΩ•in (0.60 μΩ•m)
Magnetic Permeability	Nonmagnetic
Elastic Modulus	15.2 – 17.4 x 10 <sup>7</sup> lb/in <sup>2</sup> (105-120 GPa)

(i) Mean coefficient from room temperature to 95°C (200°F)

(ii) Typical values at room temperature of about 20 to 25°C (68 to 78°F)

## TYPICAL APPLICATIONS

- Aerospace structures
- Medical implants and devices
- E-Beam equipment used for food sterilization and vulcanizing rubber
- Speaker domes

## DELIVERY

### Availability

Global.

### Size

Available in thicknesses and widths per table.

### Temper

Available in the annealed or as rolled condition.

### Surface

Clean uniform surface, 1Ra - 16Ra without discoloration or surface defects. Available with a slit edge (typical burr <10% of strip thickness) or an as-rolled edge.

### Packing

Properly packaged to avoid damage in transit. International packaging available upon request.

### Conformance

ASTM B265, ASTM F67, AMS4901, DFARS Compliant.

### Certifications

ISO9001, AS9001, Nadcap.