



Specialty Metals – Strip Products

CP Titanium Grade 4 / Ti 70

UNS R50700
W.Nr 3.7064

CP Titanium Grade 4 is the strongest of the Commercially Pure Titaniums. It is known for excellent corrosion resistance, good formability, and weldability. Applications include aircraft components, heat exchangers, cryogenic vessels, and surgical hardware. Industries supplied include: Aerospace, chemical, medical, marine.

Nominal Composition

| | Fe | O | C | N | H | Ti |
|-----|------|------|------|------|--------|---------|
| max | 0.50 | 0.40 | 0.08 | 0.05 | 0.0150 | Balance |

Physical Properties

| | At 70°F | At 20°C |
|---------------------------|---------------------------------------|------------------------|
| Density | 0.163 lb/in ³ | 4.51 g/cm ³ |
| Modulus of Elasticity (E) | 16.3 x 10 ³ ksi | 112 GPa |
| Modulus of Rigidity (G) | 5.9 x 10 ³ ksi | 41 GPa |
| Coefficient of Expansion | 5.4 microinches/in.-°F (70-932°F) | 9.7 μm/m-°C (20-500°C) |
| Electrical Resistivity | 21 μ ohm.in | 53.3 μ ohm.cm |
| Thermal Conductivity | 12.60 Btu-in./ft. ² hr.-°F | 21.79 W/m-K |

Applicable Specifications

| | |
|----------------|---------------------|
| Strip and Foil | AMS 4902, ASTM B265 |
|----------------|---------------------|

Typical Mechanical Properties

| Condition | Heat Treatment | Tensile Strength | Suggested Operating Conditions |
|-----------|----------------|---|--|
| Annealed | 1290°F | 80 ksi (550 MPa) min 100 ksi (689 MPa) typ | -300°F to 1000°F (- 184°C to 540°C) |

Phone: 1.888.843.2350

Elgiloy Specialty Metals -
Strip Products
1565 Fleetwood Dr.
Elgin, IL 60123 USA

WWW.ELGILOY.COM

LIMITATION OF LIABILITY AND DISCLAIMER OF WARRANTY:

The content in these data sheets is provided primarily by third-party melting mills and is provided for reference only. It is not intended for engineering or design.

Applications may be discussed, however, Elgiloy Specialty Metals does not recommend or endorse any material for any particular end use or application.

The data included in this data sheet are typical values and may vary.

Elgiloy Specialty Metals makes no representations or warranties, express or implied, as to the accuracy, completeness, condition, suitability, performance, fitness for a particular purpose, or merchantability of any information contained in any data sheet.

In no event will Elgiloy Specialty Metals be liable for any damages whatsoever arising from the use of the information included in the data sheets.