



# 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 <sup>3</sup>	4.51 g/cm <sup>3</sup>
Modulus of Elasticity (E)	16.3 x 10 <sup>3</sup> ksi	112 GPa
Modulus of Rigidity (G)	5.9 x 10 <sup>3</sup> 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. <sup>2</sup> hr.-°F	21.79 W/m-K

### Applicable Specifications

Strip and Foil	AMS 4902, ASTM B265
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### 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)

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