

TITANIUM

CP GRADE 2



Commercially Pure (CP) Titanium - Grade 2 UNS R56400 / WNR 3.7124

Commercially Pure (CP) titanium is an unalloyed titanium grade with a close-packed hexagonal (CPH) crystal structure at room temperature known as alpha phase structure. It has good formability, weldability, ductility, and corrosion resistance combined with moderate strength.

Grade 2 titanium has slightly increased higher mechanical properties when compared to Grade 1.

It is used principally in aerospace, automotive, chemical plants, marine environments, architecture structures & medical applications.

AVAILABLE TUBE PRODUCT FORMS

STRAIGHT

SEAMLESS

TYPICAL MANUFACTURING SPECIFICATIONS

AMS 4902

ASTM B338

Also individual customer specifications.

TYPICAL APPLICATIONS

ARCHITECTURE

MEDICAL

MARINE

PROCESSING & CHLORATE MANUFACTURING

DESALINATION PLANTS

INDUSTRIES PREDOMINANTLY USING THIS GRADE

CHEMICAL PROCESSING

MEDICAL

AEROSPACE

AUTOMOTIVE



Technical Data

MECHANICAL PROPERTIES (Room Temperature)

Property	Annealed Temper
0.2% Yield (Rp = 0.2)	40 ksi (275 MPa) minimum
Tensile (Rm)	50 ksi (345 MPa) minimum
Elongation (2"gl)	20% minimum
Hardness	200 HV maximum

PHYSICAL PROPERTIES (Room Temperature)

Specific Heat (0-100°C)	523	J/kg/°K
Thermal Conductivity	16.4	W/m/°K
Thermal Expansion	8.6	µm/µm/°C
Modulus Elasticity	105	GPa
Electrical Resistivity	12.6	Ohm-cm
Density	4.51	g/cm ³

CHEMICAL COMPOSITION

(% by weight)

Element	Min	Max
C	-	0.08
O	-	0.25
N	-	0.03
H	-	0.015
Fe	-	0.30
Ti	Balance	