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TECHNICAL DATASHEET

[Titanium Grade 2]

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► GENERAL DESCRIPTION

Ti Grade 2 (CP Titanium Grade 2) is one of the most widely used commercially pure titanium materials, offering excellent corrosion resistance, good formability, and moderate strength. It provides outstanding resistance to seawater, acidic, and chloride-containing environments, while also offering good weldability and machinability. As a typical commercially pure titanium grade that combines strong corrosion resistance with structural applicability, it is widely used in chemical processing, marine engineering, and medical equipment.

► DESIGNATIONS & STANDARDS

DIN	ASTM	UNS	JIS
3.7035	B348 / F67/ISO5832-2	R50400	TP340C (eq.)

► PRODUCT FORMS & APPLICABLE STANDARDS

Product Form	Applicable Standards
Plate / Sheet	ASTM B265 Grade 2; ASTM F67 Grade 2; ISO 5832-2 Grade 2; JIS H4600 Class 2
Bar / Rod	ASTM B348 Grade 2; ASTM F67 Grade 2; ISO 5832-2 Grade 2; JIS H4650 Class 2
Wire	ASTM B863 Grade 2; ASTM F67 Grade 2; ISO 5832-2 Grade 2; JIS H4670 Class 2
Tube / Pipe	ASTM B338 Grade 2; ASTM B861 Grade 2; ASTM B862 Grade 2; JIS H4630 Class 2

► CHEMICAL COMPOSITION (MASS %) *In accordance with: [ISO5832-2]*

Element	N	C	H	Fe	O	Ti
Content (%)	≤0.03	≤0.08	≤0.0125	≤0.30	≤0.25	Balance

► HEAT TREATMENT

Condition	Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (4D)	Reduction of Area (%)	Hardness (HV10)
Annealed	≥345	≥275	≥20	≥30	≥140

► APPLICATIONS

Condition	Dimension
Medical	Dental implants / Bone plates / Bone screws / Medical structural parts / Rods and plates for surgical implants
Aerospace	Piping / Brackets / Fasteners / Hydraulic system parts / Lightweight structural parts
Industrial	Chemical containers / Heat exchanger tubes / Seawater desalination equipment / Anodes / Corrosion-resistant flanges
Mechanical engineering	Lightweight robotic arm structural parts / Corrosion-resistant brackets / Fixtures / Housings / Connecting plates

► AVAILABLE FORMS

Available Form	Size Range	Surface Finish	Length (Customizable)	Tolerance (Customizable)	Delivery Condition
Plate	T0.5-T200.0mm	Milled / Bright	L:200/250/300 W:200/300/500/1000	-0.0/+1.0mm	Annealed
Bar	φ1.0-φ200.0mm	Ground / Precision Polished	3M/PCS	h6-h9	Annealed
Wire	φ1.0-φ3.0mm	Ground / Precision Polished	1M/PCS	h6-h9	Annealed
Tube	OD: 1.0-10.0mm ID:0.08mm-2.0mm	Ground / Precision Polished	3M/PCS	h6-h9	Annealed

Materials, specifications or special requirements not shown in the table can all be customized. Please contact our sales team.

► TESTING & CERTIFICATION

TESTING CAPABILITIES	QUALITY & TRACEABILITY
- Chemical: OES · O/N/H analyzer - Mechanical: tensile · Rockwell/Vickers · impact - NDT: ultrasonic testing (UT) - Metallography: optical & electron microscope - Dimensional: straightness / roundness / coaxiality	- ERP full-process traceability · heat-number control - Batch consistency control - Third-party testing: on request, at extra cost - Standards: ASTM · ISO · EN · AMS · DIN - MTC with each shipment

CERTIFICATION: ISO 13485 · ISO 9001

THIRD-PARTY TESTING: SGS



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