

CNC Titanium Alloys

SUITABLE FOR CNC MACHINING



MATERIAL NAME
CNC Titanium Alloys

COLOR
Silver

PROCESS
CNC

PRODUCT DESCRIPTION

Titanium Alloys are a kind of high strength, low density, corrosion resistance, high temperature resistance of metal materials, widely used in aerospace, medical, automotive, Marine engineering, military and other fields. Due to the high strength-to-weight ratio and excellent corrosion resistance of titanium alloys, it is difficult to process them, so special tools and processing strategies are required for CNC machining.

TYPICAL APPLICATIONS

- Aerospace (landing gear, turbine blades)
- Medical devices (artificial joints, dental implants)
- Marine parts and diving equipment

PRODUCT SAFETY

- Metal dust generated during CNC machining should be controlled through appropriate ventilation and protective measures to avoid inhalation.
- Use safety goggles, gloves and a dust mask during processing to prevent fine metal particles and sharp edges.

PRODUCT DELIVERY & WAREHOUSING

- **STORAGE**

Store in a dry, ventilated environment, avoiding moisture and exposure to corrosive chemicals. Apply protective coatings to prevent oxidation or corrosion of metal surfaces.

- **USAGE AND HANDLING**

Remove burrs and residual materials from the product. Use protective equipment like gloves when handling. Avoid using the product in extreme environments or high-load scenarios; regularly inspect for mechanical performance.

- **CHEMICAL COMPATIBILITY**

Avoid contact with strong acids, alkalis, or corrosive solvents. Use appropriate cleaning and maintenance solutions.

Assess risks of oxidation, corrosion, or magnetic effects based on specific application environments.

MATERIALS WE SUPPORT:

ASTM	DIN	GB	Density (g/cm ³)	Hardness	Tensile Strength, Yield(Mpa)	Fatigue Strength (Mpa)	Elongation at Break(%)
Grade3	Ti4&3.7065	TA3	4.51	195 HB	539	275~400	25
Grade5	TiAl6V4	TC4	4.43	334 HB	880	240	14

Tips: Want to explore a wider range of materials? Check out <https://www.unionfab.com/materials>