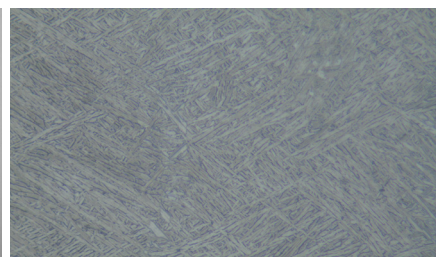
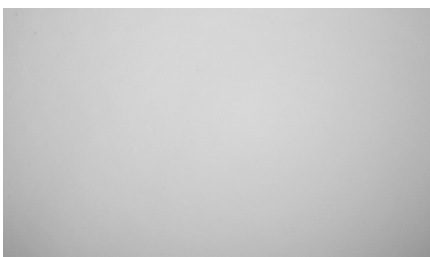
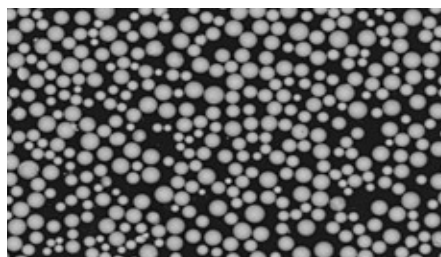


Ti6Al4V Titanium alloy

[High specific strength, good corrosion resistance]

Material Introduction

Ti6Al4V has the advantages of low density, high specific strength, corrosion resistance, excellent comprehensive performance, and good biocompatibility. It is currently the most widely used titanium alloy.



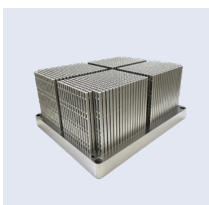
Applications

Aerospace: aviation engine fan blades, etc.

Others: watch frames, phone frames, automotive connecting brackets, etc.



Automotive
Connecting Brackets



Mobile Phone
Hinge Shaft Cover



Watch Frame



Pump impeller

Chemical Composition (wt.%)

Ti	Al	V	C	Fe	O	N	H
Bal.	5.5-6.75	3.5-4.5	≤0.08	≤0.3	≤0.12	≤0.03	≤0.015

Physical Property

Granularity(μm)			Sphericity	Loose density (g/cm ³)	Tap density (g/cm ³)	Flowability (s/50g)
D10	D50	D90				
≥15	30-40	≤63	≥0.9	≥2.4	≥2.8	≤35

Parameters

Laser power(W)	Laser speed(mm/s)	Scanning spacing(mm)
180	950	0.1



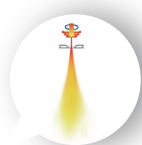
Mechanical Property

Test Temperature		Heat-Treated	
Room Temperature	Tensile Strength/MPa	Yield Strength/MPa	Elongation/%
	≥ 950	≥ 900	≥ 10.0

Advanced Powder Metallurgy Technology



The powder metallurgy technology and equipment production line--
Electrode Induction Gas Atomization (AVI-EIGA)



The powder metallurgy technology and equipment production line--
Plasma Rotating Electrode Process (AVI-PREP)



Adapting Devices

10+ proprietary LPBF equipment systems supporting build sizes from 100 mm to 1500 mm.



MT170



MT170H



MT280



MT400M



MT450



MT650

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