Precision Aluminum CNC Components Factory Balancing Lightweight Design and Structural Integrity

Our Product Introduction

Basic Information

- Place of Origin: Shenzhen China
- Brand Name: Xianheng
- Certification: ISO9001:2015
- Model Number: AL-CNC-088
- Minimum Order Quantity: 1 pcs
- Price: USD $0.1-$1.99
- Packaging Details: Carton, As Customers'packaging requirements
- Delivery Time: Samples 7-10 days, Mass production 20-25 days
- Payment Terms: T/T, Western Union, MoneyGram
- Supply Ability: 10000 pcs per week

Product Specification

- Cnc Machining Or Not: CNC Machining
- Type: Milling, Turning, Machining
- Material Capabilities: Copper, Aluminum, Bronze, Stainless Steel, Brass
- Surface Treatment: Anodizing, Brush, Anodized, Painting/Powder Coating/Sandblast/Color Anodize/Polish/Oxidation
- Application: Machinery, Automotive, Laptop, Industrial Equipment, Engineering
- Keyword: Aluminum Enclosure Box
- Tolerance: 0.01mm, 0.05 Mm, +/-0.005, 0.003-0.05mm
- Service: Customized OEM
- Sample: Acceptable

More Images

for more products please visit us on cnc-metalmachining.com

Our Product Introduction

for more products please visit us on cnc-metalmachining.com

Product Description

What We Can Provide

Precision Aluminum CNC Components Factory Balancing Lightweight Design and Structural Integrity

Description of Precision Aluminum CNC Components Factory Balancing Lightweight Design and Structural Integrity

A precision aluminum CNC components factory specializes in manufacturing high-performance parts that achieve an optimal balance between lightweight design and structural integrity. By leveraging advanced CNC machining technologies, material science expertise, and rigorous quality control, these factories produce components that meet the demanding requirements of industries such as aerospace, automotive, robotics, and consumer electronics.

Specification of Precision Aluminum CNC Components Factory Balancing Lightweight Design and Structural Integrity

CNC Capacity		
CNC Machining Center	3 / 4 / 5 axis CNC Machining Centers	40+ CNC Machines
CNC Turning	φ0.5 - φ300 * 750 mm	DIN-2768-Fine +/-0.005 mm
CNC Machining	1270×508×635 mm(max)	DIN-2768-Fine +/-0.005 mm
CNC Stamping	1000 * 1000 mm(max)	DIN-2768-Fine +/-0.005 mm
Drawing Format	IGS,STP,X_T ,DXF,DWG , Pro/E, PDF	
Inspection Equipments	Measurement Instrument, Projector, CMM, Altimeter, Micrometer, Thread Gages, Calipers, Pin Gauge etc.	
Material Available		
Stainless Steel	SS201,SS301, SS303, SS304, SS316, SS416, 17-4PH, etc.	
Steel	Mild steel, Carbon Steel, 4140, 4340, Q235, Q345B, 20#, 45# etc.	
Brass	HPb63, HPb62, HPb61, HPb59, H59, H68, H80, H90 etc.	
Copper	C11000,C12000,C12000 C36000 etc.	
Aluminum	AL6061, Al6063, AL6082, AL7075, AL5052, A380 etc.	
Iron	A36, 45#, 1213, 12L14, 1215 etc.	
Plastic	ABS, PC, PE, POM, Delrin, Nylon, Teflon, PP,PEI, Peek etc.	

Surface Finishing				
Aluminum Parts	**Stainless Steel Parts**	**Steel Parts**	**Copper /Brass**	**Plastic Parts**
Clear Anodized	Polishing	Zinc plating	Polishing	Painting
Color Anodized	Passivating	Oxide black	Passivation	Chrome plating
Sandblast Anodized	Sandblasting	Nickel plating	Galvanized	polishing
Chemical Film	Laser engraving	Chrome plating	Nickel Plating	Sandblast
Brushing		Carburized	Chrome plating	Laser engraving
Polishing		Heat treatment		
Chroming		Powder Coated		

Application Of Precision Aluminum CNC Components Factory Balancing Lightweight Design and Structural Integrity

1. Auto Components Hardware Parts Auto Parts
2. Communication Equipment
3. Industrial Equipment
4. Medical EquipmentsMechanical Parts
5. Ship Accessories
6. Electrical Equipment
7. Mechanical Equipment

Feature Of Precision Aluminum CNC Components Factory Balancing Lightweight Design and Structural Integrity

1. Good corrosion resistance
2. High strength and hardness
3. High thermal conductivity
4. Good finishing characteristics

Why Choose Us

Our advantages

1. Enhanced Fuel Efficiency & Energy Savings (Aerospace/Automotive)
Lightweight aluminum parts reduce overall vehicle/aircraft weight, leading to lower fuel consumption and emissions.
Example: A 10% reduction in component weight can improve fuel efficiency by 3–5% in aircraft.

2. Improved Performance & Speed (Robotics/Electronics)
Reduced inertia in moving parts (e.g., robotic arms, drones) enables faster acceleration and precise control.
Thermal conductivity of aluminum aids in efficient heat dissipation for electronic housings.

3. Cost-Effective Manufacturing & Scalability
CNC machining allows for rapid prototyping and low-to-medium volume production without expensive tooling costs.
High repeatability ensures consistent quality across batches, reducing waste and rework.

4. Corrosion Resistance & Longevity
Anodized or chemically treated aluminum surfaces resist environmental degradation, extending component lifespan.
Ideal for harsh environments (e.g., marine, outdoor, or industrial settings) where durability is critical.

FAQ

Q: How can I customize my products ?
A: Please describe your project. Include the following information so that we can provide an accurate quote: Part Name, 3D CAD Drawing, Quantity, Material, Color, Finishing.

Q: How can I know my products going on ?
A: We will offer a detailed production schedule and send weekly reports with digital pictures and videos which show the production process.

Q: Can You sign a confidentiality greement ?
A: We can sign a confidentiality agreement according to your needs.

Q: What is your terms of payment ?
A: 30% in advance ,70% balance before shipment. Other terms negotiable.

Q: Are you a trading company or factory?
A: We are direct factory with 20 experienced engineers and more than 80 employees as well approximate 3,000 square meters workshop area.

Q: What shall we do if we do not have drawings?
A: Please send your sample to our factory,then we can copy or provide you better solutions. Please send us pictures or drafts with dimensions(Length, Height, Width), CAD or 3D file will be made for you if placed order.

Shenzhen Xianheng Technology Co.,Ltd

0086-13360062175 sales@xianheng-tech.com cnc-metalmachining.com

Room 8-1409, Xingji jiayuan building 8-9#, HongXing community, Songgang street, Bao'an District, Shenzhen City China