

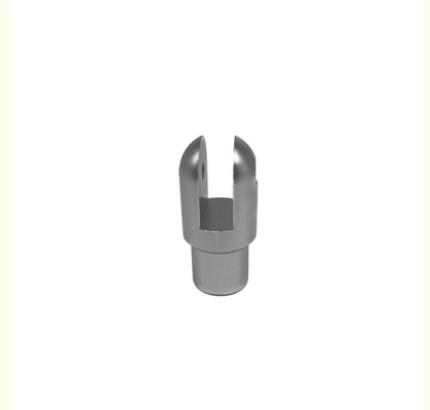


Precision Manufacturing with Custom CNC Milling Parts for Automotive and Electronics Solutions

Our Product Introduction

Basic Information

- Place of Origin: Shenzhen China
- Brand Name: Xianheng
- Certification: ISO9001:2015
- Model Number: ML-CNC-069
- 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: CNC Milling
- Material Capabilities: Copper, Aluminum, Bronze, Stainless Steel, Brass
- Surface Treatment: Anodized, Anodizing, Anodize/natural, Sandblast, Silk-screen
- Service: OEM/ODM, OEM ODM Metal Stamping, Customized OEM OEM ODM, OEM Service
- Tolerance: 0.01mm, 0.05 Mm, +/-0.005, 0.003-0.05mm
- Application: Machinery, Automotive, Laptop, Industrial Equipment, Engineering
- Color: As Per Customers' Requirement



More Images



Product Description

What We Can Provide

Precision Manufacturing with Custom CNC Milling Parts for Automotive and Electronics Applications

Description of Precision Manufacturing with Custom CNC Milling Parts for Automotive and Electronics Applications

Precision manufacturing using custom Computer Numerical Control (CNC) milling is a cornerstone of modern industrial production, particularly in the automotive and electronics sectors. This advanced process involves using computer-controlled milling machines to shape raw materials—such as metals, plastics, or composites—into highly accurate, custom-designed components. By leveraging multi-axis machining capabilities and high-speed tooling, CNC milling delivers parts with tight tolerances, complex geometries, and superior surface finishes, meeting the rigorous demands of automotive safety, performance, and electronics miniaturization.

Specification of Precision Manufacturing with Custom CNC Milling Parts for Automotive and Electronics Applications

Product Name	High Quality Copper Steel Stainless Brass Material CNC Milling Parts Services
Material	Aluminum, Stainless Steel, Copper, Brass, Titanium, Galvanized, Nylon, ABS, POM etc.
Surface Treatment	Zinc Plating, Painting, Mirror Polished, Brush Polished, Powder Coating, Electroplating, Anodizing, Sandblasting etc.
Processing	Laser Cutting, Precision Stamping, Bending, CNC Punching, Threading, Riveting, Drilling, Welding, Painting, Assembly etc.
Drawing Format	3D/CAD/DWG/IGS/STEP/PDF/JPG
OEM Service	Accept

Quality Control

1. Checking the raw material after they reach our factory----- Incoming quality control (IQC)
2. Checking the details before the production line operated
3. Have full inspection and routing inspection during mass production---In process quality control(IPQC)
4. Checking the goods after they are finished---- Final quality control(FQC)
5. Checking the goods after they are finished-----Outgoing quality control(OQC)

Application Of Precision Manufacturing with Custom CNC Milling Parts for Automotive and Electronics Applications

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

Why Choose Us

Advantages

1. Unrivalled Precision and Consistency

CNC milling achieves tolerances as tight as ± 0.001 mm (1 micron), ensuring every part meets exact design specifications. This is critical for automotive components like fuel injectors, where even a 2-micron deviation can disrupt combustion efficiency, and for electronics connectors, where precise pin spacing prevents signal loss. Automated tool calibration and real-time monitoring further eliminate human error, guaranteeing batch-to-batch consistency.

2. Complex Geometry Freedom

Multi-axis CNC milling (e.g., 5-axis machines) enables the production of parts with undercuts, helical features, and organic contours that traditional methods cannot replicate. For example:

Automotive: Turbocharger impellers with curved blades for optimized airflow.

Electronics: Heat sinks with fin densities exceeding 200 fins per inch for efficient thermal management.

This design flexibility reduces the need for assembly of multiple parts, lowering costs and improving reliability.

3. Material Versatility and Optimization

CNC milling supports a wide range of materials, including:

High-strength alloys (e.g., titanium for lightweight automotive valves).

Engineering plastics (e.g., PEEK for wear-resistant electronic components).

Composites (e.g., carbon fiber-reinforced polymers for structural parts).

Manufacturers can select materials based on performance needs (e.g., heat resistance, corrosion resistance) while minimizing waste through optimized cutting paths, reducing material costs by up to 30%.

4. Scalability and Rapid Prototyping

CNC milling bridges the gap between low-volume prototyping and high-volume production:

Prototyping: Design iterations can be tested within hours, accelerating product development cycles (e.g., testing multiple versions of a milled automotive gearbox casing in days).

Production: Automated tool changes and pallet systems enable 24/7 operation, producing thousands of parts per week with consistent quality.

This agility is invaluable for industries like electric vehicles (EVs), where rapid innovation and short product lifecycles demand flexible manufacturing.

Factory Show

Factory Equipment



WEDM



Milling Machine



CNC Wire Cut



Coordinate measuring machine



CNC Bending Machine



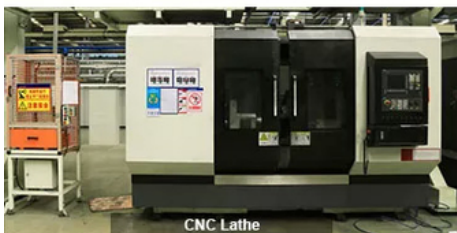
Hydraulic Press Machine



SLS/SLA Machine



5-Axis CNC



CNC Lathe



Laser cutting Machine



CNC Punching Machine



Injection Molding machine



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.



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