



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

### Our Product Introduction

for more products please visit us on [cnc-metalmachining.com](http://cnc-metalmachining.com)

#### Basic Information

- Place of Origin: Shenzhen China
- Brand Name: Xianheng
- Certification: ISO9001:2015
- Model Number: ML-CNC-068
- 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 leveraging custom Computer Numerical Control (CNC) milling has become a cornerstone of modern automotive and electronics industries, enabling the production of complex, high-performance components with unparalleled accuracy and consistency. This process integrates advanced computer-aided design (CAD) and computer-aided manufacturing (CAM) systems to control multi-axis CNC milling machines, which execute precise tool paths to shape raw materials into finished parts. From automotive engine blocks and transmission gears to electronics housings and micro-components, custom CNC milling delivers solutions tailored to stringent industry requirements.

#### 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. Unmatched Accuracy and Repeatability

CNC milling eliminates human error through programmable tool paths, achieving tolerances up to  $\pm 0.0005$  mm (0.5 microns). This level of precision is indispensable for automotive components like fuel injectors, where even a 1-micron deviation can affect combustion efficiency. In electronics, milling ensures consistent pin spacing on connectors, preventing signal interference.

##### 2. Complex Geometry Capability

Multi-axis CNC milling (e.g., 5-axis machines) enables the production of parts with undercuts, helical grooves, and organic contours impossible to achieve via traditional methods. For instance, automotive turbocharger housings with integrated cooling channels or electronics heat sinks with fin densities exceeding 100 fins per inch rely on CNC milling for fabrication.

##### 3. Material Versatility and Optimization

CNC milling supports a wide range of materials, including high-strength steels, lightweight alloys (e.g., 7075 aluminum), and engineering plastics (e.g., PEEK). This flexibility allows manufacturers to select materials based on performance needs—such as using titanium for automotive valve springs to reduce weight while maintaining fatigue resistance. Additionally, CNC milling minimizes material waste through nested cutting strategies, lowering costs.

##### 4. Scalability and Cost Efficiency

While CNC milling is ideal for low-to-medium volume production, its digital nature facilitates rapid prototyping and design iterations. For example, automotive suppliers can test multiple versions of a milled transmission component within days, accelerating time-to-market. In electronics, CNC milling's automation reduces labor costs for high-volume parts like

smartphone frames, while maintaining consistency across millions of units.

## Factory Show

# Factory Equipment



WEDM



Milling Machine



CNC Wire Cut



Coordinate measuring machine



CNC Bending Machine



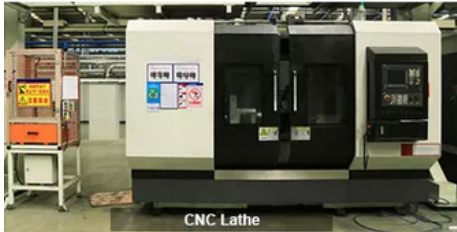
Hydraulic Press Machine



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.



Shenzhen Xianheng Technology Co.,Ltd

☎ 0086-13682614486

✉ shawn@xianheng-tech.com

🌐 cnc-metalmachining.com

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