Custom CNC Milling Parts for Automotive and Electronics The Ultimate Solution for Precision Manufacturing

Our Product Introduction

Basic Information

- Place of Origin: Shenzhen China
- Brand Name: Xianheng
- Certification: ISO9001:2015
- Model Number: ML-CNC-071
- 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

Our Product Introduction

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

Product Description

What We Can Provide

Custom CNC Milling Parts for Automotive and Electronics The Ultimate Solution for Precision Manufacturing

Description of Custom CNC Milling Parts for Automotive and Electronics The Ultimate Solution for Precision Manufacturing

Custom CNC (Computer Numerical Control) milling is a transformative manufacturing process that combines advanced software, high-speed machinery, and precision tooling to produce bespoke components for the automotive and electronics industries. By translating digital 3D models into physical parts with micron-level accuracy, this method meets the stringent demands of modern engineering, where even minor deviations can compromise performance, safety, or reliability.

Specification of Custom CNC Milling Parts for Automotive and Electronics The Ultimate Solution for Precision Manufacturing

Product Name	High Quality Copper Steel Stainless Brass Material CNC Milling Parts Services
Material	Aluminum, Stainless Steel, Copper, Brass, Titanium, Galvinized, 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 Custom CNC Milling Parts for Automotive and Electronics The Ultimate Solution for Precision Manufacturing

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 Precision and Tolerance Control
CNC milling machines operate with sub-micron repeatability, ensuring every part adheres to exact design specifications. For automotive applications—such as engine components, transmission gears, or fuel injection systems—tight tolerances (e.g., ±0.005 mm) are critical to prevent wear, leakage, or misalignment. In electronics, precision-milled connector housings, heat sinks, or semiconductor fixtures must maintain dimensional accuracy to ensure signal integrity, thermal efficiency, and miniaturization compatibility. Unlike manual machining, CNC eliminates human error, delivering consistent quality even for high-volume production runs.

2. Complex Geometries Made Possible
Modern 5-axis CNC milling enables the creation of intricate 3D shapes that traditional methods cannot replicate. For automotive manufacturers, this means producing lightweight lattice structures for electric vehicle (EV) battery trays or optimized aerodynamic components with internal cooling channels. In electronics, CNC milling fabricates micro-textured surfaces for enhanced heat dissipation in high-power devices or embedded fluidic channels for advanced cooling systems. This capability supports innovation in miniaturized 5G components, autonomous vehicle sensors, and next-gen semiconductor packaging, where space constraints demand ultra-compact, high-performance designs.

3. Rapid Prototyping and Agile Production
The automotive and electronics industries operate under relentless time-to-market pressures. Custom CNC milling accelerates development cycles by allowing same-day prototyping—design iterations can be tested within hours by simply updating CAD files, eliminating costly tooling changes. For low-to-medium volume production (e.g., custom automotive trim, niche electronic

enclosures, or pre-series EV parts), CNC milling avoids the upfront expenses of injection molding or die-casting, reducing financial risk. This flexibility enables manufacturers to validate designs faster, respond to market trends, and fulfill bespoke orders without compromising precision.

4. Cost Efficiency Through Material and Process Optimization
CNC milling's subtractive manufacturing approach minimizes waste by precisely removing material, making it ideal for high-value alloys like titanium (used in EV connectors) or carbon fiber composites (for automotive lightweighting). Automated toolpath optimization reduces machining time, while in-line inspection systems (e.g., laser scanning probes) detect defects early, preventing costly rework. For electronics, CNC milling achieves first-pass yield rates exceeding 99% for critical components like optical lens holders or RF shielding, lowering per-unit costs. Additionally, the ability to switch between materials and designs seamlessly reduces downtime, enhancing overall production efficiency.

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