



## Advanced CNC Machining Techniques Used to Produce Customized Brass CNC Parts with Tight Tolerances and Smooth Finishes

### 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: BS-CNC-078
- 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: Anodized, Anodizing, Anodize/natural, Sandblast, Silk-screen
- Application: Machinery, Automotive, Laptop, Industrial Equipment, Engineering
- Tolerance: 0.01mm, 0.05 Mm, +/-0.005, 0.003-0.05mm
- Service: OEM/ODM, OEM ODM Metal Stamping, Customized OEM OEM ODM, OEM Service
- Color: As Per Customers' Requirement
- Keyword: CNC Milling Brass Parts
- Sample: Acceptable



#### More Images



## Product Description

### What We Can Provide

#### Advanced CNC Machining Techniques Used to Produce Customized Brass CNC Parts with Tight Tolerances and Smooth Finishes

#### Description of Advanced CNC Machining Techniques Used to Produce Customized Brass CNC Parts with Tight Tolerances and Smooth Finishes

Five-axis CNC machining enables simultaneous movement along the X, Y, Z axes and two rotational axes (A and B). This technique allows for complex geometries to be machined in a single setup, eliminating the need for multiple repositioning. For brass parts, this reduces tool wear and ensures dimensional accuracy within  $\pm 0.005$  mm, critical for applications like precision connectors or aerospace components. The ability to machine intricate shapes—such as curved slots or angled holes—directly enhances part functionality while maintaining tight tolerances.

#### Specification of Advanced CNC Machining Techniques Used to Produce Customized Brass CNC Parts with Tight Tolerances and Smooth Finishes

Business Type	CNC Machined Parts Factory / Manufacturer
Service	1. CNC Machining 2. Turning and Milling 3. CNC Turning 4. OEM Parts
Material	Aluminum: 5052, 6061, 6063, 6082, 7075-T etc 2. Steel: 4140, Q235, Q345B, etc. 3. Titanium: TA1, TA2/GR2, TA4/GR5, TC4, TC18, etc. 4. Stainless steel: 303, 304, 316L, etc. 5. Brass: C36000, C37700, C26800, C22000 etc 6. Plastic: Pom, ABS, Nylon, etc.
Main Equipment	CNC Machining center (Milling), CNC Lathe, Grinding machine
Treatment	Sandblasting, Anodize color, Blackening, Zinc/Nickel Plating, Polish, Passivation PVD, Titanium Plating, Electro galvanizing, electroplating chromium, electrophoresis, QPQ (Quench-Polish-Quench), Electro Polishing, Chrome Plating, Knurl, Power coating, Laser etch Logo,
Tolerance	$\pm 0.01$ mm $\pm 0.05$ mm
Drawing format	STEP, STP, GIS, CAD, PDF, DWG, DXF etc or samples.

#### Application Of Advanced CNC Machining Techniques Used to Produce Customized Brass CNC Parts with Tight Tolerances and Smooth Finishes

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

#### 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)

### Why Choose Us

#### Advantages

##### Precision and Tolerance Control

Advanced techniques like five-axis machining and Swiss turning enable tolerances as tight as  $\pm 0.005$  mm, meeting the demands of industries such as aerospace and medical devices. This precision reduces the need for post-machining adjustments, lowering costs and lead times.

##### Enhanced Surface Quality

High-speed machining and adaptive control systems produce surface finishes as smooth as  $Ra \leq 0.4 \mu\text{m}$ , eliminating the need for manual polishing. This is critical for applications like hydraulic fittings, where surface roughness affects sealing performance.

### Material Efficiency and Cost Savings

CNC automation optimizes tool paths to minimize material waste, reducing raw material costs by up to 20%. For brass, which is costlier than steel, this efficiency is particularly valuable. Additionally, real-time monitoring reduces tool breakage, lowering replacement costs.

### Design Flexibility and Rapid Prototyping

Advanced CNC systems support rapid iteration of complex designs without dedicated tooling. For example, a custom brass connector can be prototyped in 24 hours with full functional testing, accelerating product development cycles. This flexibility is indispensable for industries like consumer electronics, where time-to-market is critical.

## Factory Show

### Factory Equipment



WEDM



Milling Machine



CNC Wire Cut



Coordinate measuring machine



CNC Bending Machine



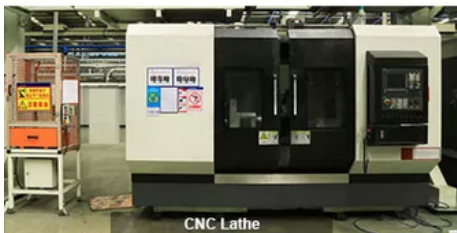
Hydraulic Press Machine



SLS/SLA Machine



5-Axis CNC



CNC Lathe



Laser cutting Machine



CNC Punching Machine



Injection Molding machine



## FAQ

### Q1: Where can I get product & price information?

A1: Send us inquiry e-mail, we will contact you as we receive your mail.

### Q2: How long can I get the sample?

A2: Depends on your specific items, within 3-7 days is required generally.

### Q3: What kinds of information you need for quote?

A3: Kindly please provide the product drawing in PDF, and will be better you can provide in STEP or IGS.

### Q4: What are the payment terms?

A4: We accept 50% as payment deposit, when the goods is done, we take photos for your check and you then pay the balance.

### Q5: Are you a trading company or factory?

A5: We are direct factory with 10 experienced engineers and more than 650 employees as well approximate 2,000 square ft. workshop area.

### Q6: What shall we do if we do not have drawings?

A6: 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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