



## High-Speed CNC Turning Plastic Metal Redefining Speed and Accuracy in Rotational Parts

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: TN-CNC-92
- 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

#### High-Speed CNC Turning Plastic Metal Redefining Speed and Accuracy in Rotational Parts

##### Description of High-Speed CNC Turning Plastic Metal Redefining Speed and Accuracy in Rotational Parts

High-speed CNC turning is an advanced subtractive manufacturing process that rotates a workpiece (plastic or metal) on a spindle at elevated speeds while a stationary cutting tool removes material to form precise rotational parts. By combining rapid spindle rotation (often exceeding 10,000 RPM) with optimized tool paths, this method achieves faster material removal rates, superior surface finishes, and tighter tolerances ( $\pm 0.001$  mm or better) compared to conventional turning. It excels in producing axially symmetric components like shafts, bushings, hydraulic fittings, and medical implants, where dimensional accuracy and repeatability are critical.

##### Specification of High-Speed CNC Turning Plastic Metal Redefining Speed and Accuracy in Rotational Parts

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		

##### 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 High-Speed CNC Turning Plastic Metal Redefining Speed and Accuracy in Rotational Parts

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

## Our Advantages

### Enhanced Productivity Through Faster Cycle Times

High spindle speeds and rapid feed rates reduce machining time per part, enabling shorter production cycles. For example, a metal shaft that might take 10 minutes to machine conventionally could be completed in 3–4 minutes with high-speed turning, boosting throughput without sacrificing quality.

### Superior Surface Finish and Dimensional Accuracy

The combination of high-speed cutting and advanced tooling minimizes tool vibration and heat generation, resulting in smoother finishes ( $Ra \leq 0.8 \mu m$ ) and tighter tolerances. This eliminates or reduces the need for secondary polishing, saving time and costs in industries like medical devices, where surface quality is paramount.

### Extended Tool Life and Reduced Downtime

High-speed machining optimizes cutting parameters (e.g., shallow depths of cut, higher feed rates) to distribute wear evenly across the tool edge, prolonging tool life by up to 50% compared to traditional methods. Fewer tool changes translate to less machine downtime and lower operational costs.

### Material Versatility and Process Flexibility

The process adapts seamlessly to diverse materials, from soft plastics (which require sharp tools to prevent melting) to hard metals (demanding robust, coated tools). This flexibility allows manufacturers to use a single high-speed CNC lathe for multiple applications, streamlining production and reducing equipment investment.

## Factory Show

### Factory Equipment



WEDM



Milling Machine



CNC Wire Cut



Coordinate measuring machine



CNC Bending Machine



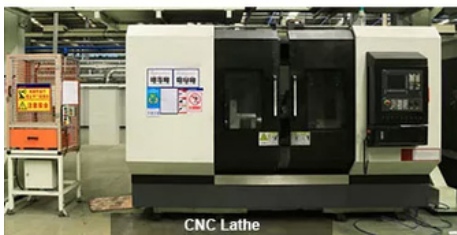
Hydraulic Press Machine



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.



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