



# Advanced CNC Manufacturing Solutions Supplier Manufacturer Factory for Complex Geometries

## **Basic Information**

Place of Origin: Shenzhen China
Brand Name: Xianheng
Certification: ISO9001:2015
Model Number: CNC-XG-095

• 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**

• Application: Automotive, Aerospace, Medical, Etc.

Drawing Format: CAD, PDF, JPG, Etc.

• Inspection: 100% Inspection Before Shipment

Lead Time: 7-15 DaysMOQ: 1 PieceMaterial: Metal

Package: Carton Box, Wooden Box, Etc.

Payment Term: T/T, L/C, PayPal, Etc.
 Process: CNC Machining
 Size: Customized

• Surface Treatment: Polishing, Sandblasting, Anodizing, Etc.

• Tolerance: ±0.005mm

Transport: By Air, By Sea, By Express, Etc.



# More Images



#### **Product Description**

# What We Can Provide

#### Advanced CNC Manufacturing Solutions Supplier Manufacturer Factory for Complex Geometries

#### Description Of Advanced CNC Manufacturing Solutions Supplier Manufacturer Factory for Complex Geometries

This facility specializes in leveraging cutting-edge Computer Numerical Control (CNC) technology to design, prototype, and produce high-precision components with intricate geometries. Equipped with multi-axis CNC machines (e.g., 5-axis systems), advanced CAD/CAM software, and precision metrology tools, it enables the fabrication of parts with complex curves, internal cavities, and micro-features that are challenging or impossible to achieve with conventional methods.

#### Material Of Advanced CNC Manufacturing Solutions Supplier Manufacturer Factory for Complex Geometries

1	CNC Turning, CNC Milling, Laser Cutting, Bending, Spinning, Wire Cutting,
sing	Stamping, Electric Discharge Machining (EDM), Injection Molding
	Aluminum: 2000 series, 6000 series, 7075, 5052, etc.
	Stainless steel: SUS303, SUS304, SS316, SS316L, 17-4PH, etc.
Materia	Steel: 1214L/1215/1045/4140/SCM440/40CrMo, etc.
ls	Brass: 260, C360, H59, H60, H62, H63, H65, H68, H70, Bronze, Copper
	Titanium: Grade F1-F5
	Plastic: Acetal/POM/PA/Nylon/PC/PMMA/PVC/PU/Acrylic/ABS/PTFE/PEEK etc.
ent	Anodized, Bead Blasted, Silk Screen, PVD Plating, Zinc/Nickel/Chrome/Titanium Plating, Brushing, Painting, Powder Coated, Passivation, Electrophoresis, Electro Polishing, Knurl, Laser/Etch/Engrave etc.
Toleran ce	±0.002 ~ ±0.005mm
Surfac e Rough ness	Min Ra 0.1∼3.2

#### Application Of Advanced CNC Manufacturing Solutions Supplier Manufacturer Factory for Complex Geometries

- 1. Computers and Laptops: Skived heatsinks are widely used in computer processors, graphics cards, and other internal components to dissipate heat generated during intense computing tasks. They help prevent overheating and maintain optimal performance.
- 2. LED Lighting: LED lights generate heat, and efficient cooling is essential to maintain their longevity and brightness. Skived heatsinks are used in various LED lighting applications, including residential, commercial, and automotive lighting systems.
- 3. Audio Amplifiers: High-power audio amplifiers generate significant heat during operation. Skived heatsinks are employed to cool down the amplifier circuitry, ensuring stable performance and minimizing distortion.

#### Features Of Advanced CNC Manufacturing Solutions Supplier Manufacturer Factory for Complex Geometries

- 1. Efficient Heat Dissipation: Aluminum is a highly efficient conductor of heat, and skived heatsinks are designed to maximize the surface area for heat dissipation. The skived fin structure enhances the heatsink's ability to transfer heat away from the electronic components.
- 2. Thin and Lightweight: Skived heatsinks are manufactured using a precision machining process that allows for the creation of thin and lightweight fins. This design makes them suitable for applications where space and weight are critical considerations.
- 3. Customizable Fin Geometry: The skiving process allows for the creation of intricate and customizable fin geometries, which can be tailored to specific thermal requirements and airflow conditions. This flexibility ensures optimal performance for various applications.

# Why Choose Us

#### **Advantages**

## **Unmatched Precision for Intricate Designs**

Advanced CNC systems enable sub-micron tolerances and flawless surface finishes, critical for components like turbine blades, prosthetic implants, or optical molds. Multi-axis machining allows simultaneous tool movement across multiple planes, eliminating manual repositioning and ensuring geometric accuracy even for freeform surfaces.

#### **Rapid Prototyping & Scalability**

CNC's programmability accelerates iteration cycles. Designs can be digitally refined and tested via virtual simulation before physical machining, reducing prototyping time by up to 50%. The same setup can scale from one-off prototypes to batch

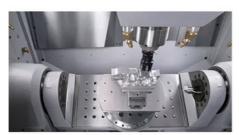
production without compromising quality, thanks to automated toolpath optimization and in-process quality checks.

#### **Material Versatility & Performance Optimization**

The factory handles diverse materials—from titanium alloys and carbon-fiber composites to ceramics and superalloys—tailoring machining parameters (e.g., spindle speed, coolant delivery) to maximize material properties. For example, heat-resistant alloys used in jet engines benefit from optimized cutting speeds that minimize thermal distortion, while medical-grade polymers are machined with non-abrasive tools to preserve biocompatibility.

#### Cost-Efficiency for Low-Volume & Custom Production

Unlike traditional methods requiring expensive dies or molds, CNC machining eliminates setup costs for each batch. Reprogrammable machines adapt to design changes or custom orders without retooling, making it economically viable to produce small batches of complex parts (e.g., custom automotive gears or bespoke architectural components). This flexibility reduces per-unit costs for low-volume runs while maintaining high quality.



**High Precision** 

5-Axis CNC & Imported machines with accuracy ±0.02-0.10mm



**Fast Lead Time** 

Multipe CNC machines, skillful workers, guarantee fast lead time



**Strictly Confidential** 

We will protect the customers'design and the customer can request a confidentiality agreement



**Quality Inspection** 

We have a strict quality inspection process to ensure the quality of our products

# **Factory Show**

# Factory Equipment



#### 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

#### 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, Hight, Width), CAD or 3D file will be made for you if placed order.









