



Anodized Aluminum CNC Parts Supplier Manufacturer Enhanced Corrosion Resistance for Harsh Environments

Our Product Introduction

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

Basic Information

- Place of Origin: Shenzhen China
- Brand Name: Xianheng
- Certification: ISO9001:2015
- Model Number: AL-CNC-089
- 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: Anodizing, Brush, Anodized, Painting/Powder Coating/Sandblast/Color Anodize/Polish/Oxidation
- Application: Machinery, Automotive, Laptop, Industrial Equipment, Engineering
- Keyword: Aluminum Enclosure Box
- Tolerance: 0.01mm, 0.05 Mm, +/-0.005, 0.003-0.05mm
- Service: Customized OEM
- Sample: Acceptable



More Images



Product Description

What We Can Provide

Anodized Aluminum CNC Parts Supplier Manufacturer Enhanced Corrosion Resistance for Harsh Environments

Description of Anodized Aluminum CNC Parts Supplier Manufacturer Enhanced Corrosion Resistance for Harsh Environments

Anodized aluminum CNC parts suppliers specialize in manufacturing components that combine precision machining with advanced surface treatment to ensure exceptional durability in corrosive or extreme conditions. Through an electrochemical process called anodizing, a thick, protective oxide layer is formed on the aluminum surface, significantly enhancing its resistance to environmental degradation, chemicals, and wear.

Specification of Anodized Aluminum CNC Parts Supplier Manufacturer Enhanced Corrosion Resistance for Harsh Environments

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		

Application Of Anodized Aluminum CNC Parts Supplier Manufacturer Enhanced Corrosion Resistance for Harsh Environments

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

Feature Of Anodized Aluminum CNC Parts Supplier Manufacturer Enhanced Corrosion Resistance for Harsh Environments

1. Good corrosion resistance
2. High strength and hardness
3. High thermal conductivity
4. Good finishing characteristics

Why Choose Us

Our advantages

1. Superior Corrosion Resistance in Aggressive Environments

The anodized layer acts as a non-conductive barrier, preventing electrochemical reactions between aluminum and corrosive agents (e.g., saltwater, acids).

Example: Anodized parts used in offshore equipment or coastal infrastructure exhibit 5–10x longer lifespans compared to untreated aluminum.

2. Enhanced Wear and Abrasion Resistance

Anodizing increases surface hardness (up to 600–700 HV), reducing damage from friction, impact, or repeated use.

Ideal for: Moving parts in robotics, automotive components, or industrial machinery where longevity is critical.

3. Aesthetic Customization Without Compromising Performance

The anodized layer can be dyed in various colors (black, blue, gold, etc.) for branding or functional purposes (e.g., UV resistance).

Unlike paints or coatings, anodized colors are fade-resistant and do not chip or peel.

4. Cost-Effective Long-Term Protection

Anodizing is a one-time treatment that eliminates the need for frequent recoating or maintenance.

Compared to stainless steel, anodized aluminum offers similar corrosion resistance at a lower weight and cost, making it ideal for weight-sensitive applications.

Factory Show

Factory Equipment



WEDM



Milling Machine



CNC Wire Cut



Coordinate measuring machine



CNC Bending Machine



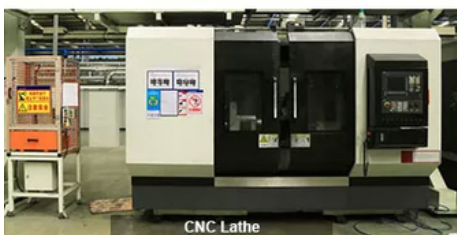
Hydraulic Press Machine



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.



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