Aluminum Stainless Steel Low Volume Machining Services Painting Chrome Plating Polishing

Our Product Introduction

Basic Information

- Place of Origin: China Shenzhen
- Brand Name: Aluminum, Stainless Steel, Brass, Titanium, Plastic
- Certification: Low Volume CNC Machining
- Model Number: Polishing,Anodizing,Painting,Chrome Plating, Silkscreen
- Minimum Order Quantity: 1 piece
- Price: USD 30 piece
- Packaging Details: Carton, Plywood Box
- Payment Terms: T/T, Paypal
- Supply Ability: 1 piece per day

Product Specification

- Material: Aluminum, Stainless Steel, Brass, Titanium, Plastic
- Feature: Mechanical Metal Model
- Procoess: CNC Lathe, CNC Machining
- Payment: T/T
- Express Way: DHL/FEDEX/UPS And SF Express So On
- Technology: CNC
- Color: Black Color And Can Be Customized
- Inspection: CMM Equipment
- Highlight: **steel low volume machining**, **stainless steel low volume machining**, **aluminum low volume production machining**

Product Description

What Is Low-Volume Manufacturing Low Volume CNC Machining Services

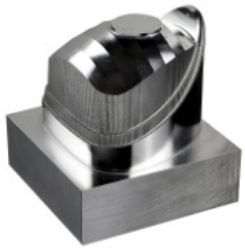
What Is Low-Volume Manufacturing?

Low-volume manufacturing is a specialized service that offers full production-quality parts but in volumes ranging from a single piece to a few thousand pieces. It's ideal for moving an idea from the concept stage through prototyping, and from there as a bridge to full volume production. Low volume production is considered to be a specialized service because most manufacturers don't want to do it. Their assembly lines and supply chains are optimized for large production volumes that leverage economies of scale. There is nothing wrong with that approach, because it's the best way to ensure the lowest cost per piece. However, it usually requires large minimum order volumes and a commitment to expensive tooling.

Tolerances

Our general tolerances for CNC machining of metals is DIN-2768-1-fine and for plastics is DIN-2768-1-medium. Tolerances are greatly affected by part geometry and type of material. Our project managers will consult with you on every part of your project and will seek to provide the highest degree of precision possible.

Materials for Custom CNC Machining Parts			
Various materials are available for CNC machines, giving you options for rapid prototyping and custom production runs of complex parts. We provide instant quotes on more than 150 metals and plastics for your manufacturing needs, and you can even compare prices on different processed materials.			
	ALuminum Aluminum is a highly ductile metal, making it easy to machining. The material has a good strength-to-weight ratio and is available in many types for a range of applications.	Aluminum	
		Machinable Material Types	AL6061-T6,AL6063-T6,AL6082 AL7075-T6,AL5052-H32
		Lead Time	3 days
		Tolerances	±0. 01mm

		Max part size	200 x 80 x 100 cm
	Copper Copper displays excellent thermal conductivity, electrical conductivity and plasticity. It is also highly ductile, corrosion resistant and can be easily welded.	Copper	
		Wall Thickness	0. 75 mm
		Lead Time	3 days
		Tolerances	±0. 01mm
		Max part size	200 x 80 x 100 cm
	Brass Brass has desirable properties for a number of applications. It is low friction, has excellent electrical conductivity and has a golden (brass) appearance.	Brass	
		Wall Thickness	0. 75 mm
		Lead Time	3 days
		Tolerances	±0. 01mm
		Max part size	200 x 80 x 100 cm
	Stainless Steel Stainless steel is the low carbon steel that offers many properties that are sought after for industrial applications. Stainless steel typically contains a minimum of 10% chromium by weight.	Stainless Steel	
		Machinable Material Types	304 SS, 303 SS, 316 SS, SS 430F, 301 SS etc.
		Lead Time	3 days
		Tolerances	±0. 01mm
		Max part size	200 x 80 x 100 cm
	Titanium Titanium has a number of material properties that make it the ideal metal for demanding applications. These properties include excellent resistance to corrosion, chemicals and extreme temperatures. The metal also has an excellent strength-to-weight ratio.	Titanium	
		Wall Thickness	0. 75 mm
		Lead Time	3 days
		Tolerances	±0. 01mm
		Max part size	200 x 80 x 100 cm
	Plastics Plastics are also a very popular option for CNC machining because of its wide choices, relatively lower price, and significantly faster machining time needed. We provide all common plastics for CNC machining services.	Plastics	
		Machinable Material Types	Buff ABS, Black ABS, Clear ABS, 94V0 flame retarding ABS, ABS+PC, Black Polycarbonate, Transparent Polycarbonate, Acrylic, NYLON 6, NYLON 66, PA6+30%GF , HDPE, POM, PP, PP+20%GF, PE, TEFLON,PPS, PEEK, PPO, PPE, PEI
		Lead Time	3 days
		Tolerances	±0. 01mm

		Max part size	200 x 80 x 100 cm

How To Choose The Right Rapid Prototyping Technique

The right prototyping method is the one that best fits your budget, the complexity of the part, what you want the prototype to do, and your development timeline. Better prototypes cost more money and take longer to make, but they also more faithfully represent the form, fit, and function of a production part.

The basic questions to ask are these:
Will the prototype be a static display model?
Does it need to be fully functional?
Are there multiple, interconnected parts?
What is the surface texture and finish?
What is it made from?
How important is strength and durability?
How closely should it match the final production version?
There are many variables to consider and we cannot cover them all here.

Metal	Aluminum 1050	AL 1050
Metal	Aluminum 1060	AL 1060
Metal	Aluminum 2024	AL 2024
Metal	Aluminum 5052-H11	AL 5052-H11
Metal	Aluminum 5083	AL 5083
Metal	Aluminum 6061	AL 6061
Metal	Aluminum 6082	AL 6082
Metal	Aluminum Bronze	AL + Br
Metal	Aluminum QC 10	AL QC 10
Metal	Brass	Cu + Zn
Metal	Copper	Cu
Metal	Copper Beryllium	Cu + Be
Metal	Copper Chrome	Cu + Cr
Metal	Magnesium	Mg
Metal	Magnesium Alloy	
Metal	Steel Stainless 303	SS303
Metal	Steel Stainless 304	SS 304
Metal	Steel Stainless 316	SS 316
Metal	Steel Stainless 410	SS 410
Metal	Steel Stainless 431	SS 431
Metal	Steel Stainless 440	SS 440
Metal	Steel Stainless 630	SS 630
Metal	Steel 1040	SS 1040
Metal	Steel 45	SS 45
Metal	Steel D2	SS D2
Metal	Titanium	Ti
Metal	Titanium Alloy	

How To Process Low-Volume Manufacturing

What is the secret to low volume manufacturing success? Is there a difference in the types of raw materials that are used, the way that they're processed, or the quality of the finished product?

Our clients are concerned that low-volume manufacturing doesn't mean compromising quality or precision when compared to full production manufacturing. Rest assured that when we process lower volume orders we use the same materials, the same equipment, and the same rigorous quality control.

How do we do it? We're experts in high-mix, low volume production because our systems are optimized to be scalable, from one part to a million. That means we have a robust supply chain of raw materials so you won't be burdened with minimum order volume restrictions. And we have a digital manufacturing platform that ties all of our equipment together into a single network. That allows us to allocate resources quickly and efficiently between work centers in order to process even complex orders fast.

CNC Machining Tolerances and Standards		
With precision CNC machining services, Barana Rapid is your ideal partner to create precision machined prototypes and parts. Our standard CNC machining tolerances for metals is ISO 2768-f and for plastics is ISO 2768-m. We can also achieve special tolerances as long as you indicate your requirements for your drawing.		
Standards	CNC Milling	CNC Turning
Maximum Part Size	2000x1500x600 mm	200x500 mm
Minimum Part Size	4x4 mm 0.1*0.4 in	2x2 mm 0.079x0.079 in
Minimum Feature Size	Φ 0. 50 mm Φ 0. 00197 in	Φ 0. 50 mm Φ 0. 00197 in
Standar Tolerances	Metals: ISO 2768-f Plastics: ISO 2768-m	Metals: ISO 2768-f Plastics: ISO 2768-m
Hole Diameters	+/- 0. 025 mm +/- 0. 001 in.	+/- 0. 025 mm +/- 0. 001 in.
Linear Dimension	+/- 0. 025 mm +/- 0. 001 in	+/- 0. 025 mm +/- 0. 001 in
Edge Condition	Sharp corner will be removed in the form of a chamfer or radius. The size of the chamfer, or resulting radii, must be indicated on the drawing.	

Shaft Diameters	+/- 0. 025 mm +/- 0. 001 in.	+/- 0. 025 mm +/- 0. 001 in.
Threads and Tapped Holes	Diameter: Φ 1. 5-5 mm, depth: 3×diameter Diameter: Φ 5 mm or more, depth: 4-6×diameter	Diameter: Φ 1. 5-5 mm, depth: 3×diameter Diameter: Φ 5 mm or more, depth: 4-6×diameter
Types of Thread	Barana Rapid can produce threads of any specification and size required by our customers.	
Text	Minimum width of 0. 5 mm, depth of 0. 1 mm	Barana Rapid can use laser marking to create standard text for CNC turned parts.
Lead Time	3 business days	3 business days

What Separates Barana Rapid's Inspection Processes from the Rest?
Careful measurement, inspection and testing are necessary to ensure the conformance of your parts. We perform multiple inspections at every step of the product development journey, from incoming material verification to final 3D scanning. You will receive complete digital files and Certificates of Compliance so you can meet your own regulatory and performance goals.

佰瑞纳 BETTER PROTOTYPE **Barana Rapid Technology Limited**

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