



High Precision Laser Cutting for Corrosion-Resistant Stainless Steel Precision Metal Stamping Parts with Aesthetic Appeal

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: PMS-XG-068
- 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: 50000 pcs per week



Product Specification

- Material: Copper, Stainless Steel, Aluminum, Brass, Etc.
- Surface Treatment: Hot Galvanized, Zinc Plating, Nickel Plating, Powder Plating, Anodize
- Process: Stamping, Punching, Bending, Punching Of Stamping Blanks, Stamping + CNC
- Application: Construction, Industrial, Used Widely Industry Auto, Mechanical Equipment, Auto Parts
- 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
- Oem: Available
- Quality: ISO9001
- Keywords: Custom Stamping Metal
- Packing: As Customers' Requirement



More Images



Product Description

What We Can Provide

High Precision Laser Cutting for Corrosion-Resistant Stainless Steel Precision Metal Stamping Parts with Aesthetic Appeal

Description of High Precision Laser Cutting for Corrosion-Resistant Stainless Steel Precision Metal Stamping Parts with Aesthetic Appeal

High-precision laser cutting is a transformative technology for manufacturing corrosion-resistant stainless steel precision metal stamping parts, combining exceptional dimensional accuracy with flawless surface finishes. By utilizing advanced fiber or pulsed lasers, this method achieves intricate cuts, sharp edges, and minimal material distortion, making it ideal for applications where both functionality and visual excellence are paramount.

Specification of High Precision Laser Cutting for Corrosion-Resistant Stainless Steel Precision Metal Stamping Parts with Aesthetic Appeal

Name	Custom OEM Laser Cutting Sheet Metal Fabrication Services Copper Stainless Steel Anodised Aluminum Metal Stamping bending Parts
Material	Zn-plating, Ni-plating, Cr-plating, Tin-plating, copper-plating, the wreath oxygen resin spraying, the heat disposing, hot-dip galvanizing, black oxide coating, painting, powdering, color zinc-plated, blue black zinc-plated, rust preventive oil, titanium alloy galvanized, silver plating, plastic, electroplating, anodizing etc.
Applications	Automotive, instrument, electrical equipment, household appliances, furniture, mechanical equipment, daily living equipment, electronic sports equipment, light industry products, sanitation machinery, market/ hotel equipment supplies, artware etc.
Packaging	Regular: Paper, Foam, OPP bag, Carton; Other: According to customers' requirements
Testing Equipment	Projecting apparatus, Salt Spray Test, Durometer, and Coating thickness tester
Tolerance	± 0.01 -0.05mm
Drawing	JPG, PDF, CAD, DWG, STP, STEP

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 Precision Laser Cutting for Corrosion-Resistant Stainless Steel Precision Metal Stamping Parts with Aesthetic Appeal

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

Advantages

1. Ultra-Fine Tolerances and Intricate Geometries

Laser cutting enables tolerances as tight as ± 0.02 mm, far surpassing traditional stamping or punching methods. This precision is critical for industries like aerospace, medical devices, and consumer electronics, where even microscopic deviations can disrupt assembly or performance. For example, in surgical instruments, laser-cut stainless steel components achieve razor-sharp edges and complex shapes (e.g., micro-perforations for fluid flow) without compromising structural integrity. Additionally, the ability to cut without mechanical force eliminates tooling wear, ensuring consistent quality across millions of cycles.

2. Minimal Thermal Distortion and Pristine Surface Quality

Unlike thermal cutting techniques such as plasma or flame cutting, fiber lasers operate with a focused beam that vaporizes material with minimal heat input, reducing the heat-affected zone (HAZ) to near-zero levels. This prevents warping,

discoloration, or micro-cracks, preserving the stainless steel's corrosion-resistant properties and natural luster. For precision stamping parts, this is essential because surface imperfections can lead to stress concentrations or corrosion initiation points. In automotive applications, such as laser-cut exhaust manifolds, the absence of thermal distortion ensures tight seals and long-term durability under extreme temperatures.

3. Cost-Effective Customization and Rapid Prototyping

Laser cutting requires no hard tooling, enabling instant design changes without the weeks-long lead time and high costs associated with die manufacturing. This flexibility is invaluable for low-to-medium volume production or iterative prototyping, where designers can refine aesthetics (e.g., decorative grilles, logos) or functional features (e.g., ventilation slots) on demand. For instance, luxury watchmakers use laser cutting to produce intricate stainless steel cases with mirror-polished finishes, achieving brand-defining precision without the expense of custom dies. This agility also reduces waste, as scrap material is minimized compared to stamping.

4. Enhanced Aesthetic Appeal Through Advanced Finishing Options

Laser cutting seamlessly integrates with post-processing techniques like electropolishing, brushing, or PVD coating to elevate visual appeal. The precision of the initial cut ensures smooth edges that accept these finishes uniformly, eliminating the need for time-consuming manual deburring. For architectural applications, such as laser-cut stainless steel façade panels, the result is a flawless surface with consistent grain patterns and reflective qualities. In consumer electronics, components like smartphone frames or laptop hinges leverage laser-cut edges for a premium, tactile finish that differentiates high-end products in competitive markets.



Multiple Machines

5-Axis CNC & Imp Professional machines, skillful workers, machines, skillful
with accuracy = guarantee the quality and lead time. three 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

Stainless Steel Material

Material:

Stainless Steel 201
Stainless Steel 430
Stainless Steel 304
Stainless Steel 316

Finish:

Mirror Polishing
Brush Polishing
Electro Polishing
Vibration Polishing



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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