



Customized Sheet Metal Shell Fabrication for Medical Equipment High-Tolerance Precision Customized Solutions

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Xiange
- Certification: ISO 9001:2015 SGS RoHS
- Model Number: MF-XG-32
- Minimum Order Quantity: 1 pcs
- Price: USD 1\$-2\$
- Packaging Details: Carton Wooden case
- Delivery Time: 5-8 days
- Payment Terms: T/T, Western Union, MoneyGram
- Supply Ability: 10 SET per week



Product Specification

- Material Capabilities: Stainless Steel, Aluminium, Copper, Brass
- Products: Metal Equipment Shell
- Process: Metal Sheets Fabrication, Welding Cutting Punching Stamping
- Application: Electronic Equipment Sheet Metal Shell, Custom Control Box Cabinet Chassis Shell
- OEM/ODM: Acceptable
- Equipment: Precision Nonstandard Parts
- Surface Treatment: Powder Coated, Hot Galvanized, Painting, Polishing, Spray Coating, Brushing, Cathaphoresis, Sandblasting, Electroplate Chrome/Zinc/Nickel Plating/Anodize/Electronic Polish, Silk-screen Etc;
- Package: Plastic Bag, Blister Box, Tap Reel Or As Your Required
- Used: Computer, Telecom, mechanical, electronics, appliance, military, aerospace.



More Images



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

Product Description

What We Can Provide

Precision Sheet Metal Shell Fabrication for Medical Equipment Customized High-Tolerance Solutions

Description of Precision Sheet Metal Shell Fabrication for Medical Equipment Customized High-Tolerance Solutions

Customized sheet metal shell fabrication for medical equipment involves designing and manufacturing bespoke enclosures, housings, and structural components tailored to the exact specifications of medical devices. This process leverages advanced sheet metalworking techniques—such as CNC laser cutting, precision bending, robotic welding, and automated assembly—to achieve high-tolerance precision (often ± 0.05 mm or tighter). The result is a durable, lightweight, and dimensionally accurate shell that meets stringent medical industry standards, including biocompatibility, sterilizability, and electromagnetic interference (EMI) shielding.

Specification of Precision Sheet Metal Shell Fabrication for Medical Equipment Customized High-Tolerance Solutions

Product	Custom Sheet Metal Fabrication Laser Cutting Bending Sheet Metal Stamping Parts
Material	Stainless Steel, Carbon Steel(Q235), Aluminum(6061,6063, 5052), Copper, Brass etc.
Process	Bending, Stamping, Welding
Finish	Zinc Plating, Mirror Polished, Brush Polished, Paint, Anodic Oxidation, Powder Coated
Package	Plywood Box + Plywood Pallet, Plywood Box
OEM Service	Accept

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 Precision Sheet Metal Shell Fabrication for Medical Equipment Customized High-Tolerance Solutions

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 promise

Precision Engineering for Critical Functionality

High-tolerance manufacturing ensures components align perfectly with sensitive medical electronics, optical systems, or fluid pathways. This minimizes risks of malfunction, contamination, or user error in devices like endoscopes, ventilators, or diagnostic analyzers, where even slight misalignments can compromise performance.

Material Optimization for Medical Safety

Custom fabrication allows the use of hypoallergenic, non-toxic metals that resist corrosion from bodily fluids, cleaning agents, or sterilization chemicals. For example, titanium shells are ideal for implantable device housings, while stainless steel enclosures endure harsh hospital environments without degrading.

Design Flexibility for Innovation

Unlike standardized enclosures, customized shells can incorporate complex geometries, ventilation patterns, or modular features to support cutting-edge medical technologies. This adaptability accelerates time-to-market for devices like portable ultrasound machines, robotic surgical tools, or AI-powered diagnostic platforms.

Cost-Effective Long-Term Reliability

While initial tooling costs may be higher, precision fabrication reduces waste and rework by ensuring first-pass quality. Durable materials and finishes also extend product lifespans, lowering replacement costs and enhancing brand reputation for medical OEMs.



Multiple Machines

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

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.



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