



2023

PROTO MFG CO.,LIMITED

COMPANY

Proto MFG CO.,LIMITED is located in Songshan Lake High-tech Industrial Park, Dongguan City, Guangdong Province, and the factory is located in Dalingshan Town. The company spent 10 million CNY in 2016 to create a new modern factory of 5,000 square meters, the annual output value of 80 million yuan. Proto MFG CO.,LIMITED specializes in custom precision parts ,prototyping, CNC machining, sheet metal, urethane casting and injection molding service. Proto MFG has been working hard to shorten the r&d period and save cost for customers.



The company is currently equipped with more than 50 sets of advanced CNC processing equipment at home and abroad, and has more than 100 highly qualified senior technical personnel. The experienced team, advanced equipment, strong technical support, good collaboration and communication ability provide guarantee for your customized high quality parts. At the same time, Ptoto MFG has also established close relationships with some famous domestic companies and groups and foreign innovative enterprises to conduct technical exchanges and explore technical achievements together, so that we can keep our leading technological advantage.



1

Precision parts

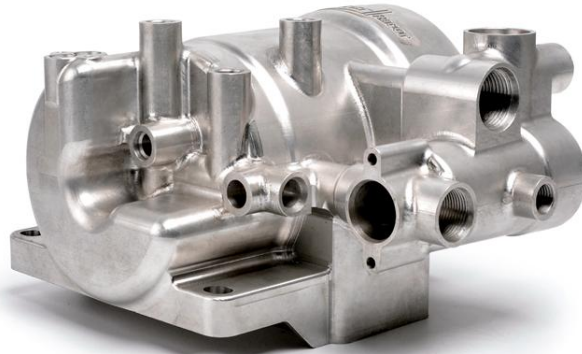
Precision parts processing according to the processing object can be divided into standard parts and non-standard parts processing, relatively speaking, non-standard parts than standard parts processing is more difficult.

Non-standard parts are relative to the standard parts proposed, standard parts refers to the structure, size, drawing, marking and other aspects have been completely standardized, and the common parts produced by professional factories, such as automotive standard parts, mold standard parts, etc. belong to the broad standard parts.

Non-standard parts processing is mainly the state has not set out strict standard specifications, no relevant parameters outside the provisions, by the enterprise free control of other accessories. Non-standard parts by many varieties, there is no very standardized classification.



Custom Parts



2

Series production

The rapid development of modern technology, the advent of the knowledge economy era, people's needs are changing day by day, so that the cycle of product renewal is becoming shorter and shorter, diversified and personalized.

The company's flexible production mode, in order to meet the diversified, personalized, multi-variety and small batch needs of customers.



Custom Parts



3

Rapid Prototyping

The rapid prototyping is one or several first made according to the product appearance drawing or structure drawing without opening the mold, which is used to check the appearance or structure rationality of the functional prototype.

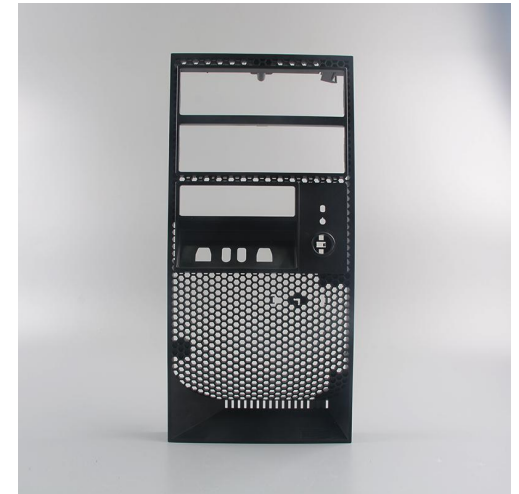
CNC prototyping its main workload is done with CNC machine tools, and according to the different equipment used, can be divided into laser rapid forming (sla) hand board and machining center (CNC) hand board and rapid prototyping (3D printing).

CNC Prototyping: stable processing quality, high processing accuracy, high repetition accuracy, can be processed by conventional methods difficult to process complex type surface, and even can process some unobservable processing parts.

The advantage of CNC prototyping is that it can reflect the information expressed in the drawing very accurately, and the surface quality of CNC prototyping is high, especially after its surface coating and silk screen printing, even more brilliant than the products produced after opening the mold. Therefore, CNC prototyping manufacturing is becoming more and more mainstream in the hand board manufacturing industry.



Rapid Prototyping



4

Plastic Injection Molding

PROTO MFG's plastic injection molding process offers many advantages over other manufacturing processes. From fast and efficient production to the customization opportunities and increased strength and durability of the parts, plastic injection molding offers companies an ideal choice for manufacturing plastic parts. PROTO MFG is committed to providing high-quality services and products that meet the exact specifications of each project. Their experienced team, state-of-the-art equipment, and innovative technologies, including scientific molding techniques, make them a go-to partner for many companies. Contact PROTO MFG today to learn how their plastic injection molding services can benefit your next project.



Prototyping



5

Urethane Casting

What are the advantages of urethane casting? If you use 3D printing directly, for example, if you want to make 50 pieces or even 100 pieces, the cost may be more expensive, but if you use the urethane casting, the cost may be slightly cheaper and more affordable.

Commonly used materials are PA (nylon), PE, PS, PP, PMMA, ABS, POM, PC and so on.

If the number of pieces of the product printed each time is relatively large, and there is no requirement for precision, you can consider using 3D printing to do, but if the number of pieces of the same product each time to play a small number of pieces, and relatively small and require precision, use urethane casting.



Process



6

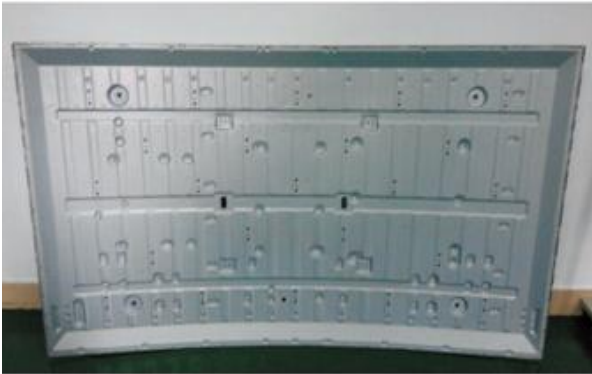
Sheet metal

Sheet metal is the deformation of some sheet metal by hand or die stamping to form the desired shape and size, and can be further formed into more complex parts by welding or a small amount of machining. Usually, the four most important steps of the sheet metal process are shearing, punching/cutting/, folding/coiling, welding, surface treatment, etc.

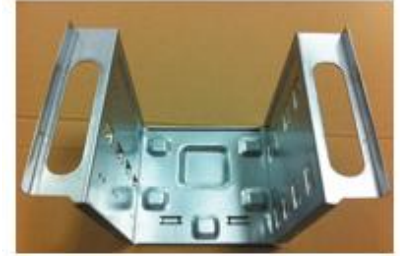
As the application of sheet metal becomes more and more widespread, the design of sheet metal parts becomes a very important part of the product development process. With the characteristics of light weight, high strength, electrical conductivity (able to be used for electromagnetic shielding), low cost, and good performance in mass production, sheet metal is widely used in electronic appliances, communication, automotive industry, and medical devices, for example, in computer cases, cell phones, and MP3, sheet metal is an essential component.



Sheet metal parts



Sheet metal parts



7 Rapid tooling

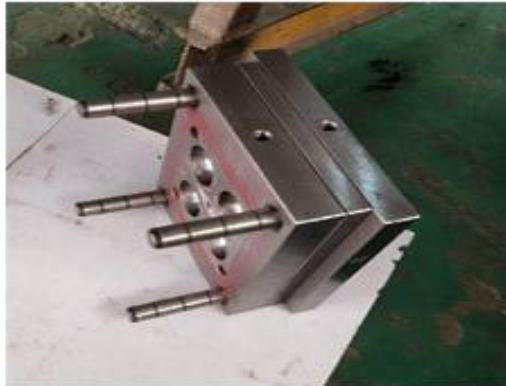
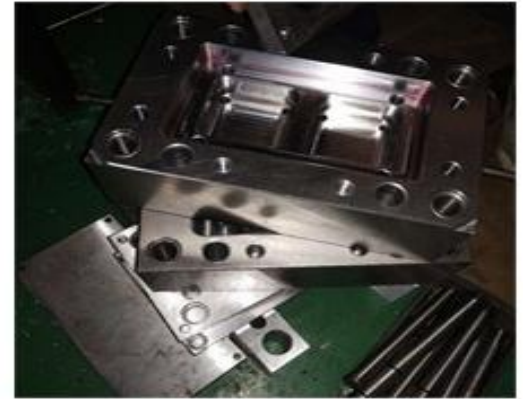
Rapid Tooling (RT) is a tool for forming products of a certain shape, size and surface accuracy from a specific shape. It is mainly used in the production of large quantities, although the production and manufacturing costs of the mold are relatively high, but because of the mass production, so the cost of each product is greatly reduced.

Looking at the modern mold technology, it is developing in the following direction:

- (1) high precision modern mold precision requirements than the traditional mold precision at least an order of magnitude higher;
- (2) long life of modern mold life than the traditional mold life twice as much as the modern mold can generally reach more than 10,000 times, up to 100 million times as much;
- (3) high productivity due to the use of multi-station progressive mold, multi-energy mold, multi-cavity injection mold and laminated injection mold and other advanced mold, can greatly improve the productivity, thus bringing significant economic benefits such as the use of four-station injection mold production of plastic soda bottles, more than 10,000 pieces per hour;



Rapid Tooling



8

Surface Treatment

Deburr, Brush, Sand blast,
Anodizing, Plating,
Painting, Heat treatment...

The purpose of the product surface treatment is to meet the requirements for corrosion resistance, abrasion resistance, decoration or other special functions, abrasion resistance, decorative or other special functional requirements



OUR EQUIPMENT





Vertical Machining Center 850 (5-Axis)

Brand: JIRFINE

Origin: China

QTY.: 1

Three Axis Travel(X/Y/Z)(mm): 800*500*700

Spindle Speed(rpm): 12000

Accuracy(mm) : Pointing Accuracy: $\pm 0,005/300$

Repeat Accuracy: $\pm 0,003$



Vertical Machining Center 850 (4-Axis)

Brand: JIRFINE

Origin: China

QTY.: 1

Three Axis Travel(X/Y/Z)(mm): 800*500*500

Spindle Speed(rpm): 12000

Accuracy(mm) : Pointing Accuracy: $\pm 0,005/300$

Repeat Accuracy: $\pm 0,003$



Vertical Machining Center 500

Brand: JIRFINE

Origin: China

QTY.: 2

Three Axis Travel(X/Y/Z)(mm): 500*400*400

Spindle Speed(rpm): 20000

Accuracy(mm) : Pointing Accuracy: $\pm 0,005/300$

Repeat Accuracy: $\pm 0,003$



High-Speed Machining 650

Brand: FENG TIE

Origin: China

QTY.: 9

Three Axis Travel(X/Y/Z)(mm): 600*500*250

Spindle Speed(rpm): 12000

Accuracy(mm) : Pointing Accuracy: $\pm 0,005/300$

Repeat Accuracy: $\pm 0,003$



High-Speed Machining 500

Brand: FENG TIE

Origin: China

QTY.: 5

Three Axis Travel(X/Y/Z)(mm): 500*400*200

Spindle Speed(rpm): 12000

Accuracy(mm) : Pointing Accuracy: $\pm 0,005/300$

Repeat Accuracy: $\pm 0,003$



Vertical Machining Center TAIKAN T-V856

Brand: TAIKAN

Origin: China

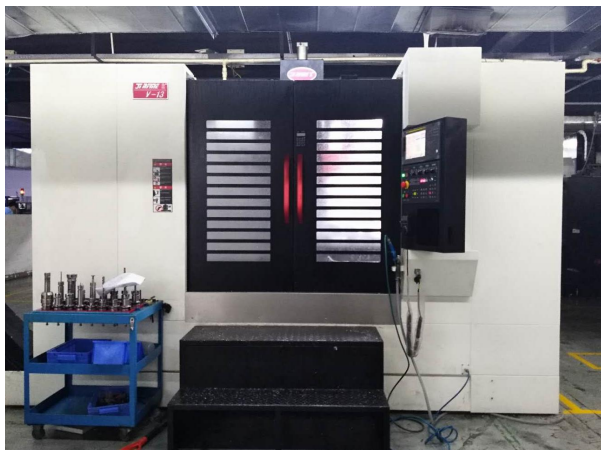
QTY.: 10

Three Axis Travel(X/Y/Z)(mm): 800*500*600

Spindle Speed(rpm): 50-10000

Accuracy(mm) : Pointing Accuracy: $\pm 0,008/300$

Repeat Accuracy: $\pm 0,005/300$



CNC Lathing

BRAND: JIRFINE

ORIGIN: China

QTY.: 1

Three Axis Travel (X/Y/Z)(mm): 1400*700*600

Spindle Speed (rpm): 15000

Accuracy (mm): 0.012/0.016 IT6-IT7



CNC Lathing

BRAND: BAOJI

ORIGIN: China

QTY.: 3**Three Axis Travel (X/Y/Z) (mm):** Max diameter 600

Spindle Speed (rpm): 3000

Accuracy (mm): 0.012/0.016 IT6-IT7



EDM

Brand: QUNJI

Origin: TAIWAN

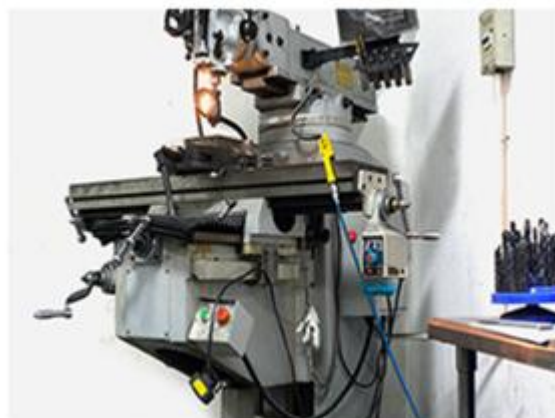
QTY.: 3

Three Axis Travel(X/Y/Z)(mm):

1. 400*300*300 2. 500*400*300 3. 700*500*400

Spindle Speed(rpm): 12000

Accuracy(mm) : Surface Roughness: Ra0.5



Conventional Milling

Brand: DIWANG

Origin: China

QTY.: 2

Three Axis Travel(X/Y/Z)(mm): 800*500*400

Spindle Speed(rpm): 3000

Accuracy(mm) : ± 0.01



VMS

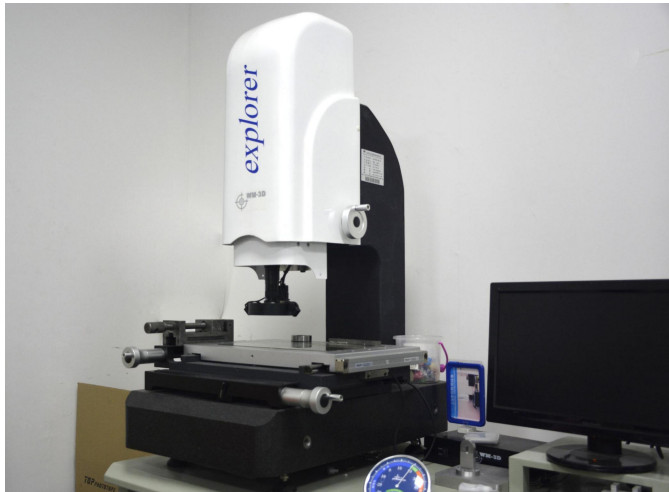
Brand: SEREIN

Origin: China

QTY.: 1

Three Axis Travel(X/Y/Z)(mm):

Accuracy(mm) :



VMS

Brand: AIDI

Origin: China

QTY.: 1

Three Axis Travel(X/Y/Z)(mm): 300*200*100

Accuracy(mm) : $\pm 0,005$



Thread Plug Gauges

Origin: China

QTY.: 1 set

Three Axis Travel(X/Y/Z)(mm):

Accuracy(mm) : $\pm 0,001$



Pin Gauges

Origin: China

QTY.: 1 set

Three Axis Travel(X/Y/Z)(mm):

Dia 1-12mm Step 0,01mm

Accuracy(mm) : $\pm 0,001$



Digital outside micrometer

Origin: China

QTY.: 4 set

Three Axis Travel(X/Y/Z)(mm):

0-25mm 25-50mm 50-75mm

Accuracy(mm) : $\pm 0,002$ mm



Digital three point inside micrometer

Origin: China

QTY.: 1 set

Three Axis Travel(X/Y/Z)(mm): Dia 12- 100mm

Accuracy(mm) : $\pm 0,002$ mm $\pm 0,005$ mm



Thread Ring Gauges

Origin: China

QTY.: 1 set

Resolutions : 0.0001

Accuracy(mm) : 6G



TESA HITE400

Origin: Switzerland

QTY.: 2

Resolutions : 0.0001

Accuracy(mm) : (2.5+4L)um

Scope : 400

OUR ADVANTAGES

1

Technology
innovation

4

Processing speed

2

Quality of the
product

5

Secrecy

3

Equipment is
complete

6

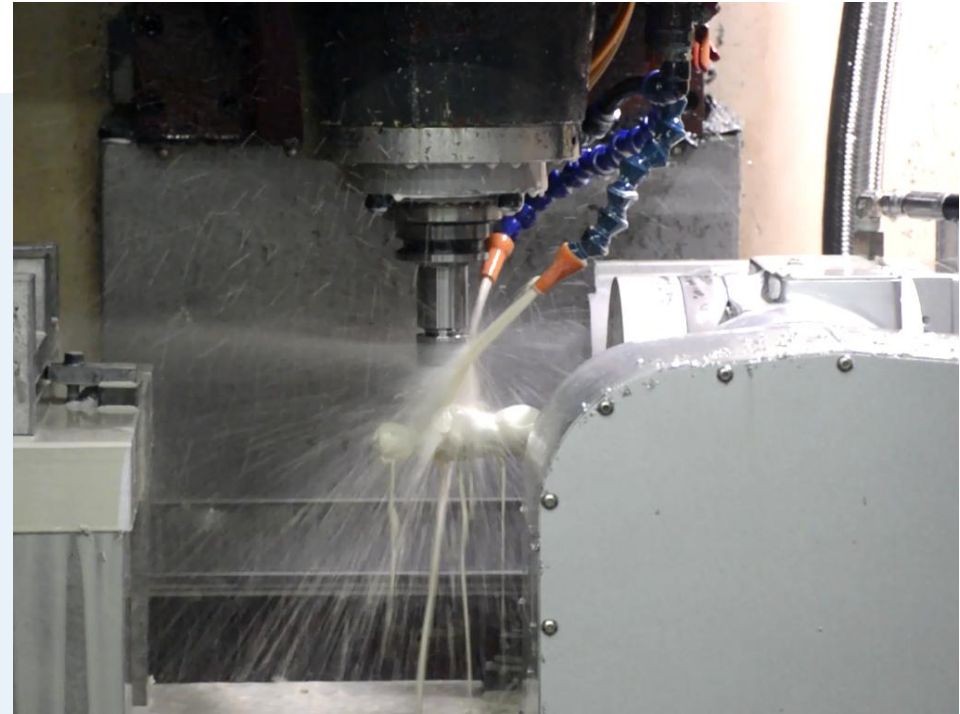
Price advantage

01



Technology innovation

Complex and hard surface and function structure can be rapid prototyping and maintain accurate original



02



Quality of the product

Good quality and guaranteed, high precision can be up to 0.02 - 0.1 mm



03



Fully equipped

Process capability is strong, production lines; Advanced equipment, professional mature supporting facilities.



04



Processing speed

Short processing cycle and fast delivery ensure timely delivery.



05

Secrecy

Processing cycle is short, fast delivery, ensure that in accordance with the delivery on time delivery.



06



Price advantage

Cost-effective, the same level's plate proofing, more affordable price





07



The Certificate of Quality Management System

Certificate No: 51822Q07569R0

PROTO MFG CO.,LIMITED

(Unified social credit code: 91441900MA58C6K458)



Registered address: Room 1305#, 16 B, 7 N, 10 Tech Road, Songshan Lake Area,
Dongguan, Guangdong

Certification address: Room 1305#, 16 B, 7 N, 10 Tech Road, Songshan Lake Area,
Dongguan, Guangdong

Has been awarded this certificate for compliance with the standard

GB/T19001-2016 /ISO9001:2015

Range of Products and Process: Metal&Plastic Prototyping, Metal&Plastic Precision
machined parts

Issued date: 2022-07-18

Valid until: 2025-07-17

Initial issued date: *****

Renewal date: 2023-06-09

If the above scope involves administrative licensing and compulsory certification requirements, this certificate only
covers products and services within the scope of licensed qualifications and compulsory certification requirements.

Surveillance conformity label should be pasted below for continual effectiveness of this certificate.



中国认可
国家认证
管理体系
MANAGEMENT SYSTEM
CNAS CL172-M



G M *Wang*

Shenzhen Zhongbiao International Testing and Certification Co., Ltd.

Company address: 1103 (Zhenye Building), Xing Hai Ming Cheng VII, Intersection of Qian Hai Road & Shen Nan
Road, Xing Hai Ming Cheng Community, Nantou Street, Nanshan District, Shenzhen

TEL: 0755-82833099

FAX: 0755-82839499

Information of this certificate can be found on the official website of certification center (www.szccac.com)
and CNCA official website (www.cnca.gov.cn)



ISO 9001

08



ZhongRen HeZong Certification (Shenzhen) Co., Ltd.
Medical Device Management System Certification

Certificate NO: 64623B8060538R0S

We hereby certify that

PROTO MFG CO., LIMITED

Unified Social Credit identifier: 91441900MA58C6K458

Registered Address: Room 1305#, 16 Building, 7# 10 TECH Road, Songshan Lake
Area, Dongguan, Guangdong

Production / Business Address: Room 1305#, 16 Building, 7# 10 TECH Road,
Songshan Lake Area, Dongguan, Guangdong

After review, the organization's medical device management system meets the
standards:

GB/T 42061-2022/ISO13485:2016

Scope of certification:

Metal & Plastic Prototyping, Metal & Plastic Precision machined parts,
mold Manufacturing for medical devices, which Involved medical
device management activities

Date of Issue: 20 June 2023 Date of Expiry: 19 June 2026

The First Surveillance	The Second Surveillance	The Third Surveillance
------------------------	-------------------------	------------------------

This certificate is used with the requirements of valid laws and regulations which the
certification scope involved. The validity of the certificate should be confirmed and
maintained through regular supervision and audit by ZhongRen HeZong Certification. Please
conduct supervision and audit according to the annual audit time. If the failed to pass the
audit within the time limit, the certificate will be invalid.
Check the CNCA Website: www.cnca.gov.cn
Or website of company: www.zrhz-cert.com



Address: R606, Jiayu Building, Hongxing Community, Songgang Street, Bao'an District, Shenzhen.
Tel: 0755-23305084 Website: www.zrhz-cert.com