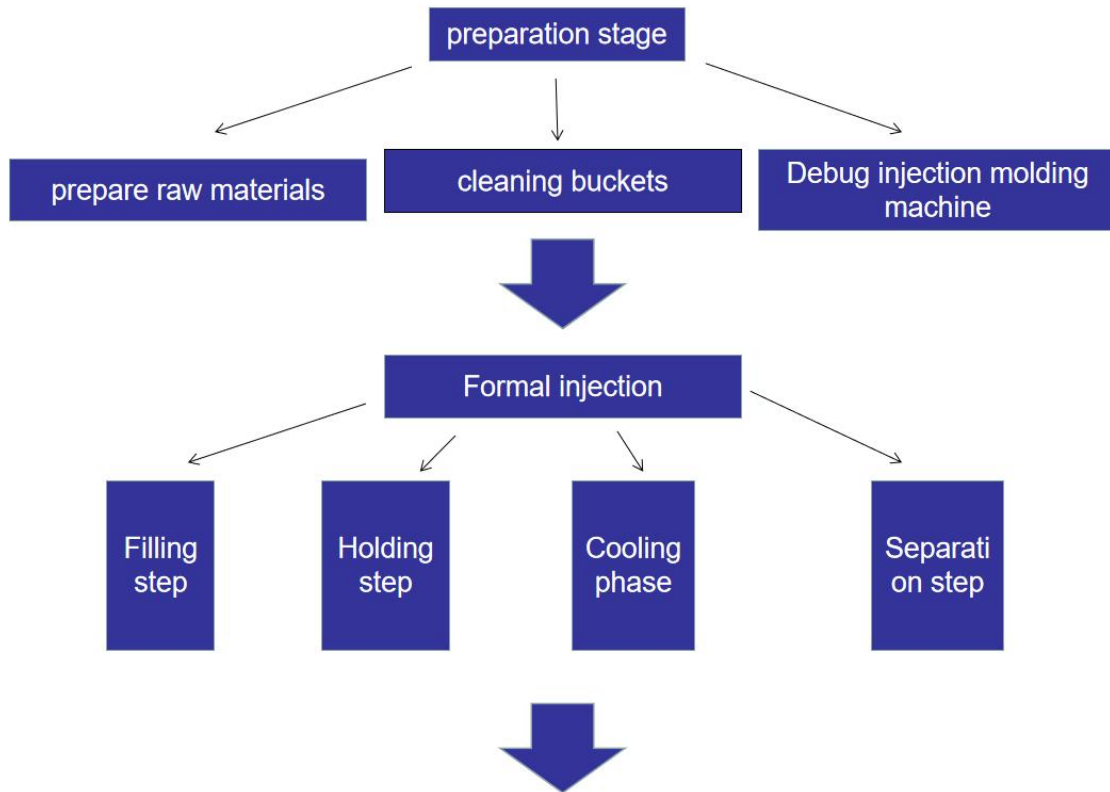
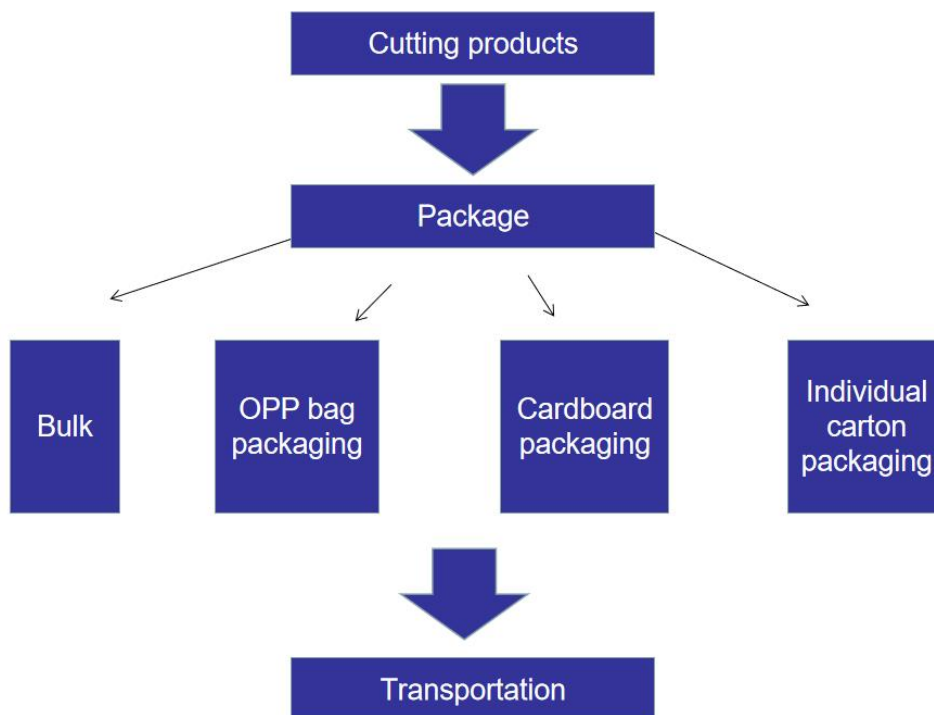


Professional injection moulding services

Select the appropriate injection molding machine according to the characteristics of the mold, adjust the process of the injection molding machine according to the plastic material, and finally produce the best and most suitable plastic products.





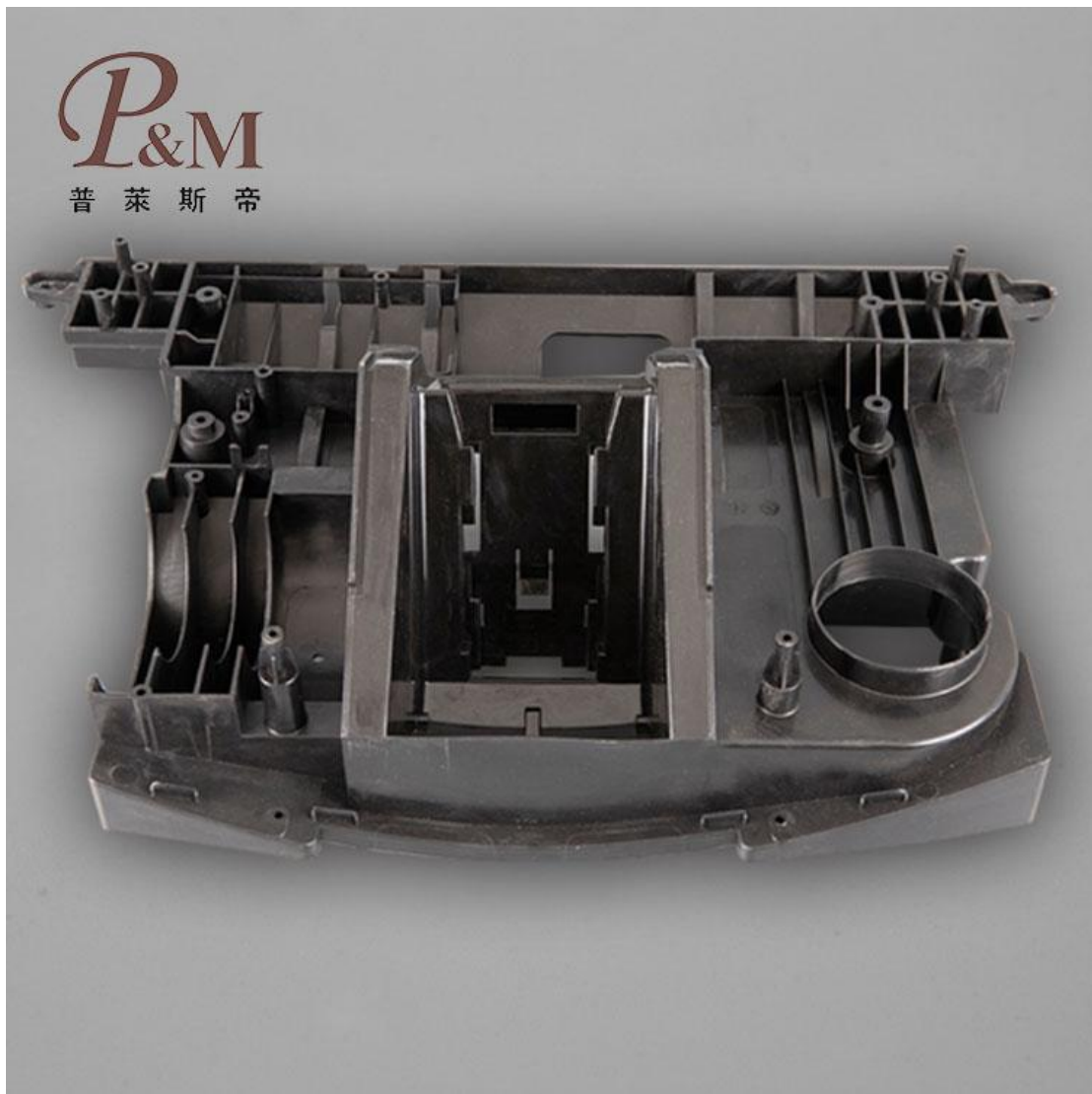
视频链接: <https://www.youtube.com/watch?v=VdEzT7IpXjg>

一. Plastic material selection

1.ABS acrylonitrile-butadiene-styrene copolymer-**Custom ABS Parts**

Typical application range:

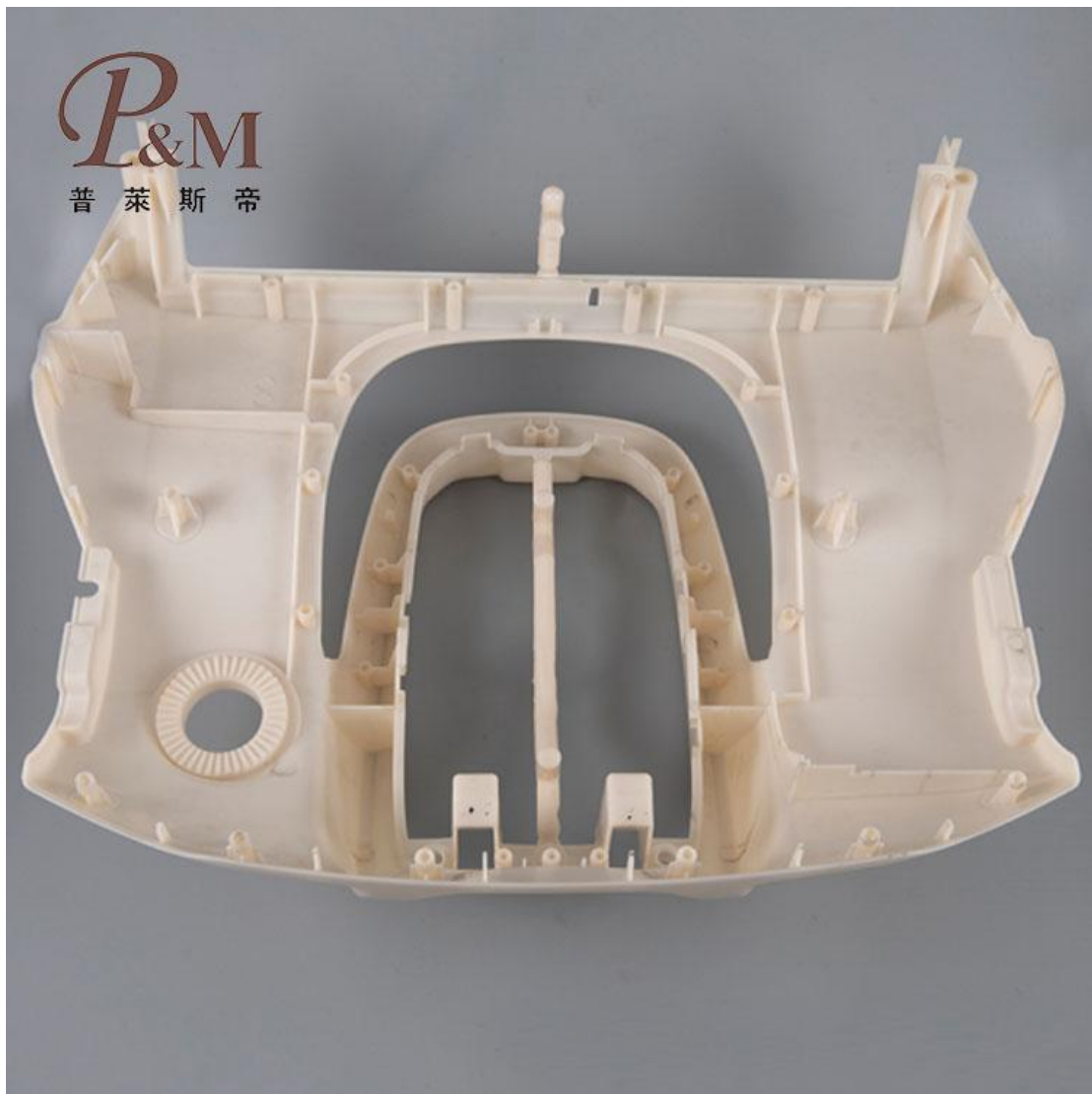
Automobiles (dashboards, tool hatches, wheel covers, mirror boxes, etc.), refrigerators, heavy-duty tools (hair dryers, blenders, food processors, lawn mowers, etc.), telephone casings, typewriter keyboards, recreational vehicles such as golf carts and jet skis.



2.PA6 polyamide 6 or nylon 6-**Custom PA6 Parts**

Typical application range:

It is widely used in structural components due to its good mechanical strength and stiffness. Because of its good wear resistance, it is also used to manufacture bearings.



3.PA12 polyamide 12 or nylon 12-**Custom A12 Parts**

Typical application range:

Water meters and other commercial equipment, cable sleeves, mechanical cams, sliding mechanisms and bearings, etc.



4.PA66 polyamide 66 or nylon 66-**Custom PA66 Parts**

Typical application range:

Compared with PA6, PA66 is more widely used in the automotive industry, instrument housings and other products that require impact resistance and high strength requirements.



5.PBT polybutylene terephthalate-**Custom PBT Parts**

Typical application range:

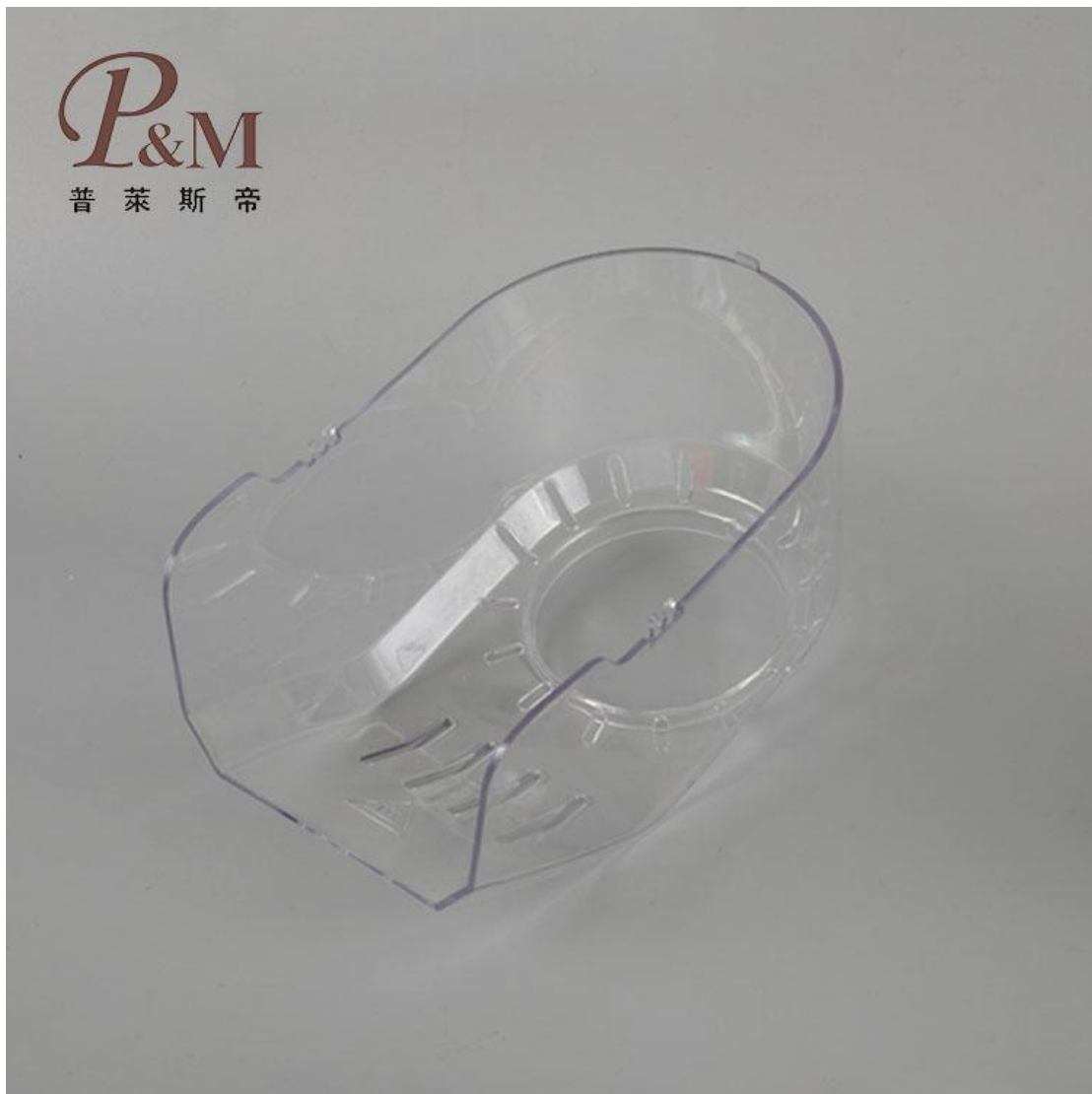
Household appliances (food processing blades, vacuum cleaner components, electric fans, hair dryer housings, coffee utensils, etc.), electrical components (switches, motor housings, fuse boxes, computer keyboard keys, etc.), automotive industry (radiator grilles, etc.) , body panels, wheel covers, door and window components, etc.).



6.PC polycarbonate-**Custom PC Parts**

Typical application range:

Electrical and business equipment (computer components, connectors, etc.), appliances (food processors, refrigerator drawers, etc.), transportation industry (vehicle front and rear lights, dashboards, etc.).



7.PC/ABS polycarbonate and acrylonitrile-butadiene-styrene copolymers and blends-Custom PC/ABS Parts

Typical application range:

Computer and business machine casings, electrical equipment, lawn and garden machines, automotive parts (dashboards, interior trim, and wheel covers).



**8.Blend of PC/PBT Polycarbonate and Polybutylene Terephthalate-Custom
PC/PBT Parts**

Typical application range:

Gearboxes, automotive bumpers, and products requiring chemical and corrosion resistance, thermal stability, impact resistance, and geometric stability.



9. PE-HD high density polyethylene-**Custom PE-HD Parts**

Typical application range:

Refrigerator containers, storage containers, household kitchenware, sealing lids, etc.



10PE-LD low density polyethylene-Custom PE-LD Parts

Typical application range:
Bowls, Cabinets, Pipe Couplings



11. PEI polyether-**Custom PEI Parts**

Typical application range:

Automotive industry (engine parts such as temperature sensors, fuel and air handlers, etc.), electrical and electronic equipment (electrical connectors, printed circuit boards, chip casings, explosion-proof boxes, etc.), product packaging, aircraft interior equipment, pharmaceutical industry (surgical instruments), tool housings, non-implantable devices).



12. PET polyethylene terephthalate-**Custom PET Parts**

Typical application range:

Automotive industry (structural components such as mirror boxes, electrical components such as headlight mirrors, etc.), electrical components (motor housings, electrical connectors, relays, switches, internal components of microwave ovens, etc.). Industrial applications (pump housings, hand instruments, etc.).



13.PETG Glycol Modified-Polyethylene Terephthalate-**Custom PETG Parts**

Typical application range:

Medical equipment (test tubes, reagent bottles, etc.), toys, monitors, light source covers, protective masks, refrigerator fresh-keeping trays, etc.



14.PMMA polymethyl methacrylate--Custom PMMA Parts

Typical application range:

Automotive industry (signal equipment, instrument panels, etc.), pharmaceutical industry (blood storage containers, etc.), industrial applications (video discs, light diffusers), consumer goods (drink cups, stationery, etc.).



15.POM polyoxymethylene--**Custom POM Parts**

Typical application range:

POM has a very low coefficient of friction and good geometric stability, especially suitable for making gears and bearings. Since it also has high temperature resistance properties, it is also used in plumbing devices (pipeline valves, pump housings), lawn equipment, etc.



16.PP polypropylene---Custom PP Parts

Typical application range:

Automotive industry (mainly using PP with metal additives: fenders, ventilation pipes, fans, etc.), appliances (dishwasher door liners, dryer ventilation pipes, washing machine frames and covers, refrigerator door liners, etc.), daily Consumer goods (lawn and garden equipment such as lawnmowers and sprinklers, etc.).



17.PPE polypropylene-**Custom PPE Parts**

Typical application range:

Household items (dishwashers, washing machines, etc.), electrical equipment such as controller housings, fiber optic connectors, etc.



18.PS polystyrene-**Custom PS Parts**

Typical application range:

Product packaging, household items (tableware, trays, etc.), electrical (transparent containers, light source diffusers, insulating films, etc.).



19.PVC (polyvinyl chloride)-Custom PVC Parts

Typical application range:

Water supply pipes, household pipes, house wall panels, commercial machine casings, electronic product packaging, medical equipment, food packaging, etc.



20.SA styrene-acrylonitrile copolymer-**Custom SA Parts**

Typical application range:

Electrical (sockets, housings, etc.), daily commodities (kitchen appliances, refrigerator units, TV bases, cassette boxes, etc.), automotive industry (headlight boxes, reflectors, instrument panels, etc.), household items (tableware, food knives, etc.) etc.), cosmetic packaging, etc.



视频链接: <https://www.youtube.com/watch?v=OLVuMWXRyJA>

二 The process of injection molding service:

设备视频链接: <https://www.youtube.com/shorts/6EB6DIwzGJA>

(一)Raw material preparation:

1. We will choose the most suitable plastic raw materials according to the requirements of customers (our raw materials are basically imported, and the brands are Lotte from Korea, Chi Mei from Taiwan, etc.)



2. Choose the toner (our toner comes from our local supplier, the price is right and the quality is good)
3. Cleaning the barrel (it takes 3 hours)
4. Put the raw materials and toner into the bucket and stir.

(二) Equipment debugging

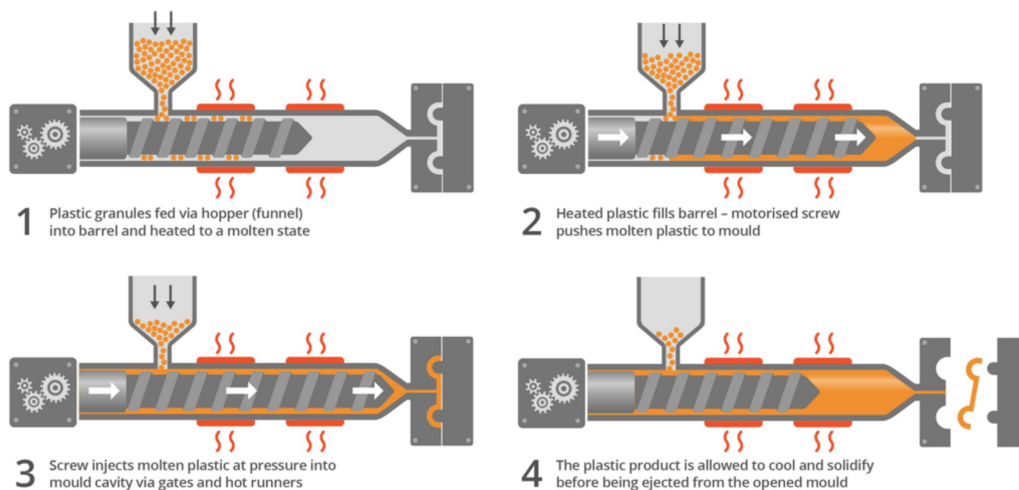
设备视频链接: <https://www.youtube.com/shorts/WKTB7GbEO3U>

1. Select the most suitable injection molding machine, and choose the most suitable injection molding machine according to the size and requirements of the mold
2. The engineer put the mold into the injection molding machine with a chain sling, and began to debug the injection molding machine. (This process will take several hours)

(三) Formal injection molding

视频链接: <https://www.youtube.com/shorts/K2vLp7HHE1o>

The injection molding process mainly consists of six steps, such as mold closing - filling - holding pressure - cooling - mold opening - mold release. These six steps directly determine the molding quality of the product, which is a complete continuous process.



1. Filling step: Filling step is the first step of the whole injection cycle, which starts from closing the mold to when the mold cavity is about 95% full. Theoretically, the shorter the filling time, the higher the molding efficiency; however, in actual production, the molding time (or injection speed) depends on many conditions.

2. Holding step: The holding step is the continuous application of pressure to compact the melt and increase the density of the plastic (densification) to compensate for the shrinkage characteristics of the plastic. During the holding pressure process, the back pressure is high because the mold cavity is already filled with plastic. During the holding pressure compaction process, the screw of the injection molding machine can only move forward slowly and slightly, and the flow rate of plastic is also slow, which is called holding pressure flow. As the plastic cools and hardens against the mold walls, the viscosity of the melt increases rapidly, so the resistance in the mold cavity is high. In the later stages of the holding pressure, the density of the material continues to increase and the molded part is gradually formed. The holding pressure phase must continue until the gate is cured and sealed.

3. Cooling phase: The design of the cooling system is very important. This is because the bent plastic part can only be cooled and hardened to a certain hardness in order to avoid deformation of the plastic part due to external forces after separation. Since the cooling time accounts for about 70%~80% of the whole molding cycle, a well-designed cooling system can greatly reduce the molding time, improve the productivity of injection molding and reduce the cost. A poorly designed cooling system will increase molding time and cost; uneven cooling will further lead to warpage and deformation of plastic products.

4. Separation step: Separation is the last step of the injection molding cycle. Although the product has been cold molded, separation still has a very significant impact on the quality of the product. Improper deburring can lead to uneven forces when deburring the product, resulting in deformation and other defects when the product is ejected. There are two main types of deburring: top bar deburring and plate removal deburring. When designing the mold, we need to choose the proper deburring method according to the structural characteristics of the product to ensure the quality of the product.

设备视频链接: <https://www.youtube.com/shorts/V8JBvy5HIB8>

(四) Cutting products.

设备视频链接: https://www.youtube.com/shorts/CvLUoNEZ_JU

1. Cut the product by machine, (the product is produced with the material head, which requires the machine to cut. We have two kinds of machines, one is a semi-automatic machine, which requires manual cutting, and a certain fee is required. Labor costs. The other is a fully automatic machine, which is done by a robotic arm) (picture of the product just produced)



2. Pack the finished product in a carton and transport it to the factory warehouse for packaging.

(五) Packaging (we will package according to the needs of customers)



1. Bulk: We pack according to the characteristics of the product. If the product can be stacked, we will pack it by stacking. Our purpose is to make the packing size as small as possible, so as to reduce the customer's shipping cost.

视频链接: <https://www.youtube.com/shorts/vFFvtkVx3Gk>

2. Individually packaged: Individually packaged by OPP bag, with cardboard packaging, and individually packaged in carton.

① OPP bag packaging: It is to use an ordinary OPP bag to transfer the product. If the quantity is small, we will use manual individual packaging, if the quantity is large, we will use machine packaging.

视频链接: <https://www.youtube.com/shorts/LQIjYHx05kc>

② Cardboard packaging: A coated paper is used to jam the packaging of the product, and sometimes it is made into a blister package with a blister box.

③ Individual carton packaging: Customized carton packs the product individually, and the effect that customers want can be printed on the carton.
(The time for simple individual packaging is generally about 7-9 days, if the complex individual packaging needs the actual situation)

三. Transportation service (We will choose the best shipping method for customers according to their requirements)



1. Air transport

Air freight generally can choose FedEx, UPS, DHL, Sagawa Express, TNT and other express transportation.

The time limit is generally about 5-8 working days

2. Sea transportation

(1) DDP: DDP by sea is Door to door, tax is already included, and the time limit is expected to arrive in about 20-35 working days

(2) CIF: We arrange the transportation of the goods to the destination port designated by the customer, and the customer needs to complete the customs clearance after arriving at the destination port.

(3) FOB: We transport the goods to designated ports in China and arrange customs declaration processing for the goods. The rest of the process requires the customer's designated freight forwarding arrangements.

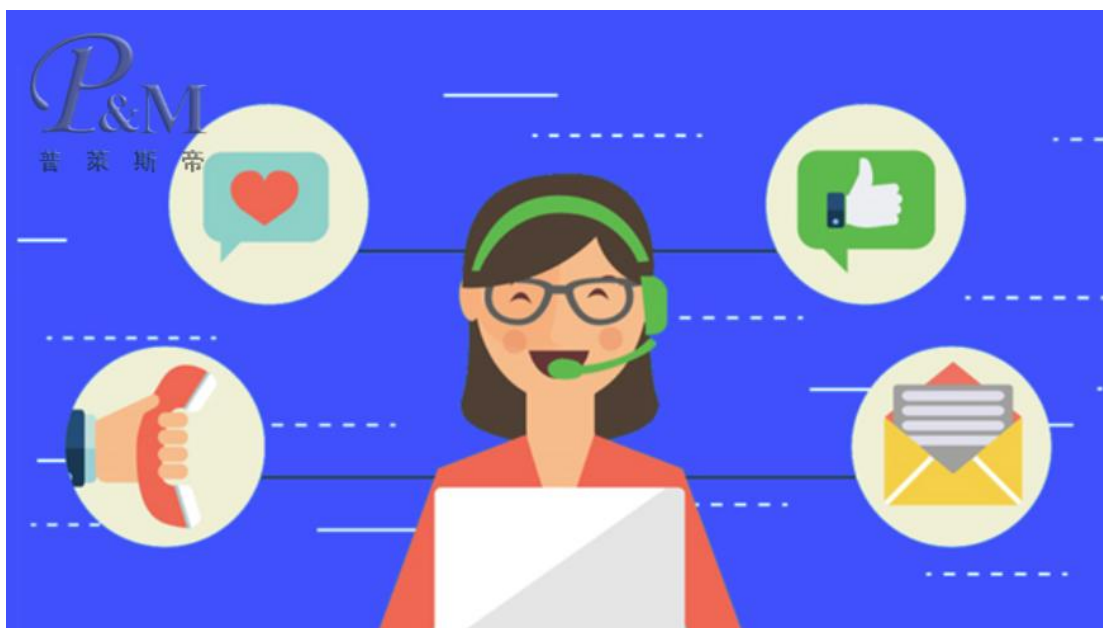
(4) Trade terms can be selected according to your requirements

3. land transport

Land transportation is to arrange truck transportation to customers. The countries that generally use this transportation method are: Vietnam, Thailand, Russia, etc. The time limit is generally about 15-25 days to arrive, including tax

4. Rail transport

Railway transportation is mainly used in European countries, and the time limit is about 45-60 days, including taxes.



We will bring you the most extreme and perfect service!

At the same time adhering to the concept of long-term cooperation, we are willing to give you the lowest price under the same quality!

Hope to accompany your company to progress and develop together, become your true partner and friend, and achieve a win-win situation! Welcome to inquiry:)