

INJECTION MOLDS

Gestión de Compras designs, develops and manufactures injection molds for plastic parts of multiple sectors.

PROCESS:

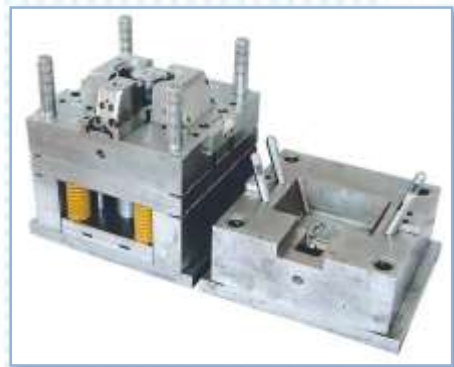
Plastic injection molds are ideal for producing high volumes of plastic parts, due to the ability of making multi-cavity injection molded parts, where multiple parts are made with one cycle. Some advantages of injection molding are high tolerances, repeatability, a wide range of material selection, low labor cost, minimal scrap losses, and little need to finish parts after molding.

EQUIPMENT

The basic equipment for the process of plastic injection consist of two main parts: Injection molding machine and mold.

Injection Molding Machine

Injection Molding Machine, also known as presses, consist of a material hopper, an injection ram or screw-type plunger, and a heating unit. Molds are clamped to the platen of the molding machine, where plastic is injected into the mold through the sprue orifice.



Mold

Mold or Die are the common terms used to describe the tooling to produce injection plastic parts. In molds is possible differentiate three principal parts: sprue, runners and mold cavity. In order to improve the part quality and the mold service life, this molds must be designed with the correct draft to facilitate the removal of the molded parts, thus as allowing air trapped into the mold to scape.

PRODUCTION:

Exist two main methods to produce injection molds: standard machining and EDM.

- **Standard machining** has been the method of building injection molds. CNC machining became the predominant means of making more complex molds with more accurate mold details in less time than traditional methods.
- **Electrical discharge machining (EDM)** has become widely used in mold making. As well as allowing the formation of shapes that are difficult to machine, the process allows pre-hardened molds to be shaped so that no heat treatment is required.

MATERIALS AND PRODUCTS:

Typical injection molds are constructed from hardened steel, pre-hardened steel, aluminum, and/or beryllium-copper alloy. The choice of either material is usually in function of the size of the piece, the volume of parts to be manufactured and the desired quality. Modern hard aluminum with proper mold design can easily make molds capable of 100,000 or more part life with proper mold maintenance.



Virtually all polymers can be produced by injection plastic molding, its important know the part's material before design the mold. It is because every material have a characteristic shrinkage, injection temperature, injection pressure, etc. And must be considered on mold design.

Gestión de Compras supplies plastic injection molds for household appliances sector (trays and front refrigerators, washing machine parts...), automotive (bumpers, grille, fans, control panel...), packages (boxes horticultural, beverage boxes, storage boxes...) packaging (thin wall IML, glasses, caps, PET preforms), and air conditioning (indoor machine housings, vents...). And molds with drawings specifications can be supplied also.

TOLERANCES:

Dimensional tolerance depends of the method used to produce the mold. Machining process can reach tolerances slightly less than one tenth of mm, while EDM method are suitable for better tolerances, about hundredth of mm.

STANDARD AND CERTIFICATES:

We have the means to ensure our products comply the general regulation and the specific certificated regulations in manufacturing products that requires them.

- ISO 9001
- ISO 14001.
- TS 16949, UNE-EN ISO 13485,...
- OHSAS 18001.



CONTACT:

In **Gestión de Compras** work with a wide range of customers from different sectors but have in common the search for products that suit your needs at the best Price and the guaranteed maximum quality. Check with us about any product. We have a qualified staff who will advise you.

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