Electronic insert over molding part for EMS device in Europe market. The plastic material is PC/ABS alloy with high or low temperature resistance testing. The insert is M8 brass 8 pcs inside mold insert molding methods.

Project details as below :

<table>
<thead>
<tr>
<th></th>
<th>Insert Injection tooling and molding</th>
<th>Core surface finish:</th>
<th>polish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Material:</td>
<td>PC/ABS + metal insert</td>
<td>Cavity surface finish:</td>
<td>VDI3400 texture</td>
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<tr>
<td>No of Cavities:</td>
<td>1x1 cavities</td>
<td>Injection System</td>
<td>Cold runner</td>
</tr>
<tr>
<td>Core Material:</td>
<td>P20HH</td>
<td>Type of gating:</td>
<td>Sub gate</td>
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<tr>
<td>Cavity Material:</td>
<td>P20HH</td>
<td>Ejection system:</td>
<td>Ejection pin</td>
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<tr>
<td>Slider material:</td>
<td>4 pcs slider</td>
<td>Lead time for FOT:</td>
<td>5 weeks</td>
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<tr>
<td>Mold base steel:</td>
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<td>Shot life:</td>
<td>200000</td>
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<td>Total Mold Price</td>
<td>EUR 11500</td>
<td>Manufactures:</td>
<td>Asia Billion</td>
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<tr>
<td>Totally:</td>
<td></td>
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</tbody>
</table>

Product Characters:
1) electronic insert injection tooling and molding project
2) VDI 3400 texture finishing
3) High and low temperature resistance testing up to -40 to 85 cent degrees

Asia Billion is a professional Electronic insert over mold manufacture in Shenzhen south of China, a quarter of our production are insert mold or over mold project, we are ISO 9001 certified and accord to the TS 16949 standard to control our manufacturing process. If you have any project, no matter what kind of material, Please contact us freely for you project.

Asia Billion Insert Injection Tooling Making process:
Insert Molding and Out-sert molding

Insert molding refers to a molding method in which a resin prepared by inserting a pre-prepared different material insert into a mold and injecting a resin, and the molten material is bonded and solidified to form an integrated product.

Out-sert molding refers to a method of inserting an injection molded part on a part of a metal plate surface.

The above two molding methods are essentially the same. Its characteristics are as follows.

1. The combination of the moldability and flexibility of the resin and the rigidity, strength and heat resistance of the metal complements the complex and intensive metal-plastic integrated product.

2. In particular, by using a combination of the insulating properties of the resin and the electrical conductivity of the metal, the molded article can satisfy the basic functions of the electrical product.
3. The pre-formed combination of multiple inserts makes the post-engineering of the product unit combination more rational.

4. Inlay products are not limited to metal, but also cloth, paper, wire, plastic, glass, wood, wire, electrical parts and so on.

5. For the rigid molded product and the curved elastic molded article on the rubber gasket plate, the integrated product is formed by injection molding on the substrate, thereby eliminating the complicated operation of arranging the sealing ,, making the automated combination of the post process easier.

6. Because it is the joining of molten material and metal inserts, the metal insert gap can be designed to be narrower than the press-in molding method, and the reliability of composite product molding is higher.

7. Selecting the appropriate resin and molding conditions, that is, for products that are easily broken (such as glass, coils, electrical parts, etc.), can also be sealed and fixed by resin.

8. By selecting the appropriate mold construction, the insert can also be completely enclosed in the resin.

9. After the insert is molded, it can be made into a product with a hollow groove after the core hole treatment.

10. The combination of the vertical injection molding machine and the manipulator, the inserting device, and the like, the insert molding project can be automated.

Automatic insert molding system design selection considerations

1. Metal insert molding is prone to uneven molding shrinkage, and the limit test of shape and dimensional accuracy of important parts should be done in advance.

2. The metal insert is easily deformed and displaced during the injection process, and the design of the mold and the design of the mold shape for easily maintaining the metal insert should be fully considered. For products whose insert shape cannot be changed, prior testing is indispensable.

3. Where the arrangement of the metal inserts is separated and the conveyor is used, the contact between the metal inserts and the inserts and the vibrating balls may cause slight damage to the surface of the insert, which may affect the quality of the product. The quality tolerance limits should be confirmed in advance.
4. The zigzag shape, the amount of warpage, the difference in material thickness, the difference in diameter, and the difference in thickness caused by gold plating processing of the metal insert due to the press working should be measured in advance. On this basis, the design and design of the automation device and the design of the mold structure are carried out.

5. Mold gate position mode, molding cycle, etc., can predict the predictability of the mold structure, and solve the problem as much as possible in advance or have corresponding improvement measures.

6. It should be confirmed whether the metal insert needs to be preheated or dried. The purpose is to ensure product quality and stability of the molding.

7. The various testing devices installed in the mold are used to ensure the stability of the molding action under the influence of environmental conditions such as heat, force and vibration of the mold. It should be confirmed whether it is used or not.

8. In order to prevent the metal inserts and the fine pieces of the molded product from accumulating in the cavity, the air blowing device can be assembled if necessary.

9. Due to the high investment price of the system equipment, it is necessary to fully consider whether it can ensure the production volume after the equipment is operated. In the case of a dedicated machine, it is necessary to ensure that the product has no form to update the premise of continuous production for several years.

10. When using a general-purpose machine, it is necessary to confirm how many combinations of multi-variety and small-volume inserts are produced. If mass production is not guaranteed as a whole, the recovery of fixed assets of one product is difficult. In this case, after replacing a part of the device, it can be adapted to the variety update requirements within a certain range.

11. Determining the insert molding rate, productivity and molding cost conditions, the accuracy of the metal insert, the shape of the insert, whether the mold is conducive to insert molding and shape of the molded article and other factors and technology.

12. The effective combination of injection machines, molds, and automation devices and how they function in a short period of time is the key to determining an automatic insert molding system. It is recommended to consult with manufacturers who have considerable experience and experience.