

Abis mold company

The plastics industry manufactures polymer materials — commonly called plastics — and offers services in plastics important to a range of industries, including packaging, building and construction, electronics, aerospace, and transportation.

It is part of the chemical industry. In addition, as mineral oil is the major constituent of plastics, it is regarded a part of the petrochemical industry.

Besides plastics production, plastics engineering is an important part of the industrial sector. The latter field is dominated by engineering plastic as raw material because of its better mechanical and thermal properties than the more widely used commodity plastics.

Injection plastic materials commonly used: ABS, PP, PVC, PC.

Mold commonly used materials: yellow brand material, P20, 718, 738, S136.

The general requirements for injection mold materials generally include the following aspects.

1. Easy to process Injection mold parts are mostly made of metal materials, and some structural shapes are still very complex. In order to shorten the production cycle and improve efficiency, mold materials are required to be easily processed into the shape and precision required by the drawings.

2. Good abrasion resistance The gloss and accuracy of the surface of the plastic parts are directly related to the wear resistance of the mold cavity surface, especially when some plastics are added with glass fiber, inorganic fillers and some pigments, they are plastic. The melt flows together in the flow path and the cavity, and the friction on the surface of the cavity is very large. If the material is not resistant to wear, it will wear out soon, and the quality of the plastic parts will be damaged.

3. High corrosion resistance Many resins and additives have a corrosive effect on the surface of the cavity. This corrosion causes the surface of the cavity to erode and flaking away. The surface condition deteriorates and the quality of the plastic part deteriorates. Therefore, it is best to use corrosion-resistant steel, or chrome plated, niobium nickel processing on the cavity surface.

4. Good dimensional stability During injection molding, the temperature of the injection mold cavity should be above 300° C. For this reason, it is best to use an appropriately tempered tool steel (heat-treated steel). Otherwise it will cause changes in the microstructure of the material, resulting in changes in the size of the mold.