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Injection Mould for Refrigerator Drawer

How to design a good core-pulling mechanism structure in the Refrigerator Drawer Plastic Injection Mold?

Please look at A, B highlighted in arrow area, which will be talked in critical points. As we know that these two areas are very special, Slider core-pulling design must be used in both side areas in the Refrigerator Drawer Plastic Injection Mold design specification. However, you may notice the inward slot highlighted in circle in picture a), it's named handle in this plastic drawer. You may see it in details in section like picture c). In terms of Refrigerator Drawer mold structure, this groove or slot must use an upward core-pulling slider in order to release the mold. but since there has been a large core-pulling slider on this side so only the core-pulling angle lifter structure in the secondary core-pulling slider can be used. Please look at picture d) that there are two inward clips, clips could not be demoulded normally, sliders must be used as well.

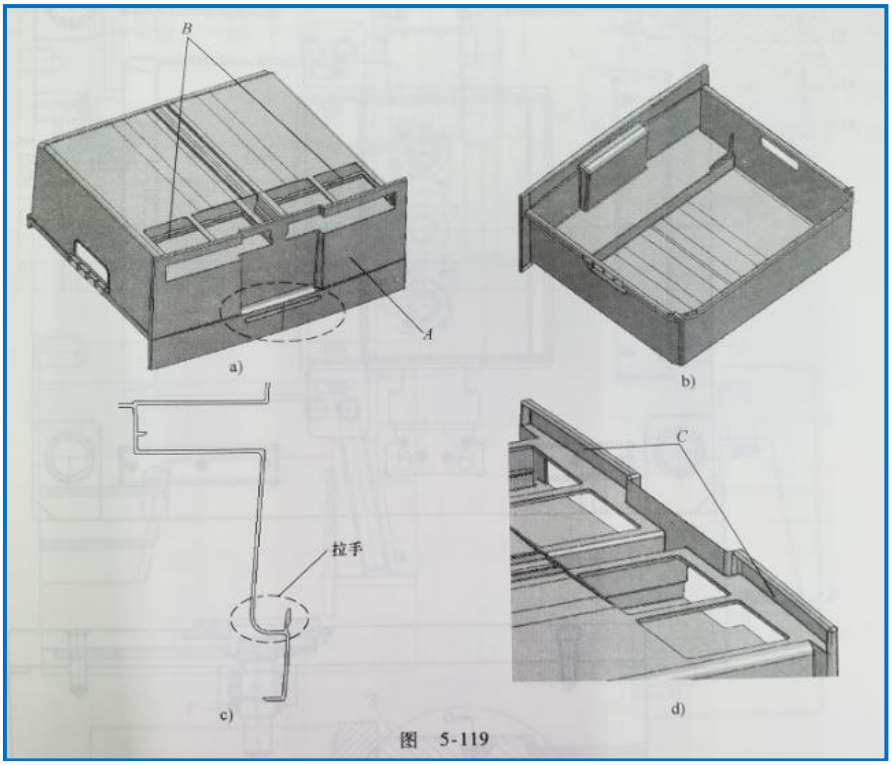
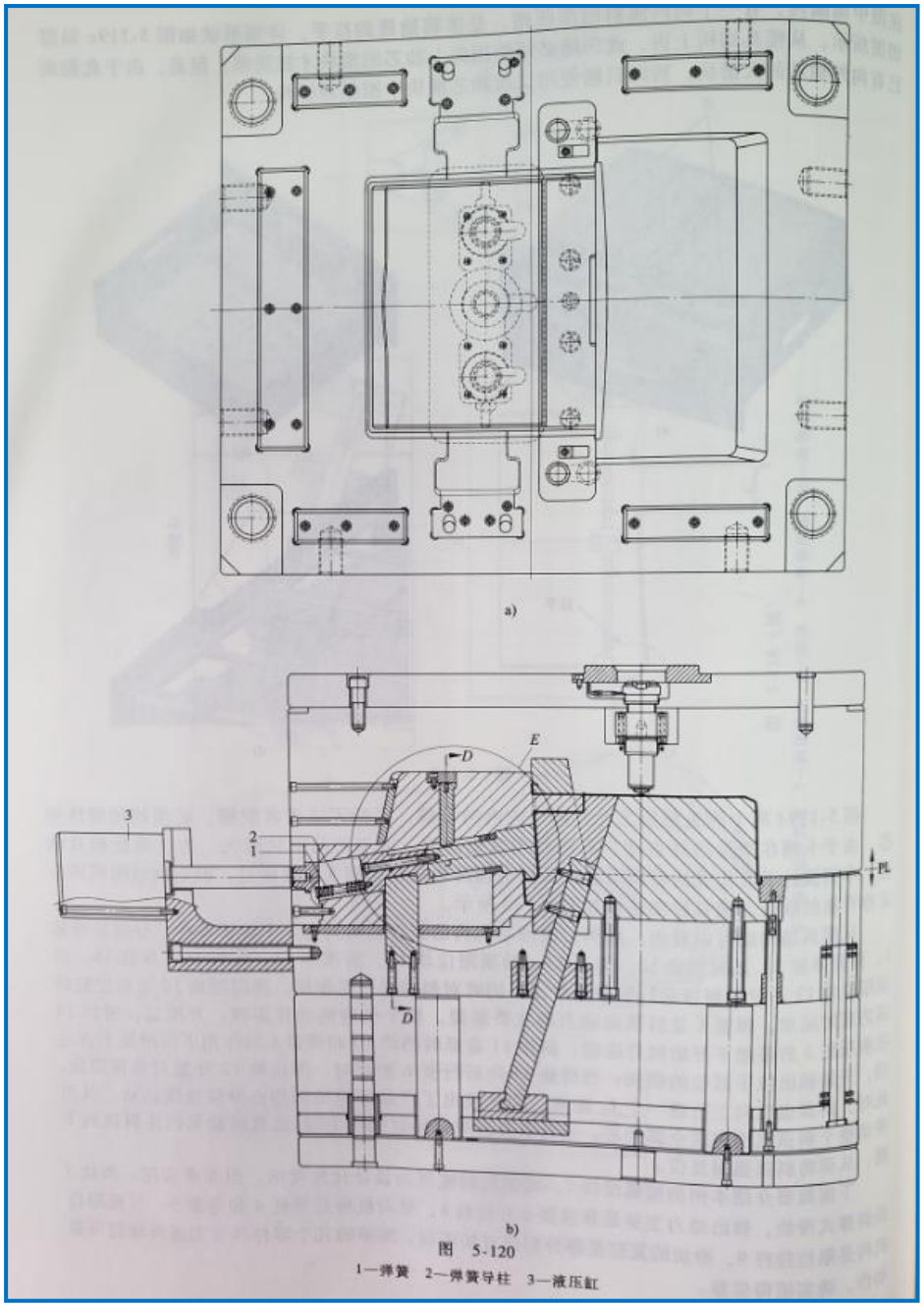


图 5-119

Since the slot is on the outer surface of the product, only the concave die slider can be used. Because of the large shape of the product, in order to simplify the structure of the die, we designed the front die slider of the simplification. The detailed structure of the die is shown in the following figure.



1- Spring 2- Spring Guide Pillar 3-Hydraulic cylinder

As can be seen from Refrigerator Drawer Plastic Injection Mold structure diagram, there are 8 important leaders in the angle lifter structure of the secondary core pulling structure: Spring 1, spring guide pillar 2, delay block 10, Angle lifer 11, Angle lifter limit block 12, Angle lifter seat 13, Pressing plate 15, Guide sleeve 16. The angle lifter block 12 not only plays the role of stroke limit, but also plays a large stop role on the angle lifter. Delay block 10 mainly controls the delay motion of the angle lifter. Spring 1 is the source of angle lifter moving.

The principle of action of the entire organization: After opening the mold, the slide block 14 starts to move backward under the drive of the hydraulic cylinder 3, the slant 11 moves up the slider under the action of the delay block 10 and the spring 1, and begins to pull out the inverted buckle of the handle, and when the slider 14 moves backward to l distance, Limit block 12 begins to limit the angle lifter. At this time, the angle lifter has also moved upward into a distance of L1, completely out of the reverse buckle of the product part, and the slide block continues to move, thus driving the whole angle lifter structure to complete all the core pulling. When the slider is reset, the straight face of the delay block 10 is tightly on the slot of angle lifter, thus forcing the angle lifter to reset.

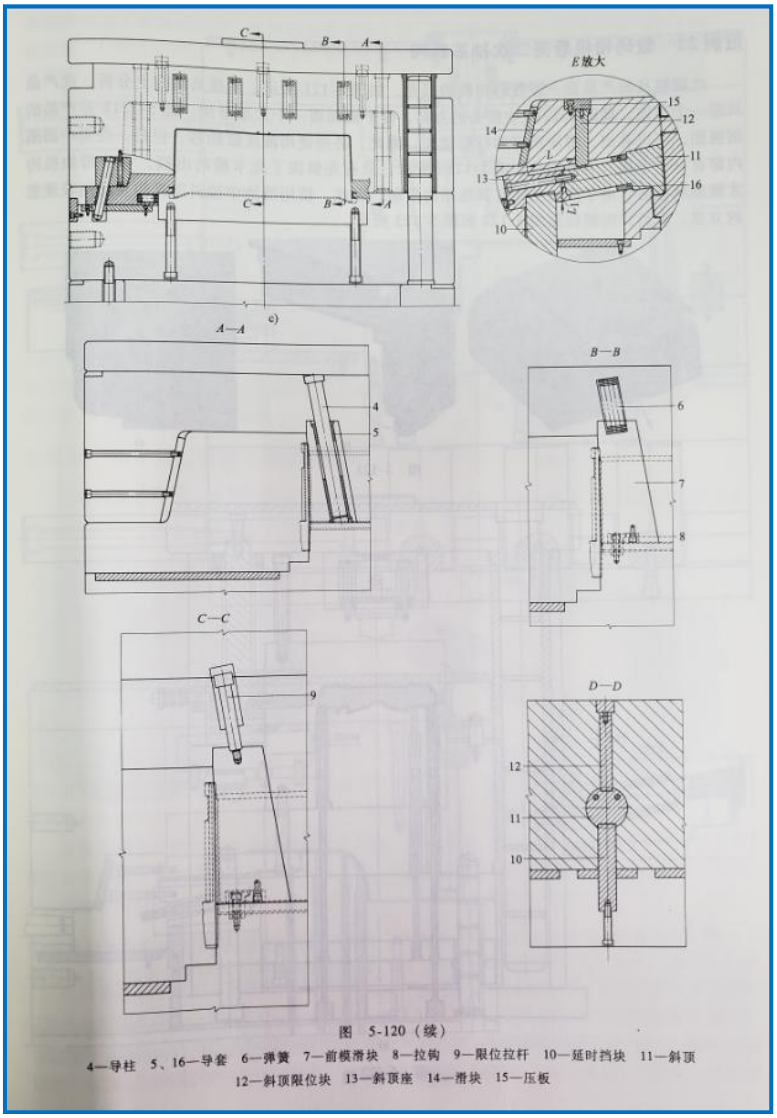


图 5-120（续）

4—导柱 5、16—导套 6—弹簧 7—前模滑块 8—拉钩 9—限位拉杆 10—延时挡块 11—斜顶 12—斜顶限位块 13—斜顶座 14—滑块 15—压板

4- Guide Pillar 5,16- Guide Bushing 7-Cavity sliders 8-Pull hook 9-Limit pulling rod 10- Delay Block 11- Angle lifter 12- Angle lifter limit block 13- Angle lifter seat 14- Slider 15- Pressure Pad

We talk about cavity slider no.7 in the picture. This design for cavity slider of Refrigerator Drawer Plastic Injection Mold is very simple and as well as applicative, the slider 7 is driven by spring such as the driven by spring 6 and pull hook 8, guiding mechanism is guide pillar 4 and guide bushing 5, the travel limit mechanism is the limit rod 9, when the slider is reset, it is directly pressed back by the parting surface. This is very good design for Refrigerator Drawer Plastic Injection Mold and also very important for a plastic mold design to learn.

Ceeto company has many years experience in design the Refrigerator Drawer Plastic Injection Mold, if you have any questions, please leave a message for us, we shall be very glad to give you response soon.