

## Higrade(Qingdao) Moulds& Products Co., Ltd.

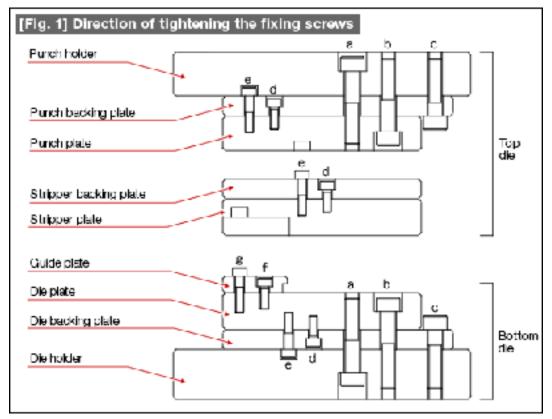
Washupitos Tiendita

## **Direction of Tightening Fixing Screws**

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Although there is no problem with fixing screws for the plates constituting a die, there will be complaints that it is difficult to carry out the work during assembling or maintaining the dies.

Let us consider the reason for this, which is explained using Fig. 1. The standard form of screw fixing will be as shown in (a) for both the top die and the bottom die. There will be no problems with the form shown by (a) in the case of a small die because it is possible to easily separate or turn upside down the top and bottom dies.



As the die becomes larger, separating or turning upside down the top die and the bottom die becomes difficult. Sometimes this work will require two persons. In such cases, if the fixing screw of the bottom die is of the form (a), the screws have to be tightened after turning the dies upside down. If the work has to be done in this condition, doing this work will become difficult. In view of this, if the fixing is done as shown in (b) or (c) the work can be done without turning the dies upside down.

Since very often, after the top die and the bottom die are separated, the top die is inverted and put down, the work becomes easy if the method of fixing shown in (b) or (c) is used. At this time, if the stripper plate is of the movable type, since in the case of (b) the screw tightening work cannot be done unless the stripper plate is removed, the form of fixing shown in (c) may be good.

When fixing the punch backing plate using the form of screw fixing shown in (c), the two plates, the punch plate and the punch backing plate are integrated using the fixing method of (d) or (e). Integrating the backing plate and the body plate or integrating the stripper plate and the die plate are also done in a similar manner. When the surface of a die plate, etc., is machined without separating the backing plate, etc., it will be difficult to carry out the machining work if the method of using the fixing screws is like (e).

Even fixing by screws of parts that go on top of the die plate, such as the guide plate, will be like (f) or (g), but the escape on the side of the stripper plate becomes cumbersome, or providing this escape may be forgotten sometimes. If there is no problem with the thickness of the plate, it is good to sink the head part of the screw as in (f). Some techniques can be thought of since there are some screws available with thin heads.

Although it looks obvious when explanations such as the above are given while showing the figures, in actual dies fixing screws are very often used without thinking. It is necessary to grasp the features of the die structure and to use the fixing screws that make the work easy. Sometimes, because of this, it may also be good to change the structure of the dies.

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**Vendor Information**