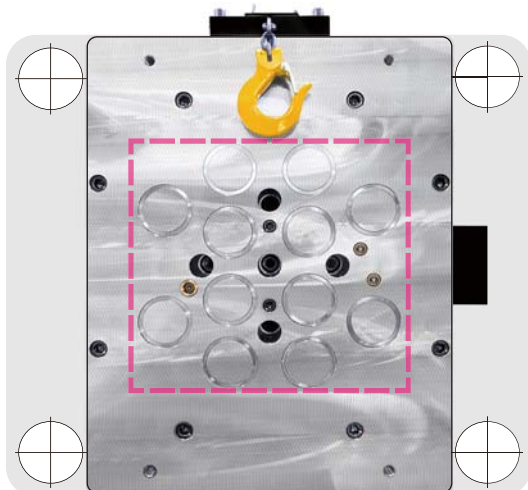
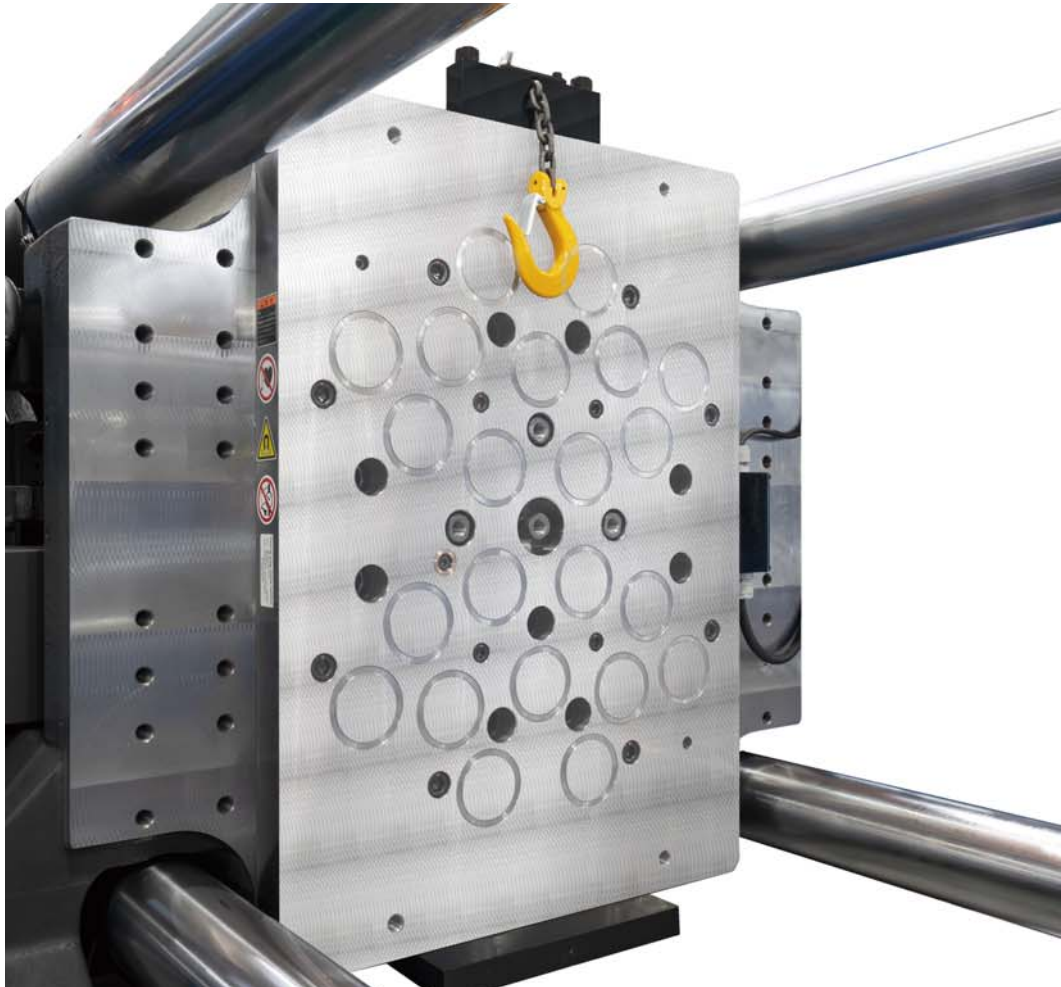


# Pascal offers 2 models in accordance

## Slim model

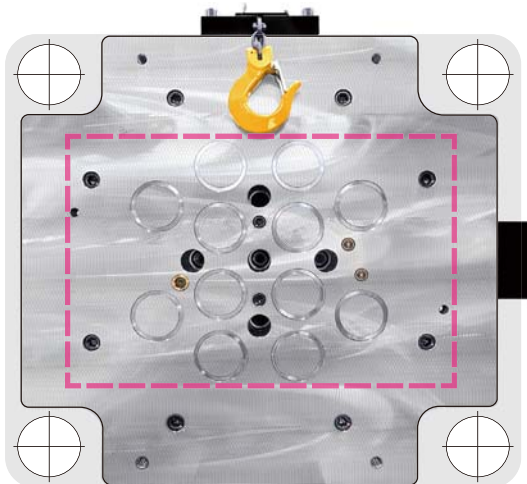
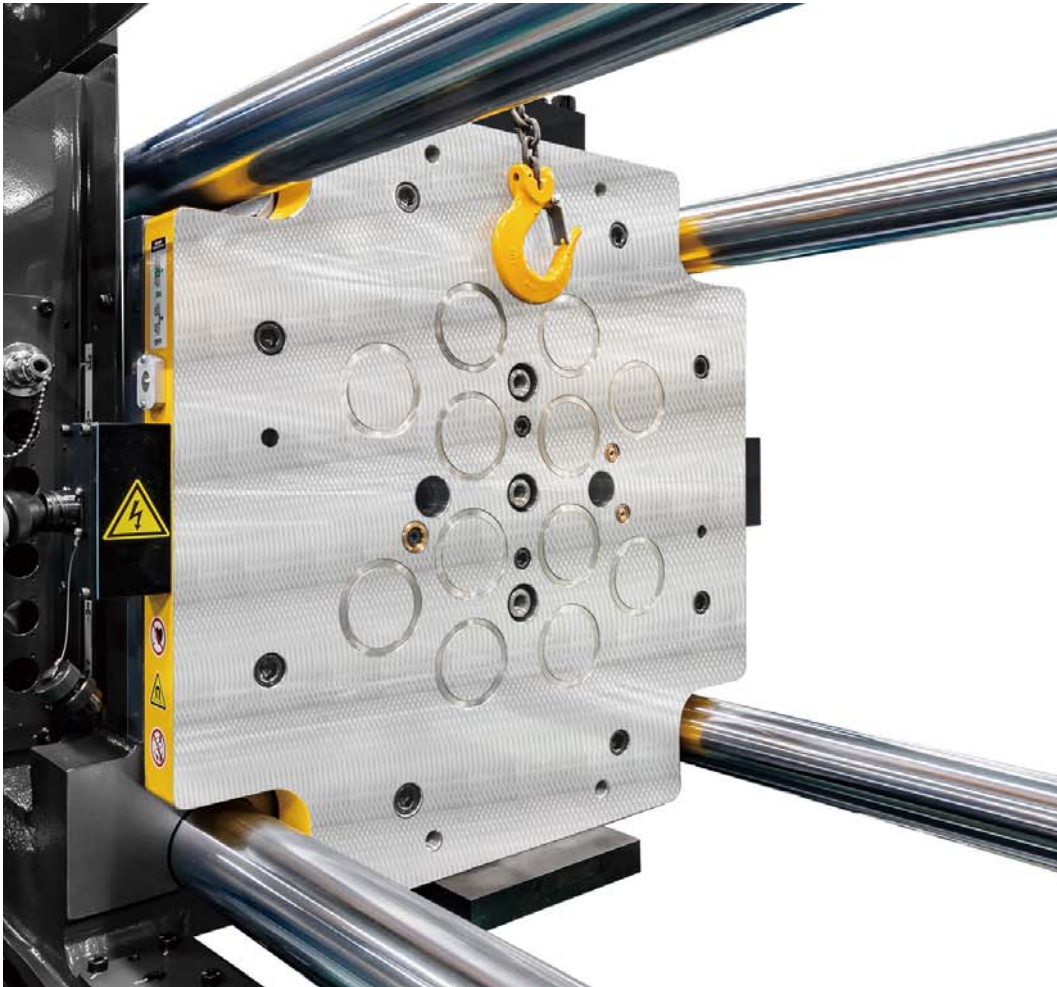


### Suitable for long vertical molds

This new model features a slimmer plate to reduce the cost. It is best suited for when the mold width fits inside the tie bar.

with the size and shape of the user's mold.

Standard model



**Suitable for  
wide molds**

---

The plate shape is the same as the previous model which can accommodate laterally wide mold.

# Time to change from a manual clamp to circle core magnetic clamp

It is difficult and dangerous work for an operator to fix the mold by hand tools and reaching underneath heavy molds.

Safe, easy, and quick mold changes with a circle core magnetic clamp will eventually reduce machine downtime and make the operators job much easier. The work environment will be much more comfortable, and productivity will be improved.

It takes time to fasten/unfasten screws



Uncomfortable working posture



Molds can be clamped in 0.5 to 4.5 sec.

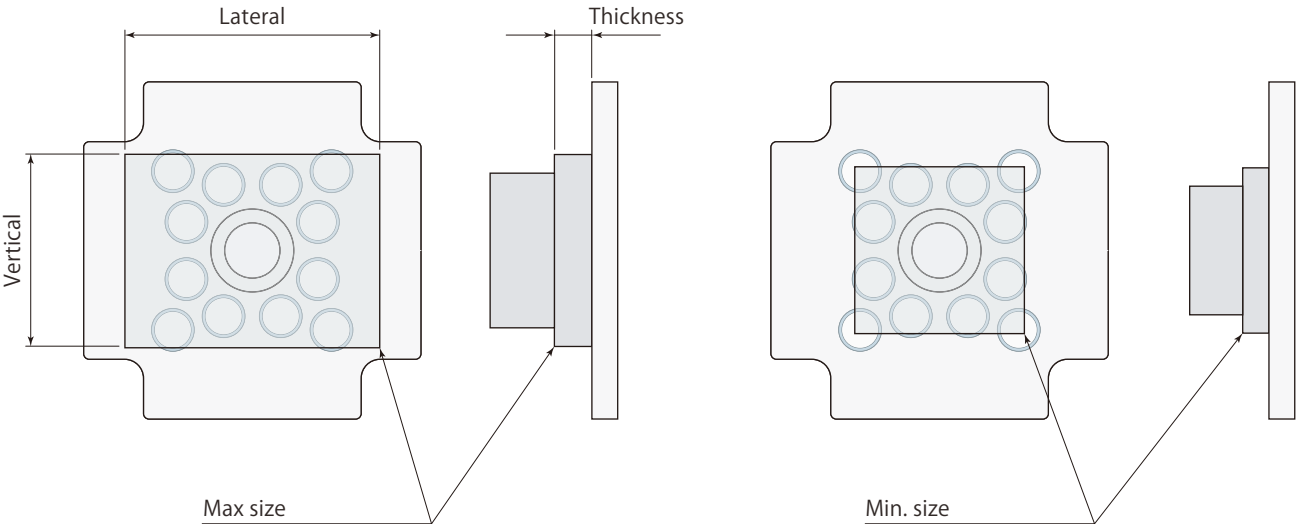


Simply push the button



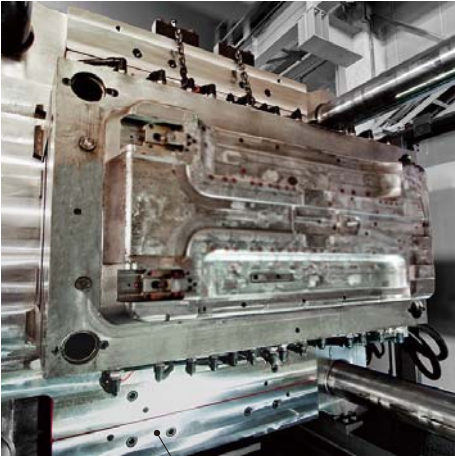
# Automated clamping regardless of size of mold

It is not necessary to standardize the size (vertical/horizontal/thickness)



## Utilize the machine platen area to the maximum

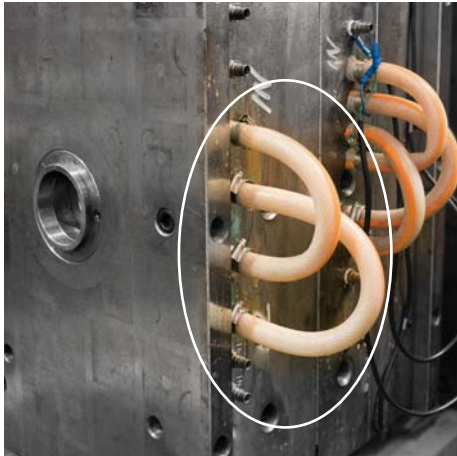
Extra space is not necessary to mount a conventional clamp on the machine platen and a designer can design the mold without any dimensional constraints.



Mag clamp

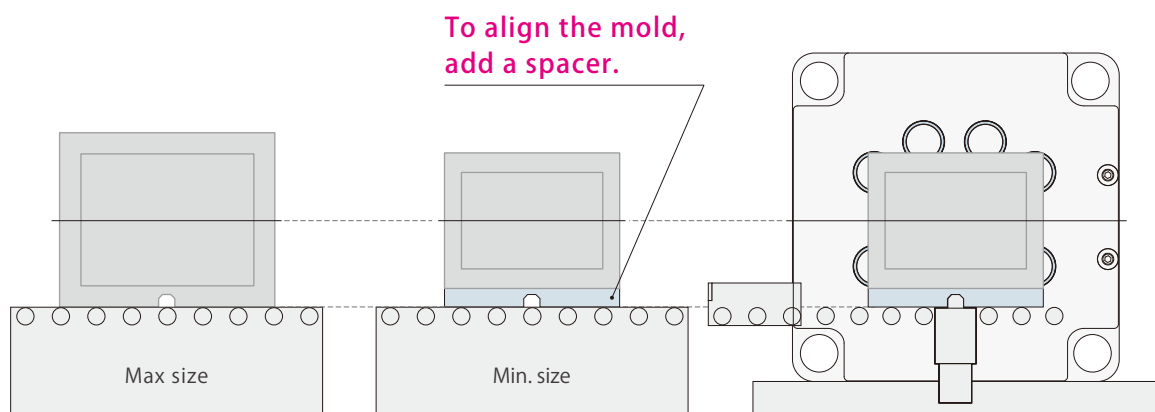
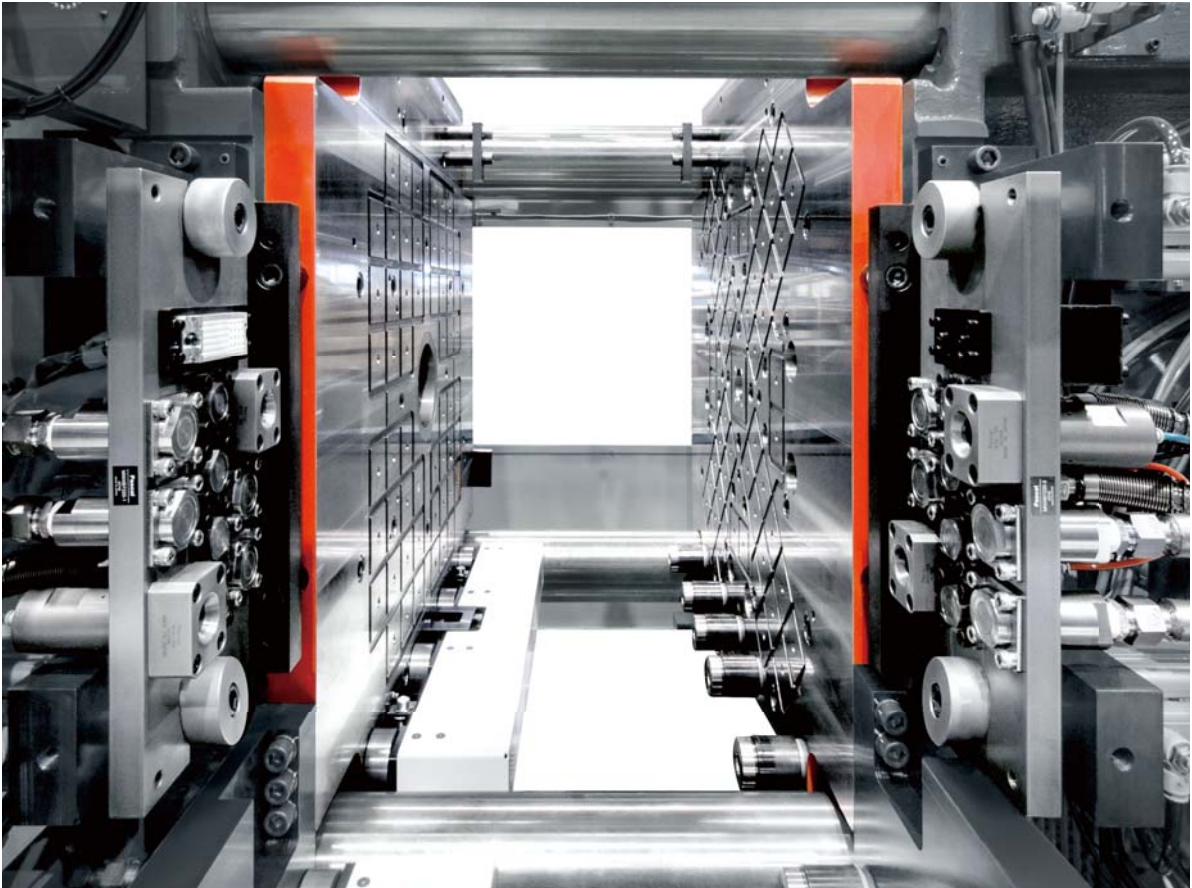
## No interferences such as wires or hoses

Extra space is required to mount manual or hydraulic clamps on the platen and core cylinders, electrical connectors, couplers, and hoses can be interferences.



# Perform horizontal mold-changes without an overhead crane

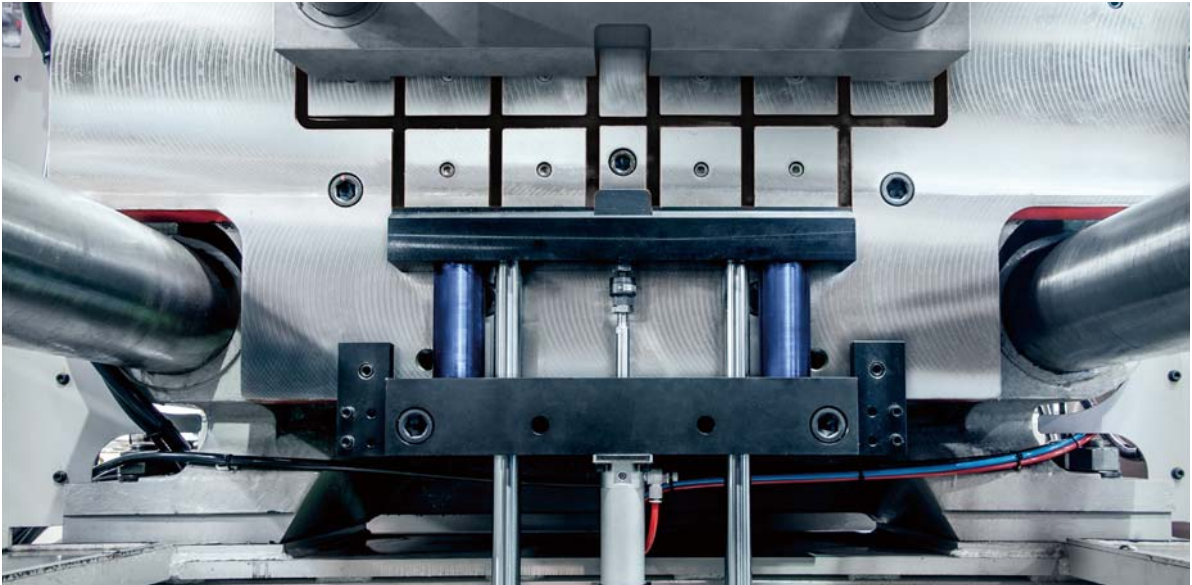
The standard model can accommodate horizontal mold changes with a spacer. Even if the mold height is not standardized, horizontal mold changes can be achieved by using a spacer.



# New mold positioning devices to help improving the mold set-up

## die setter

By simply placing a mold on the die setter, positioning for vertical and horizontal directions can be done securely and easily, improving mold set up time (Optional)



## die leveler

Using the die leveler with a locator ring can reduce the mold installation time. (Optional)

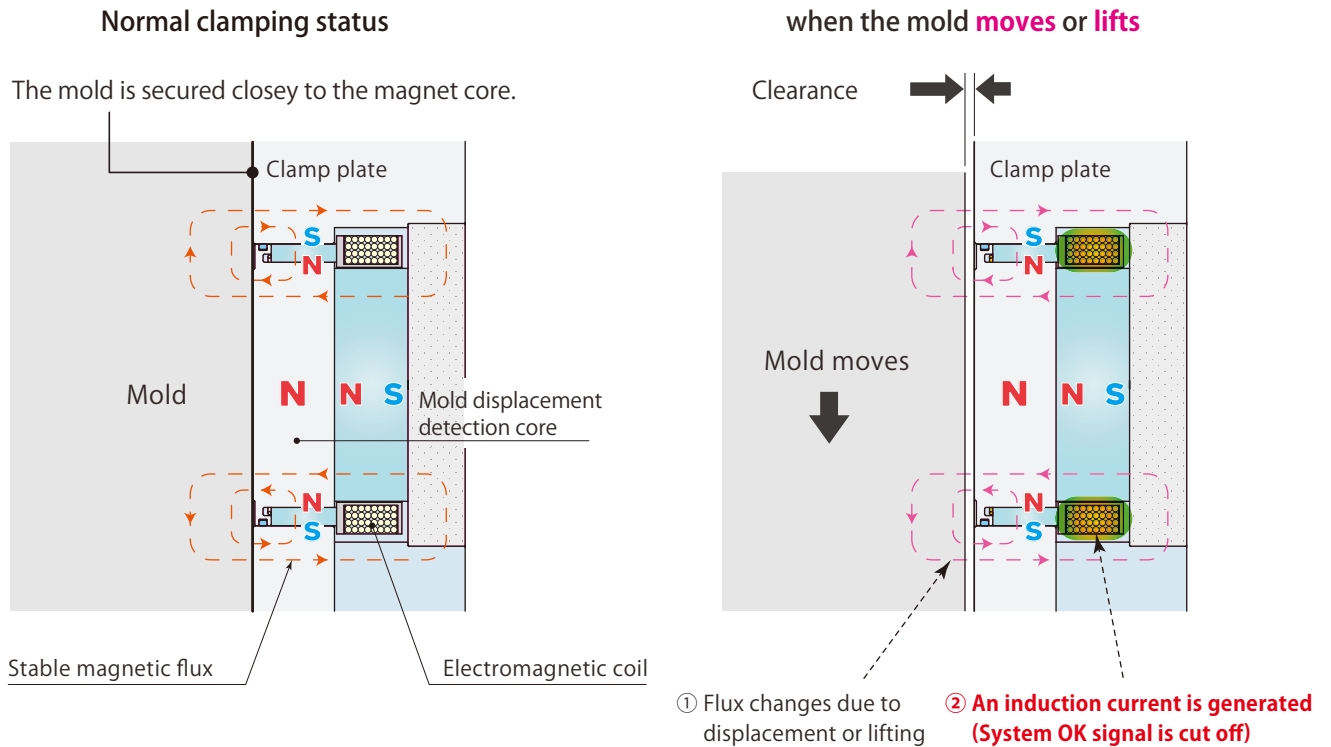


# Safety measures

## Mold displacement detection system

Displacement or lifting of the mold can be detected by the electromagnetic coils that are built into magnet core located near the center of the clamp plate.

When the mold moves, these electromagnetic coils detect an induction current signal.



If there are moving parts on the mold displacement detection core, they may create false detection signals. Moving parts should be changed to non-magnetic materials. Ask Pascal for the details.

## Mold fall protection hook(optional)

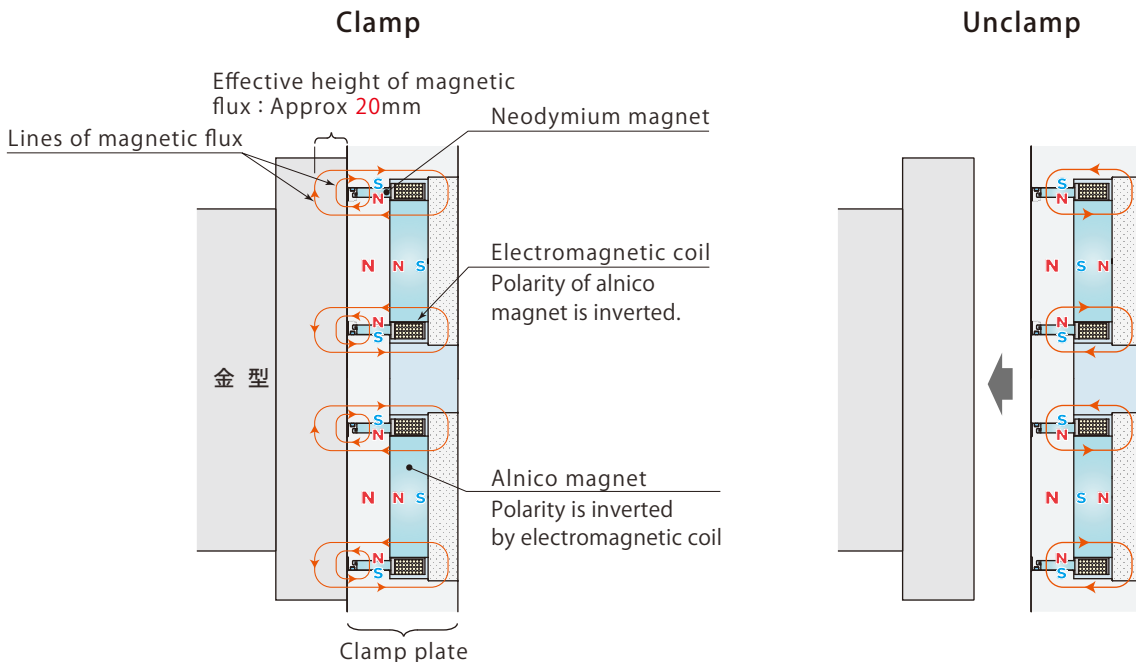
Another available option is a protection hook with an easily adjustable chain length.



# Features

- Energization is only required when switching on and off. No energization is required during clamping. No electricity is consumed, and so there is no heat generation.
- The clamp plate has no moving parts, thus assuring high durability . The interior is maintenance-free.
- Clamp force is evenly applied on all faces of the magnet core. No gaps are created between the machine's platen surface and center part of the mold which helps improve molding accuracy.
- Once the mold is clamped, unclamping (demagnetization) will not occur even when there is a power failure or cable breakage occurs.
- The magnetic force of permanent magnet will not decrease over time. Clamping force is maintained for long-term use.
- The effective height of the magnetic flux is about 20 mm above clamp plate surface.
- No magnetic field is generated from the sides of the clamp plate. So the injection nozzle and controller are not affected.

## Structure and function



- ① Electromagnetic coil is energized for 0.5 sec.
- ② Polarity of alnico magnet is inverted.
- ③ Neodymium magnet and alnico magnet become homopolar.
- ④ Magnet core becomes a strong magnet to clamp the mold.

- ① Electromagnetic coil is energized for 0.5 sec.
- ② Polarity of alnico magnet is inverted.
- ③ Magnetic flux of neodymium magnet and alnico magnet is not emitted from the surface of the magnet core so that the mold can be unclamped.