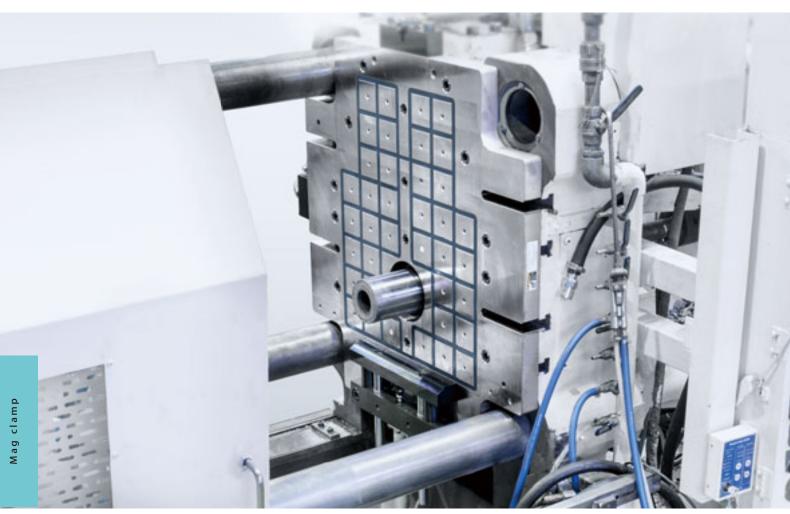
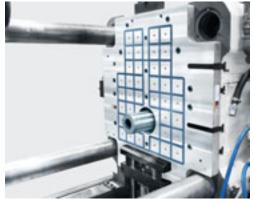
Clamp dies instantly with super strong permanent magnet

Pascal mag clamp is a die clamp system for die-casting machines that clamps a die with powerful magnet force.

As the mounting bolt and mounting space for automatic clamp are not required, the die-casting machine surface can be maximized.



3,500kN(350ton) Die-casting machine Mag clamp & Die setter



3,500kN (350ton) Die-casting machine Mag clamp fixed side



3,500kN (350ton) Die-casting machine Mag clamp movable side

Structure and function

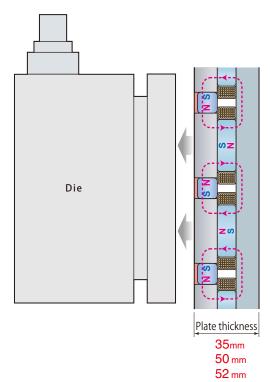
Clamp (Magnetized)

Neodymium magnet Super strong permanent magnet Inverts the polarity by electromagnetic coil Inverts the polarity of alnico magnet. Electromagnetic coil Inverts the polarity of alnico magnet. Magnet core Powerfully adheres die.

Effective height of magnetic flux : approx 20mm

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

Unclamp (Demagnetized)



- 1 Electromagnetic coil is energized for 0.5 sec.
- Polarity of alnico magnet is inverted.
- Magnetic flux of neodymium magnet and alnico magnet is not emitted from the surface of magnet core so that the die can be unclamped.
- The clamp plate is one set of two plates for movable platen and fixed platen sides.
- Die can be adhered and detached instantly (0.5-4.5 seconds).
- Energization is required only when switching on and off. No energization required during clamped condition.
- Die displacement detection and die fall protection hook are equipped as standard.
- \bullet 0 \sim 180 for heat proof type.
 - Contact Pascal for the details.