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1、Brief introduction

The CHV110 series high-performance vector energy-saving cabinet is the latest product, gathering the experience of many years of research and development, production and on-site transformation of injection molding machine energy saving cabinets. Mainly aimed at energy-saving transformation of the injection molding machine, it has introduced the superior performance of vector control technology to the injection molding machine energy-saving field, solved the previous problem that V/F control mode affects the production cycle, and increased the energy-saving rate. Energy-saving cabinet can also be applied to the energy saving of air compressor, central air-conditioning energy saving and automatic escalator energy saving and other energy saving applications.



2、Technical features:

- Control mode: Without PG vector control (SVC)、with PG vector control (VC)、V/F control;
- Frequency setting mode: The signals comparison of pressure and flow channels;
- Signal conversion panel, using the Hoare module, changes the proportional valve of injection molding machine pressure and flow 0~1A signal into 0 ~ 10V signal to feedback the frequency inverter or directly connects to 0 ~ 10V signal;
- Big torque at low frequency: quick starting without affecting the production cycle;
- Good ability at overload: under the high pressure from plastic injecting and other conditions, it will not escape, so as to ensure the quality of the product;
- IP21 protection grade; fully enclosed design; dual-use of cabinet and wall hanging. Anti-Dust; anti-gas; anti-corrosion; environmental adaptability is good; the life of the equipment extends;
- 15KW~55KW full range of built-in DC reactor, effectively improves the power factor and improves the overall efficiency and stability, and effectively eliminates the impact from the high harmonics of the input side on the energy saving cabinet and reduces external interference;

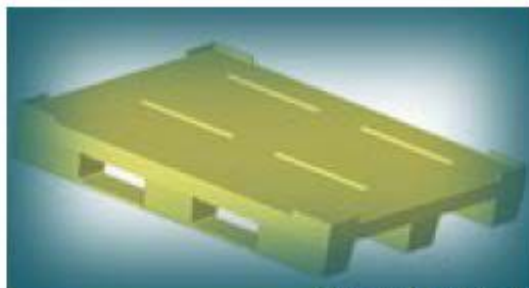
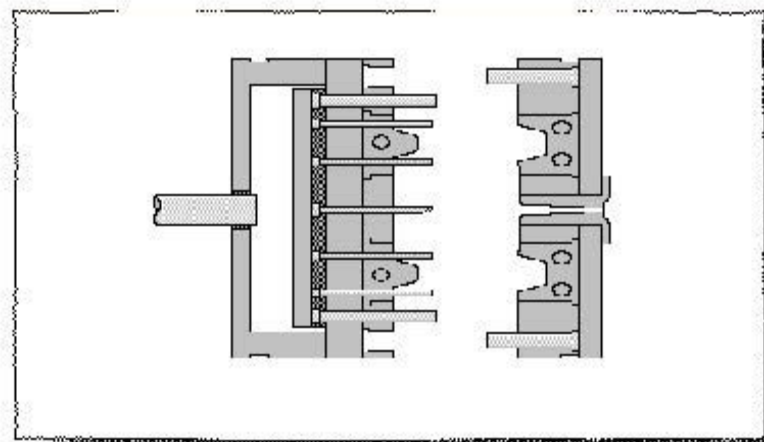
- Main supply / energy-saving dual-circuit security safety design ensuring the system is trouble-free and does not affect production;
- With the functions of automatic reset and power-off reset, to ensure continuous production and production efficiency;
- Good at anti-interference; input / output power cables are installed with filtering rings; the strong and weak electricity are separated, giving full consideration to safety requirements;
- With built-in PID controller, easily composing the closed-loop control system temperature, pressure, flow volume and other process parameters;
- Energy-saving is 5%~10% more than that of V/F control mode.

3、Injection molding machine principle



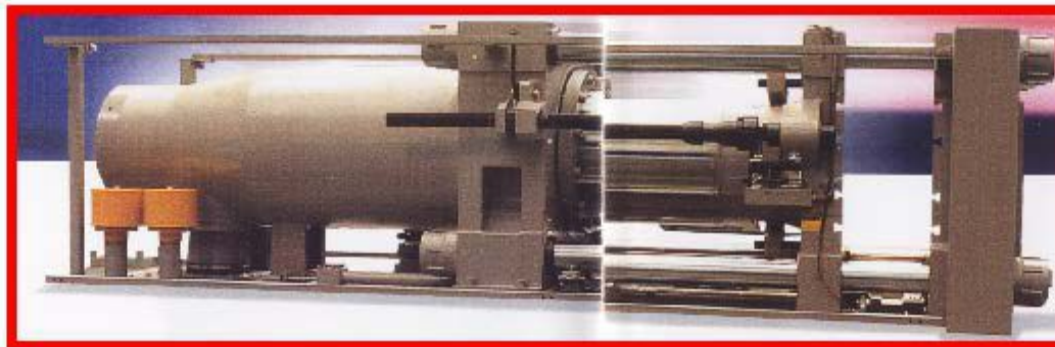
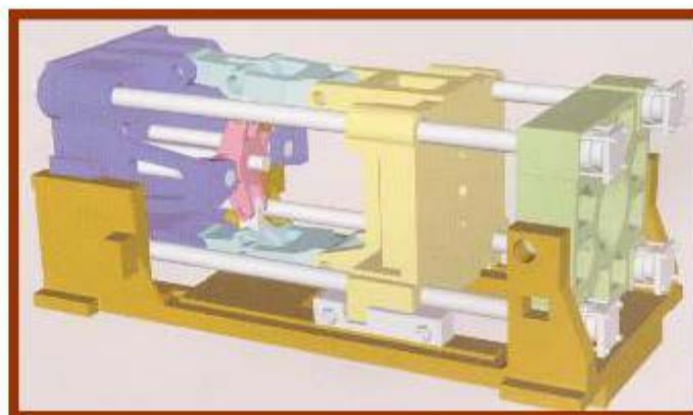
The injection molding define

- Adopting the injection molding method ;
- The main equipment used for injection molding is injection molding machine;
- The main auxiliary equipment is molds;

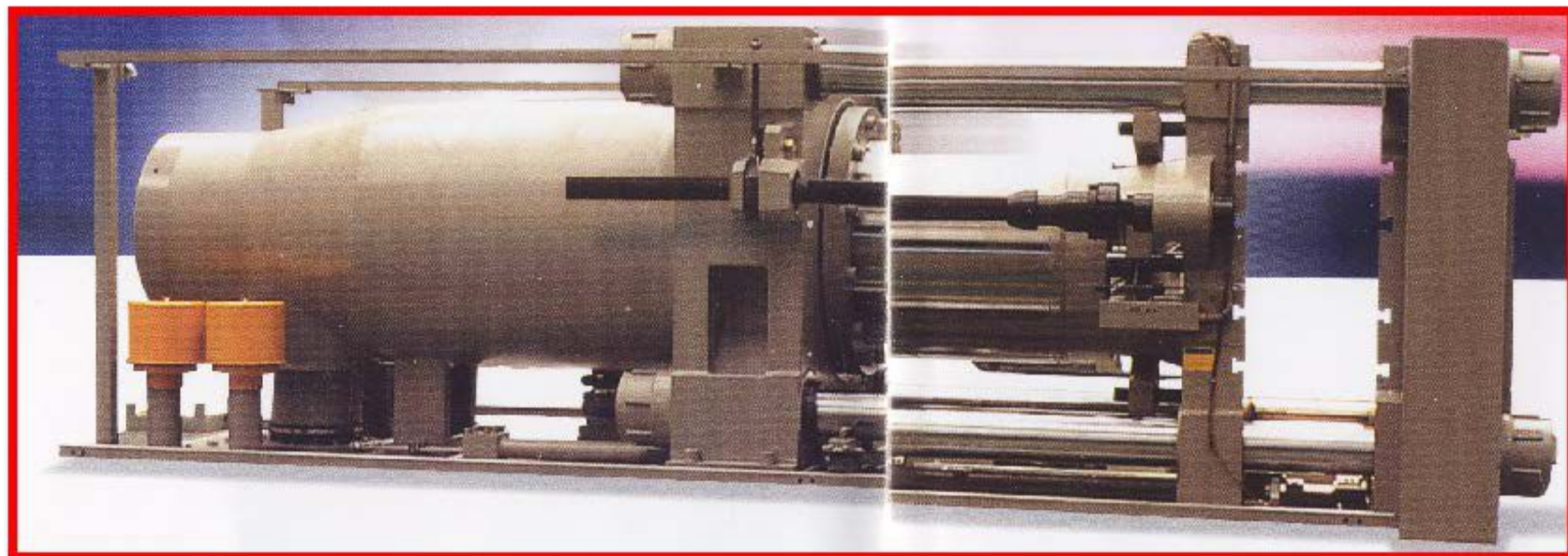


Injection molding machine classification

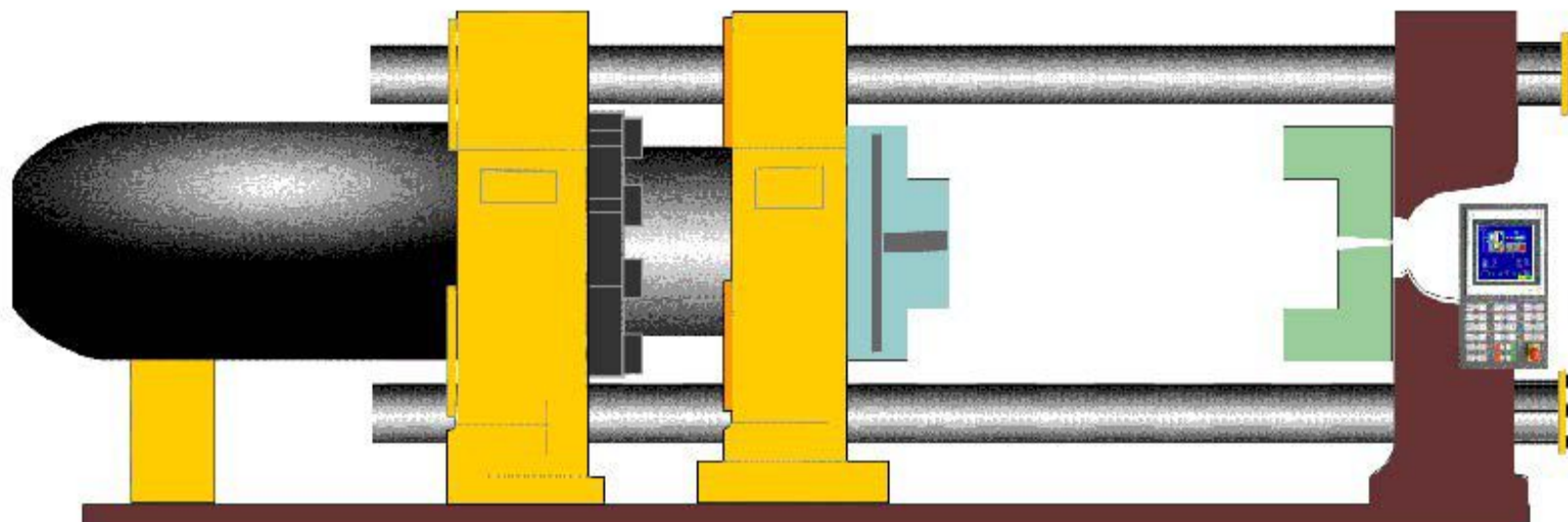
- According to the locking mode:
Machine hinge type,
direct pressure type and
two plate type injection
molding machine;



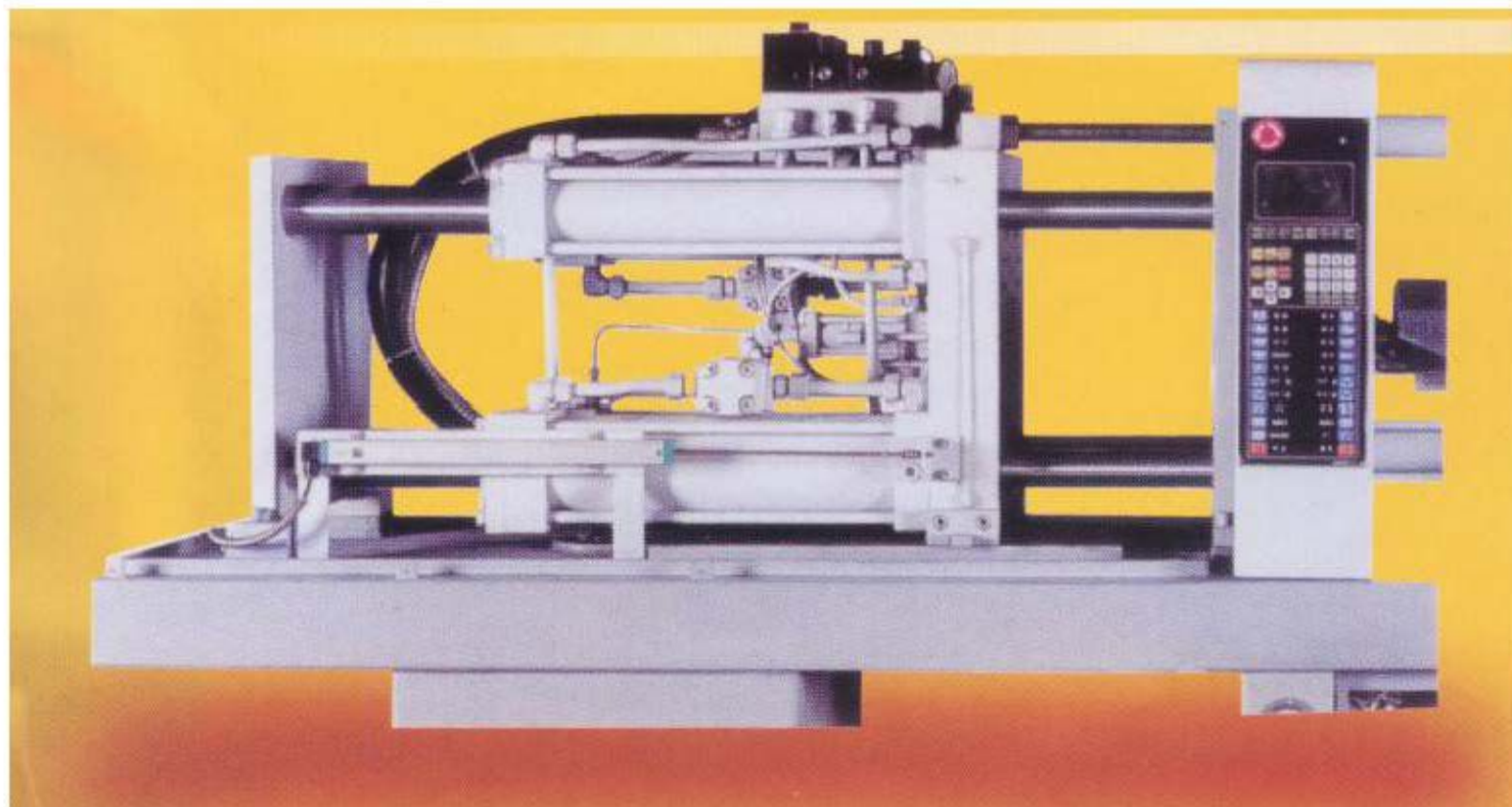
Direct pressure injection molding machine1



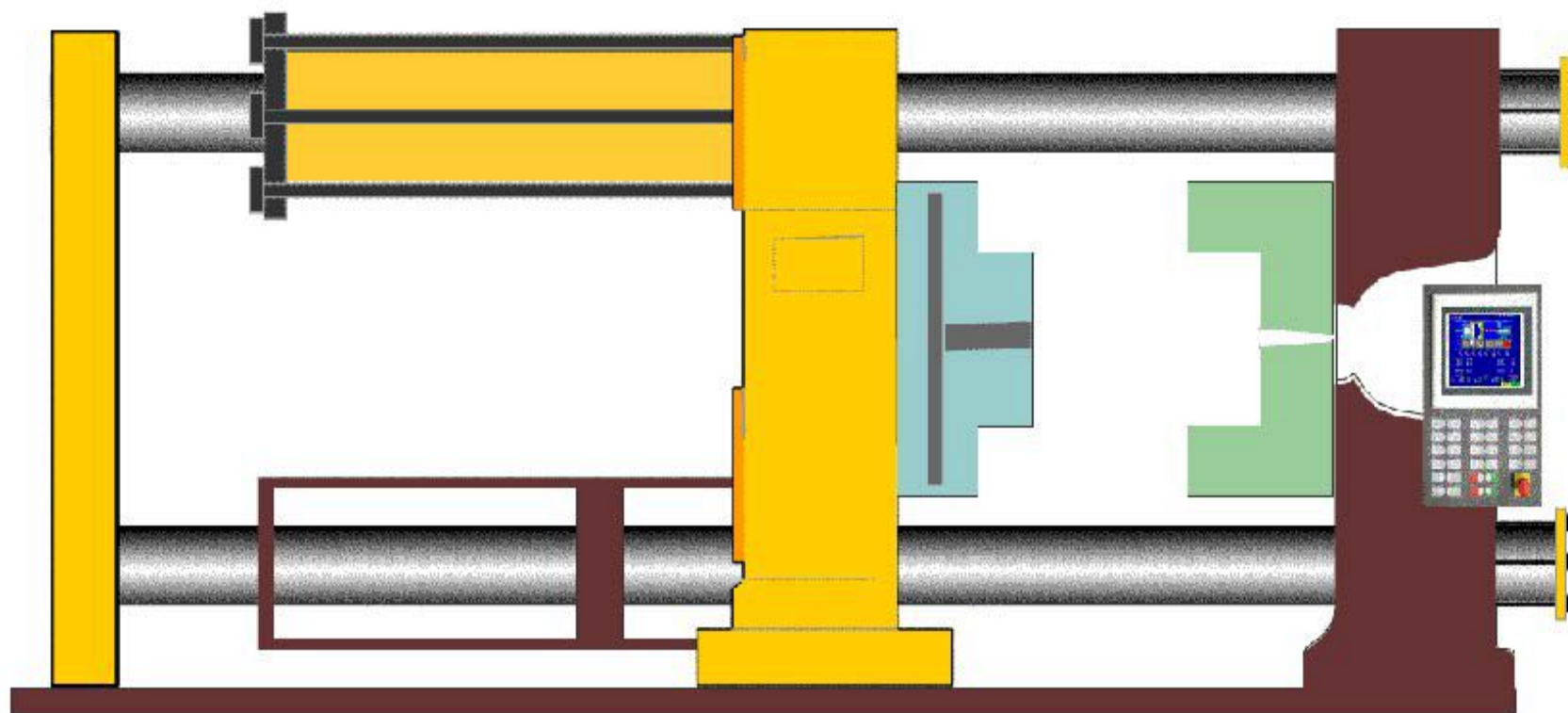
Direct pressure injection molding machine1



Direct pressure injection molding machine 2



Direct pressure injection molding machine 2



Various forms of injection molding machine



55T

85T

120T

150T

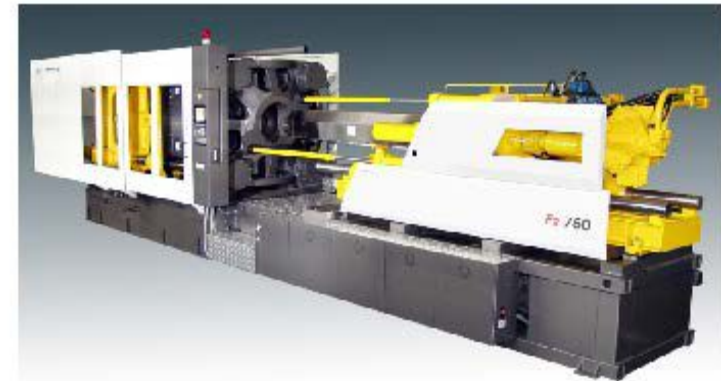


Various forms of injection molding machine



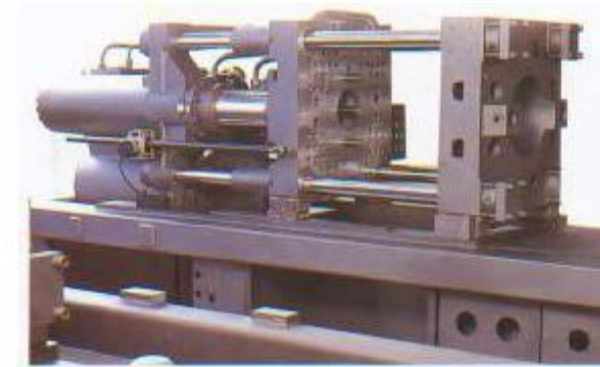
Injection molding machine classification

- According to the injection device mold-locking arrangement: Horizontal type、Vertical type and angle type injection molding machine;



Injection molding machine classification

- According to driving mode: Hydraulic type, electric type and electric hydraulic combined type injection molding machine;

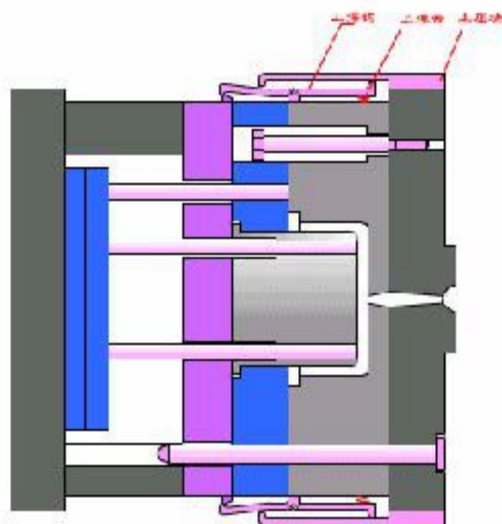


Injection molding machine classification

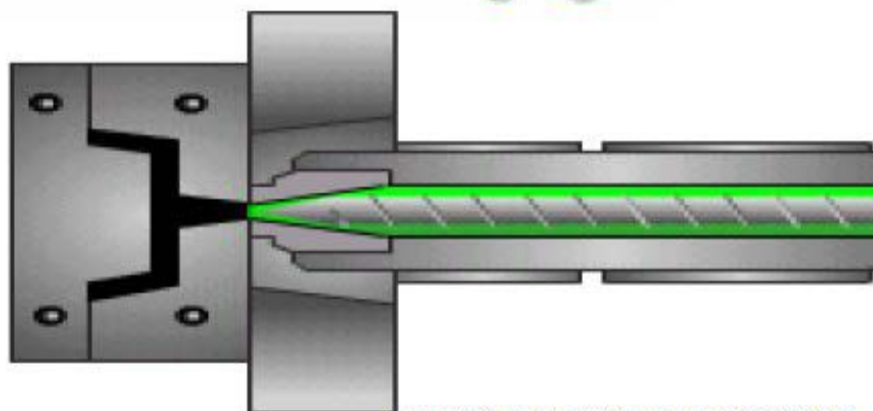
- According to injection device number:
The single material type and multi material type injection molding machine;



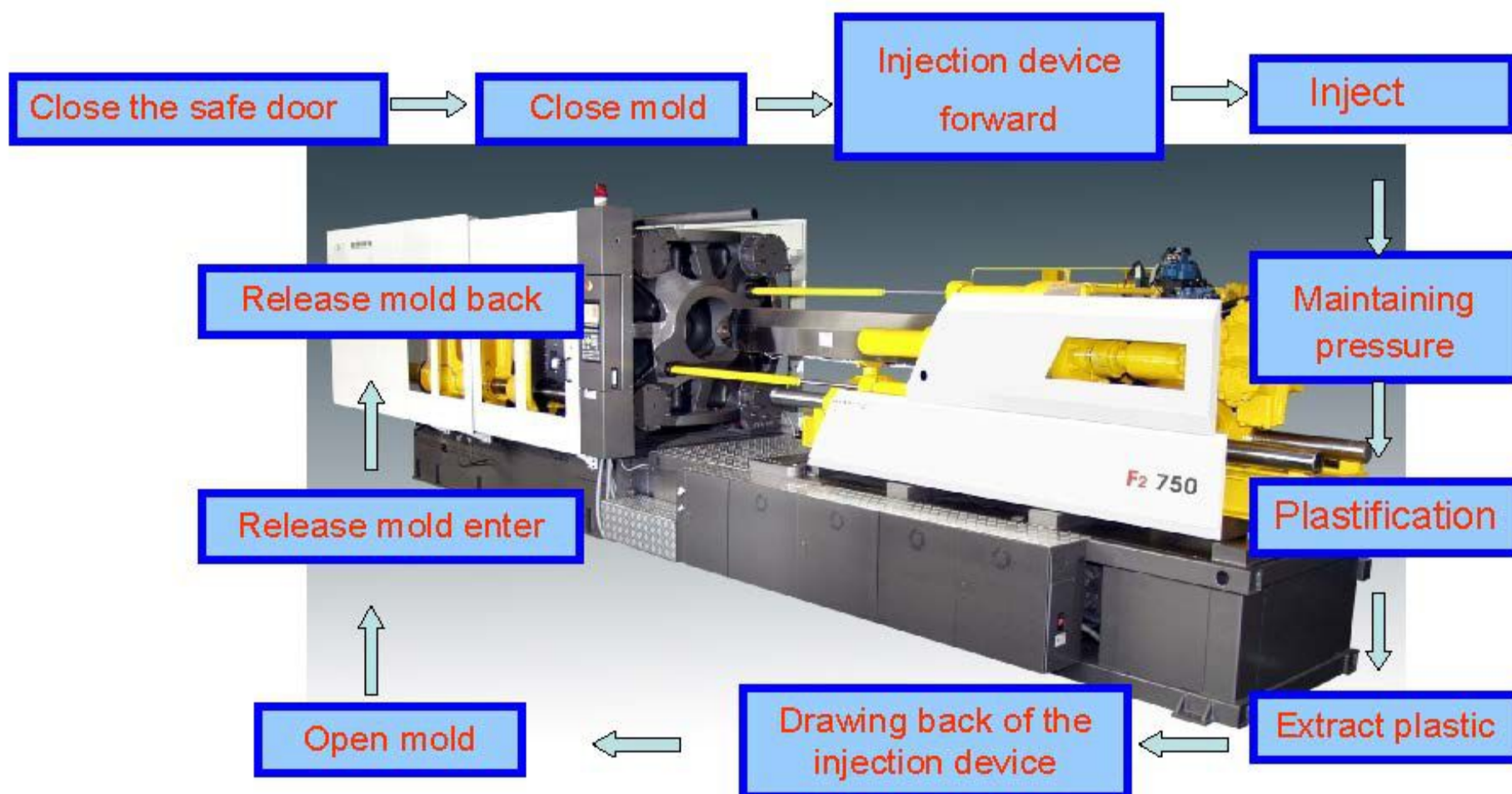
Injection molding machine schematic



摆钩分型螺钉定距双分型面注射模



Injection molding machine work flow



Injection molding machine structure principle

- Injection molding machine generally divided into four parts



Lock mold part



Inject part



Electric part



Hydraulic part

