

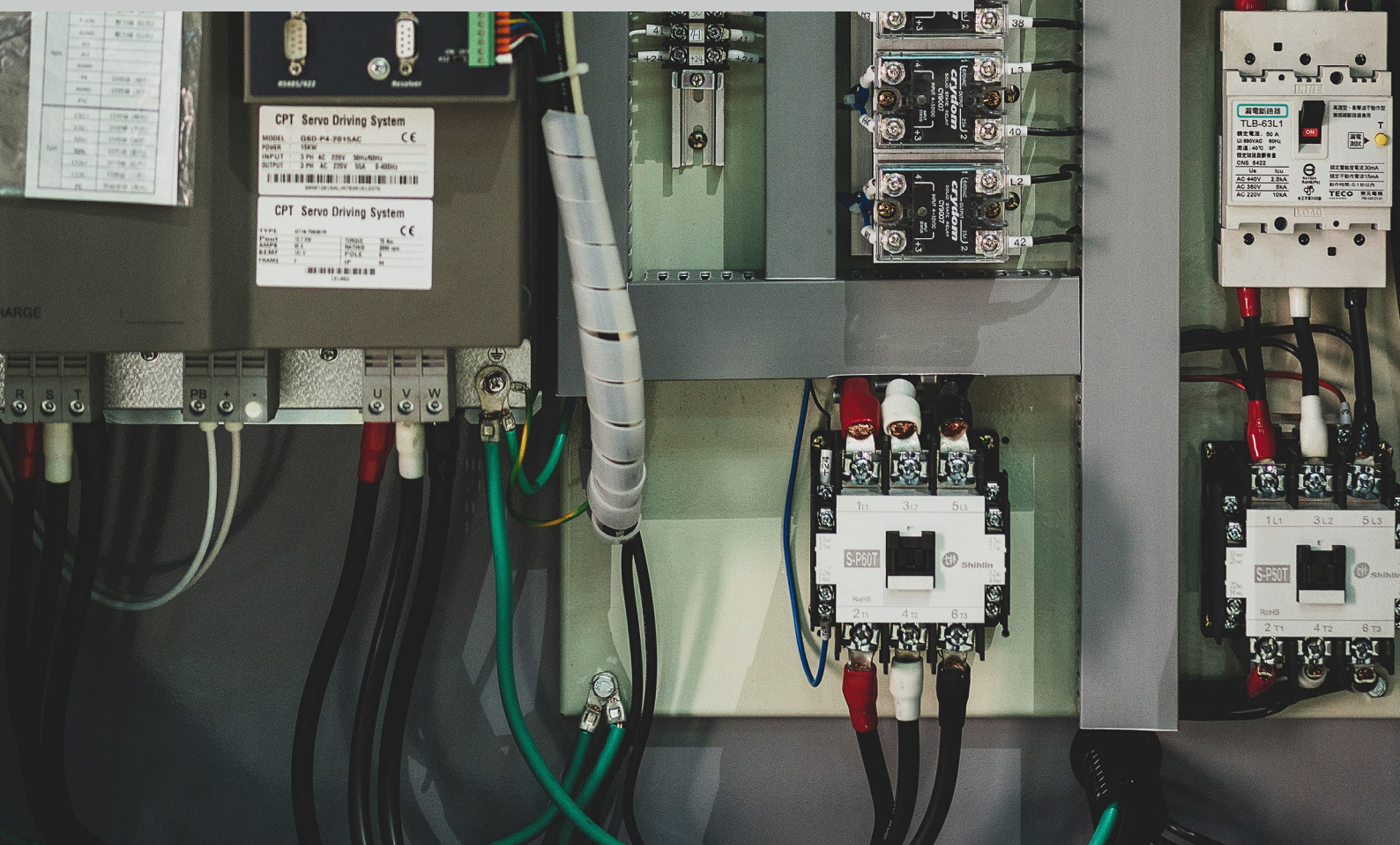
Vertical Toggle Injection Molding Machine

VS-DS 60~150^T

OMC

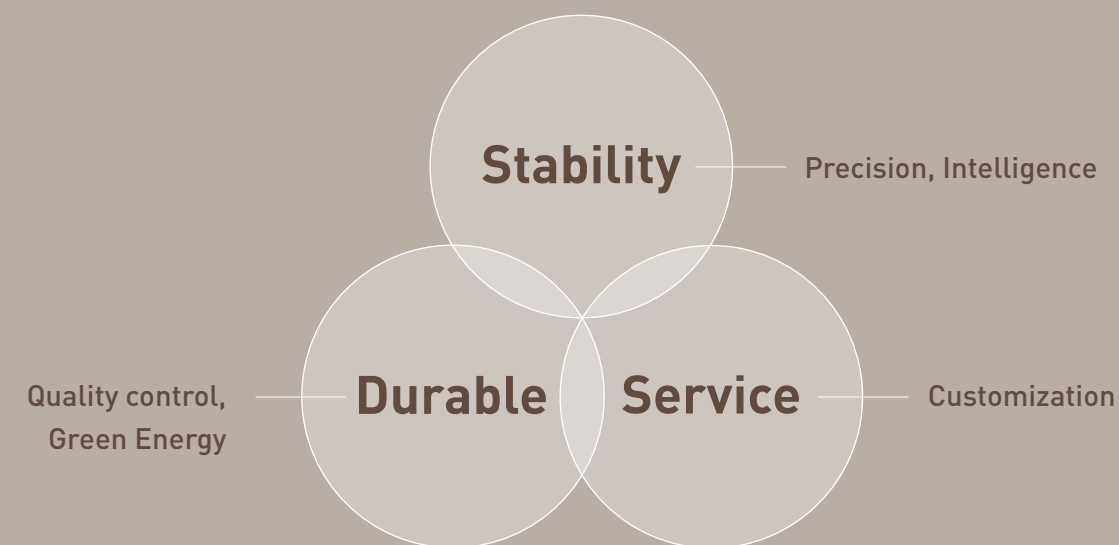
Outstanding Machinery Co., Ltd.

[www.
omc-injection.
com.tw](http://www.omc-injection.com.tw)



OMC

Advantage & Philosophy



The word we like to challenge the most is "Impossible".

Facing with doubt, we have our motto: Speak Less, Do More. Do not express much opinion, but act first. When continuous practice gradually takes shape, give it meaning so that people can understand it.

Creating the best customer experience.

Because clients from all over the world expect and look for perfect experience, OMC's products provide the precision to meet our promised performance. Constantly adjusting molding-parameter, unstable quality, and helpless maintenance and technical support, the above frustrating experience are what we hope you will not bump into it anymore. Creating the best customer experience is the core philosophy of our team.

The broader the horizon, the bigger the thinking.

Recruiting talented thinkers and practitioners in all fields, we make continuous progress in products and practices. Learning from our colleagues equals learning from the best talents in the industry. Additionally, no matter to clients or to enterprises, our team listen with humility, learn and share sincerely. We are committed to make bilateral relationships well-established.

OMC

Product Principle

High environmental protection requirements.

The impact of production equipment on the environment is minimized.

Long operating life. After operating for many years, if repairs are required, machines can be repaired and then they can be operated for a long time.

High-standard business ethics.

Treat customers, employees and suppliers with respect.

Suppliers must meet OMC's required business ethics standards.

Treat customers and employees with fairness and justice.

High-standard products.

Product design and selection of raw materials are of the highest quality.

Leverage excellent experience and innovative technologies to design better products.

100% of product reliability OMC pursues.

Every product is verified after assembly.

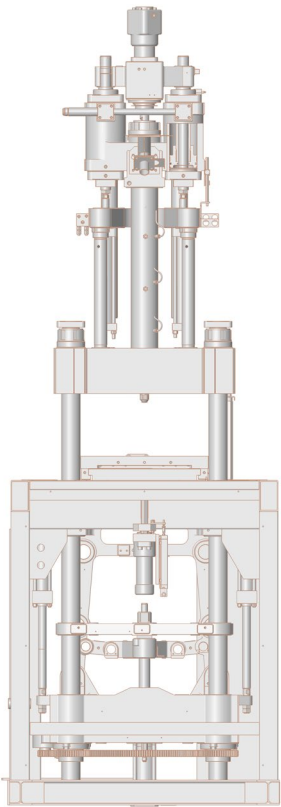
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Mechanical Performance Characteristics

Vertical Toggle Injection Molding Machine

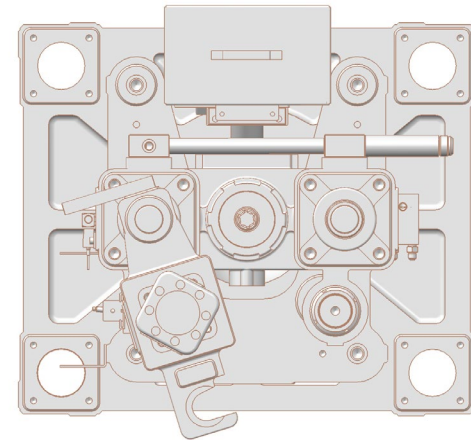
V-DS 60~150 ton

Servo motor system (Japanese Toshiba and other optional brand) and made-in-Germany Rexroth/Bosch semi-close-loop system.
Injection pressure and speed monitoring function. (Screw pressure)
Display of pressure unit and speed unit is friendly to switch based on your usage habit. (Bars or Kg/cm², % or Mm/s)
Temperature of electrical heating-band is controlled by PID intelligent system.
Multilingual choices: Chinese, English, German, Spanish, Vietnamese, Thai. Function keys, F1~F8 switch languages friendly and directly.
Industry 4.0 communication. High-performance computer control system and its extremely quick response: 0.2~0.3ms. (Microsecond)
Central monitoring function. (Excluding the expense of cables, computers and software of your factory)
Communication agreement Ethernet (OPC UA), EtherCAT: <ul style="list-style-type: none">Alarm notices of servo-driver display on the controller for friendly reading and convenient communication.Integrated auxiliary equipment such as robot-arm, mold temperature controller, hopper, and servo-driver save your resetting time.
DI/ DO/ AO mandatory signal output and our signal-switch function are friendly and convenient for maintenance staff.
Enhance the effect of ground wire of servo-driver to avoid signal interference.
Have proper distance between Alternating Current and Direct Current to avoid signal interference.
Instruction, maintenance manual, spare parts manual, electrical circuit diagram, and hydraulic circuit diagram.
Technical document of adjusting parameters among servo-driver, solenoid valves and controller.
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Ejector return signal for protecting your mold.
Linear transducers on injection, clamping and ejectors.
Japanese LUBE automatic lubrication.
Connect hydraulic circuit with cooler to maintain low oil-temperature.
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Comprehensive adoption of nodular cast iron FCD-600 (D5506 in U.S., GGG60 in Germany) and high-strength alloy steel SCM-440 (4140 in U.S., 42CrMo4(1.7225) in Germany).
Mastering screw experience for 40 years, we adopt extra anti-wear and anti-corrosion stainless steel: SACM-1 (SACM-645 in Japan, SAE 7140 in U.S., 41CrAlMo7 (1.8550) in Germany) and Japanese Hitachi DAC SKD-61 (H13 in U.S., X40CrMoV51 (1.2344) in Germany).
Injection-carriage adopt two hydraulic cylinders for much balanced movement, avoiding the nozzle from friction damage while attaching to the mold.
Movable platen is coupled with Japanese anti-friction roller bearings. (Optional adoption: brass blocks or linear slide)
The parallelism of our movable and fixed platens is required with 0.05mm.
CE quality and safety certification (ISO TUV)
Mechanical high-precision machining requirements
Nitriding Heat Treatment
High Frequency Induction Hardening
Eletroplating
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Coupled with hydraulic logic valves, Rexroth/Bosch proportional valve of decompression (back pressure) provides precise hydraulic movement.
The changeover position to holding pressure is precisely controlled to guarantee you reliable parts quality.
Integrated with experienced hydraulic and electrical circuit design, our signature injection structure ensures the highest repeatability, enhancing the accuracy within 0.01mm.
Unique hydraulic circuit design lowers the intense friction as the motor pump reverses suddenly, enhancing its operating life.
This delicate integration technology of hydraulic and electrical circuit holds the instantaneous acceleration of hydraulic cylinder.
100% hand-made hydraulic steel pipe.
Japanese high-pressure steel-wired hose.



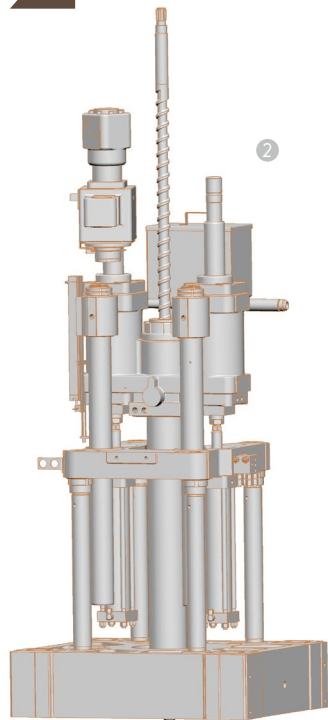
# Features

**1** Our convenient design, which rotates the charging motor to 180 degree angle, is for quick screw replacement.



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**2** The solid injection platform makes the charging motor stable and fixed.



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**3** The patented-designed hydraulic circuit counteracts the gravity and reduce the structure pressure during clamping and mold thickness adjusting.

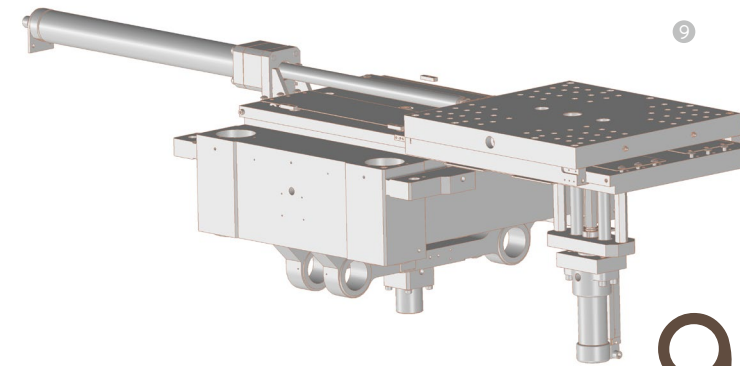
**4** During charging with the open nozzle, the screw reverses smoothly.

**5** During differential change in velocity, our toggle unit moves fluently and quickly. Reducing the clamping time, enhancing productivity, censoring pressure and preventing twice high-pressure clamping, our machines extremely protect your molds.

**6** Especially when you have many molds with different thickness, our vertical toggle clamping design is the only way that maintains extremely large opening stroke, compared with traditional vertical machines.

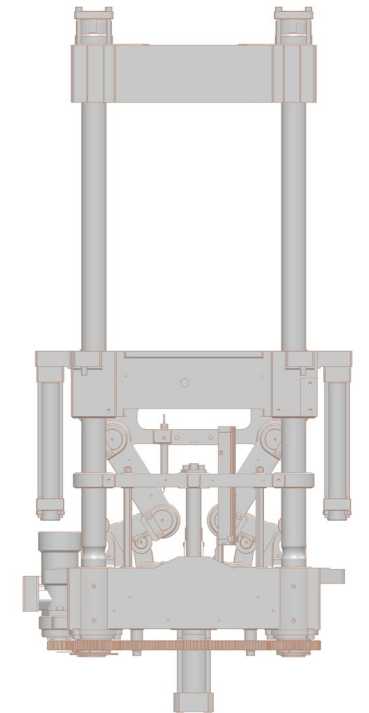
**7** Assembled with precise tolerance of 0.01mm, our L-shaped slide table has extremely small resistance and moves smoothly, ensuring long-term operation time without scratches and abrasions. The slide table does not shake itself, so when clamping the molds, our machines guarantee to protect the positioning pins of your molds from break-off.

**8** Compared with direct hydraulic cylinder clamping unit, our toggle clamping unit is extremely new and innovative design.



9

**9** Equipped with either internal or external ejector, our slide table has a reliable and accurate positioning.



8

**10** The positioning sensor devices for the slide table ensure stable and accurate movement, improving the stability of automation.

**11** On left and ride sides of machines, we have safety-doors and prepare fixed basement for your robot-arms assembly.

**12** Safety devices such as safety light curtains, two-hand-on button, and emergency rebound.



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