

FORZA SERIES

Two-platen Energy-saving Servo Injection Molding Machine

Application industry: automotive parts, home appliances, sanitation buckets, pallets, pipe fittings, etc.

4500-70,000KN

Clamping force



CLAMPING UNIT

Short stroke cylinder

High clamping force, Short pressure build-up time
Minimize energy consumption

Fast-moving cylinder

Arrange diagonally to allow, maximum access to the mold area

Non-contact tie bars with the moving platen

Excellent mold protection, Frictionless
Minimal contamination on molding area
Tried and trusted system

Strong cast iron platen

Excellent rigidity, Fast dry cycle time
Ejector free access from outside

Synchronized locking

Quick and precise, Short locking time

Linear guideway

Perfect platen support,
Precise mold guidance and platen parallelism
Energy-efficient mold movement

INJECTION UNIT

Ergonomics

Comfort, efficiency, safety machine design
Less footprint

Screw and barrel

Various design for different applications to optimize quality

Proven plasticizing system

Maximum reproducibility and homogeneous melt

Electric metering

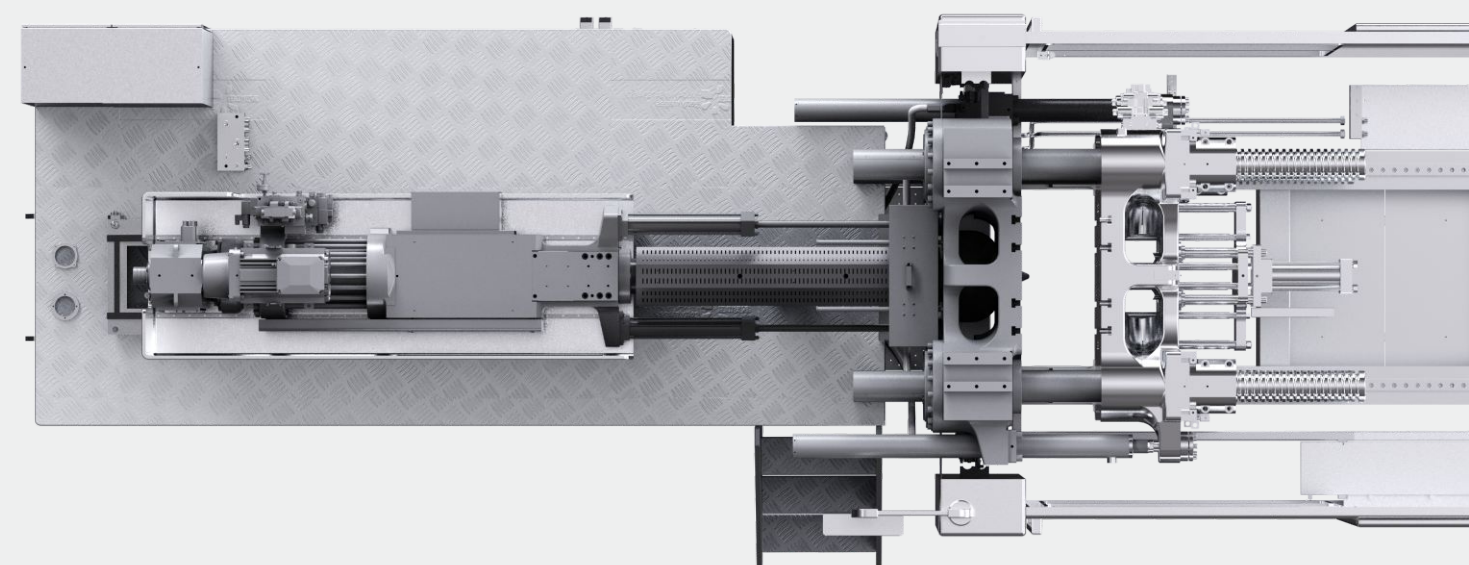
High plasticizing performance to reduce total cycle time,
ideal for efficient results

Versatile drive technology

Excellent acceleration of movements
Flexible selection optimized for different requirements

Flexibility through modularity

Freedom of combination on clamping,
injection and drive unit



STANDARD FEATURES

Injection unit

- Screw cold start protection
- Double layers barrel protection cover
- Barrel support
- 10 stages injection velocity/pressure control
- 10 stages holding velocity/pressure control
- 5 stages metering velocity/pressure control
- 5 stages metering backpressure control
- 3 stages carriage forward velocity/pressure control
- 3 stages carriage backward velocity/pressure control
- Pressure-holding position/time control
- Injection position transducer
- Carriage position transducer
- Injection screw with linear guide rails
- Carriage with linear guide rails
- Proportional backpressure control
- Carriage movement with time/position control
- Material loading platform(For model FA1200 and above)
- Nozzle safety cover
- Auto purge function
- Material feeding throat temperature display
- Ceramic heater band
- Individual temperature control for nozzle
- Screw rpm monitoring function

Clamping unit

- 5 stages mold opening/closing velocity/pressure control
- Mold protection control
- Automatic mold height adjustment
- Regenerative mold opening circuit
- Electrical/hydraulic safety interlock for clamping
- Front safety door controlled by servo-motor (For models FA1000 and above)
- Non-operation side safety door lock(For models FA1000 and above)
- Moving platen sidewalk and molding area safety platform (For models FA1000 and above)
- T-slot platen
- 2 sets of core pulling(For models FA450-900)
- 4 sets of core pulling(For models FA1000 and above)
- 3 stages ejector velocity/pressure control
- Velocity, pressure and position control for ejection
- Mold ejector backward end input
- CANOpen digital transducer for mold platen position
- High pressure cylinder position transducer
- Ejector position transducer
- Ejector or core-pulling parallel with mold opening
- Euromap 18 handling equipment mechanical interface

Control unit

- European Keba 2000 professional control system
- 12" control panel
- 2 colors alarm indicator
- Mold parameters storage on RAM/USB
- 32A industrial power sockets(2pcs for FA450-1000, 3pcs for FA1200 and above)
- Residential earth leakage circuit breaker for power sockets
- Hard-copy printout interface
- Oil cooled motor servo-drive
- Multi languages selection

Hydraulic unit

- Low oil level alarm function
- Oil temperature monitoring and alarm function
- Cooling water gate system with Ø12 quick connector (6 sets on fixed and moving platen for FA450-1000; 12 sets on fixed and moving platen for FA12000 and above)

OPTIONAL FEATURES

Injection unit

- Bi-metallic injection screw and barrel set
- Extended nozzle
- Hydraulic/pneumatic shutoff nozzle
- Proportional injection speed control
- Metering parallel with mold opening by electric servo motor
- 6/8/10/12/16/18/24 sets of sequential injection control (Hydraulic/pneumatic)
- Independent pump station of hydraulic sequential injection control function
- Heating controlled by solid state relay
- Holding switchover by cavity pressure (Sensor not included)
- Material loading platform(For model FA450-1000)
- Injection pressure monitoring function
- Material feeding throat temperature on display with switch function
- Hopper and cover
- Hopper dryer
- Material automatic loading device

Clamping unit

- Proportional mold opening and closing control
- Euromap 2 mold locating ring (For fixed and moving platen)
- 6/8/12/16/24/32/36/48/64 sets hot runner control by solid state relay (16A maximum)
- Core pulling with check valve
- Core puller with quick coupling
- Pressure relief circuit for core pulling
- Pressure holding for core pulling(Separated pump set)
- Extra core puller
- Airblow device
- Middle ejector push-pull function
- Ejector with check valve
- Mechanical safety lock
- Magnetic mold platen
- Hydraulic quick mold change device(with power pack and console)
- Front safety door controlled by servo-motor(For models FA450-900)
- Product unload platform with stairs
- Linear guide rails for mold support(For Tandem/Stack/Cube mold)
- Water/Oil type mold temperature controller
- Air/water cooled type chiller
- Handling equipment robot

Control unit

- Keba 5000 control system
- Keba 8000 control system
- 15"control panel (For Keba 2000 and 5000 control system)
- 21" control panel(Keba 8000 control system only)
- CANOpen digital transducer for injection position
- Euromap 67 handling device robot electrical interface
- Euromap13 core pullers electrical interface
- Euromap 14 hot-runner thermocouple and heating electrical interface
- Euromap 62 fluid injector system electrica interface
- Euromap 70 magnetic clamping system electrical interface
- Complied with CE Machinery Directive
- Euromap 71 mold changing device electrical interface
- Energy consumption meter
- Low/High voltage and phase monitor device
- Barrel heater broken detection device
- Hot-runner heater broken detection device
- Water cooled heat exchanger for cabinet Cabinet
- LED light for cabinet
- Control circuit UPS device(1kVA)
- Extra waterproof power socket(16A\32A63A)
- Lighting socket (220V)
- 3 colors alarm indicator

Hydraulic unit

- Filter clogging switch and alarm
- Oil temperature control(Cooling water solenoid valve + thermocouple)
- Oil temperature preheating circuit
- Cooling water regulators with quick coupling
- Directional valve solenoid with LED
- Extra cooling water switch