LENA SERIES

High Precision Direct Hydraulic Injection Molding Machine

Application industry: high-end applications such as electronics, packaging, toys, etc.

LENA direct hydraulic servo injection molding machine with the advantages of high injection pressure, high injection velocity, high response, which is suitable for molding the products with high precision and stable size requirements such as packaging products, medical thin wall products, tablet computer, mobile phone and computer plastic accessories etc. LENA series provides different configuration and high quality, is the best choice for customer to produce various products.



150-200mm/s

Injection speed

Robust clamping unit

Top-notch direct hydraulic clamping
High pressure cylinder internal oil circulating circuit
Fast response and energy saving
Highly integrated hydraulic clamping structure and sealing technology

Ingenious control

Proportional clamping control

Back pressure proportional control

KEBA 12" PLC with LCD touch screen panel

Linear transducer for injection position, carriage
position, mold platen position and ejector position

Hydraulic System

European high efficiency servo pump technology

Single cylinder injection system

High injection precision
Low inertia with fast response
Optimal injection speed for thin-wall applications between 150 -200 mm/s
Electric metering for shorter cycle time and lower energy consumption (optional)

Non-contact tie bars and swift platen movement

Tie bars have zero wear with unparalleled service life
Low friction, fast response platen support by linear guideway
Generous distance between tie bars and daylight to fit bigger molds

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STANDARD FEATURES

Injection unit

- Screw cold start protection
- Double layers barrel protection cover
- Pressure holding position/ time control
- Nozzle safety cover
- Auto purge function
- Material feeding throat temperature display
- Injection with linear guide rails
- Carriage with linear guide rails
- 10-stage injection velocity/ pressure control
- Carriage movement with time/ position control

- 10-stage holding velocity/ pressure control
- 5-stage metering velocity/ pressure control
- 5-stage metering backpressure control
- Proportional backpressure control
- Carriage forward velocity/ pressure control
- Carriage backward velocity/ pressure control
- Injection position transducer
- Carriage position transducer
- Ceramic heater band
- Individual temperature control for nozzle

Clamping unit

- Mould platen with linear guide rails
- Mould protection control
- Electrical/ hydraulic safety interlock for clamping
- Mould ejector backward end input (reserved)
- Mould platen position transducer
- Ejector position transducer

- Product dropout chute
- Velocity, pressure and position control for ejection
- 5-stage mould opening/ closing velocity / pressure control

Control unit

- KEBA 2000 control system
- 2-color alarm lamp
- Mould parameters recording
- Waterproof socket with earth leakage protection device
- 380V 16A waterproof power socket
- 220V 10A single phase socket

Hydraulic unit

- Oil temperature alarm
- Cooling water valves (6 sets)
- Return line filter with clogging switch and alarm

OPTIONAL FEATURES

Injection unit

- Bi-metal injection screw set
- Proportional injection control
- Heating controlled by solid state relay
- Electrical metering
- CANOPEN digital transducer for injection position
- Sliding hopper
- Stainless hopper
- Hopper dryer
- Auto loader
- Holding switching by mould cavity pressure

Clamping unit

- Euromap 70 magnetic clamp device connecting interface
- CANOPEN digital transducer for mould platen position
- Ejector with check valve
- Hot-runner control
- Push-pull structure for ejector (mechanical lock)
- Quick mould change system (hydraulic/ pneumatic mould clamp)
- T-slot mould mounting
- Euromap 2 mould mounting pattern and T-slot

- Mechanical interlock
- Airblow
- Euromap 13 core pulling/ejector connecting interface
- Euromap 2 mould locating ring for fixed and moving platen
- Euromap 18 robot mounting holes pattern
- Robot arm
- Water type/ Oil type mould temperature controller
- Air-cold/ water-cold chiller
- Hydraulic core pullingt

Control unit

- 15" display
- · Energy consumption meter
- LED lighting for cabinet
- Control circuit UPS device (1KVA)
- Heat exchanger for cabinet

- KEBA 5000 control system32A waterproof power socket
- 3-color alarm lamp
- Euromap 67 robot connecting interface
- Low oil level alarm

Hydraulic unit

- Oil temperature preheating circuit
- Cooling water valves (8/12/24 sets)
- Directional valve with LED

 Oil temperature control (oil cooler with water valve and thermocouple)

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