# HIGH EFFICIENCY ALL-ELECTRIC SERIES

## Benchmarking with international performance standard and level of technology

LK Elettrica series all-electric injection molding machine integrated the advanced technology and R&D concepts, with flexibility through modularity to cope with different production requirement.

The series combined advantages of high repeatability, stability, quick response, energy-saving and user-friendly, especially suitable for the application in communication, optics, medical, packaging industry.




20%⇧

Compared with traditional hydraulic machine, energy saving up to

## Efficient and precise

The operation of Elettrica series is driven by multi servo electric motors that achieve movement parallel and bring the outstanding performance.

## Expansibility

LK Elettrica combined with ergonomic design concept, operation panel can be rotated at multiple angles, easy to use and for maintenance.

An open platform operation system is available management more smart integration, graphical free programming,more convenience adding automation.

## Safety and high repeatability

With superior low-pressure protection algorithm, safety of the mold can be sensed instantly by real-time monitoring speed and torque changes on mold clamping servo motor. It can effectively protect the mold from damage by foreign object.

## Save space

Create Maximum efficiency for each cubic meter.

## Eco-friendly and energy saving

The most of benefits of the all-electric is to save energy compared with traditional hydraulic models; less wear and more than 95% energy utilization rate, ensure high repeatability of injection molding;No hydraulic oil, no seal aging and no oil pollution problems, suitable for clean production;Low noise, providing more comfortable environment at mass production scale.

# STANDARD FEATURES

## Injection unit

- Hard chrome plating screw assembly
- Injection/melting motor stroke control
- Double carriage linear guide slding mechanism
- Sliding hopper base
- Barrel double layers protective cover
- Nozzle safety cover
- Protective cover for injection unit
- Injection pressure sensor
- Digital back pressure control for melting
- Screw revolution dispaly function
- Material feeding throat temperature display
- Ceramic heating system

## Clamping unit

- Toggle clamping structure
- Gear type electric drive mold height adjustment
- Precision encoder for clamping/ejector stroke control
- Grease lubrication system
- Ejector control with electric setting
- Screw thread mounting hole platen (EL100-EL230)
- T-slot platen (EL280 or above)
- Electrial and mechanical safety interlock
- robot mounting holes
- Ejector parallel with mold opening
- Plasticizing parallel with mold opening
- Mold protection
- Repeatedly clamping function
- Inside mold ejector function
- Repeatedly ejection function

## Control unit

- 15" touch screen control panel
- Emergency stop button (operation&non-operation side)
- Molding conditional memory function
- Maintenance alarm
- Production monitor function
- Quality monitoring function
- Heating control by solid state relay
- Suck back function
- Auto-purge function
- Screw cold start protection
- Resin anti-carbonization function
- Barrel insulated function
- Complied with CE Machinery Directive
- Movement cycle display function
- I/O position free change function
- Alarm recording
- Operation recording
- Curve display for injection or material stroage
- Curve display for mold opening / clamping & ejection
- Molding cycle Gantt chart
- Parameters fast setting function
- Nozzle/needle valve interface
- Sequential injection interface
- Air blast interface (6sets)
- Robot customized function

## Others

- Tool with tool box
- Product slide
- Mold mounting clamp
- Waterproof socket
- Water drain (5-in-5-out with Φ12 fast joint)
- Three-color alarm lamp
- Lighting socket one set
- OPC-UA industry 4.0 interface



# OPTIONAL FEATURES

## Injection unit

- Bi-metallic screw and barrel set
- Extended nozzle
- Air shut-off nozzle (needle valve type)
- R angle customized for nozzle head
- Stainless steel
- Standard hopper

## Clamping unit

- Air blast device
- Special mold fange(position ring)
- Special core pulling function
- Core pulling device
- Special platen design (T-slot/mounting holes)
- Clamping close-loop control

## Control unit

- Extra lighting socket
- LK NET
- Extra waterproof power socket
- Euromap 67 robot control device
- Hot runner control internal device
- Mold temperature display and control function

## Others

- Extra water drain
- Detecting device for product slide
- Water distributor for mold cooling
- External transformer
- Energy saving infrared heating device
- Electrical interface for detecting cavity pressure