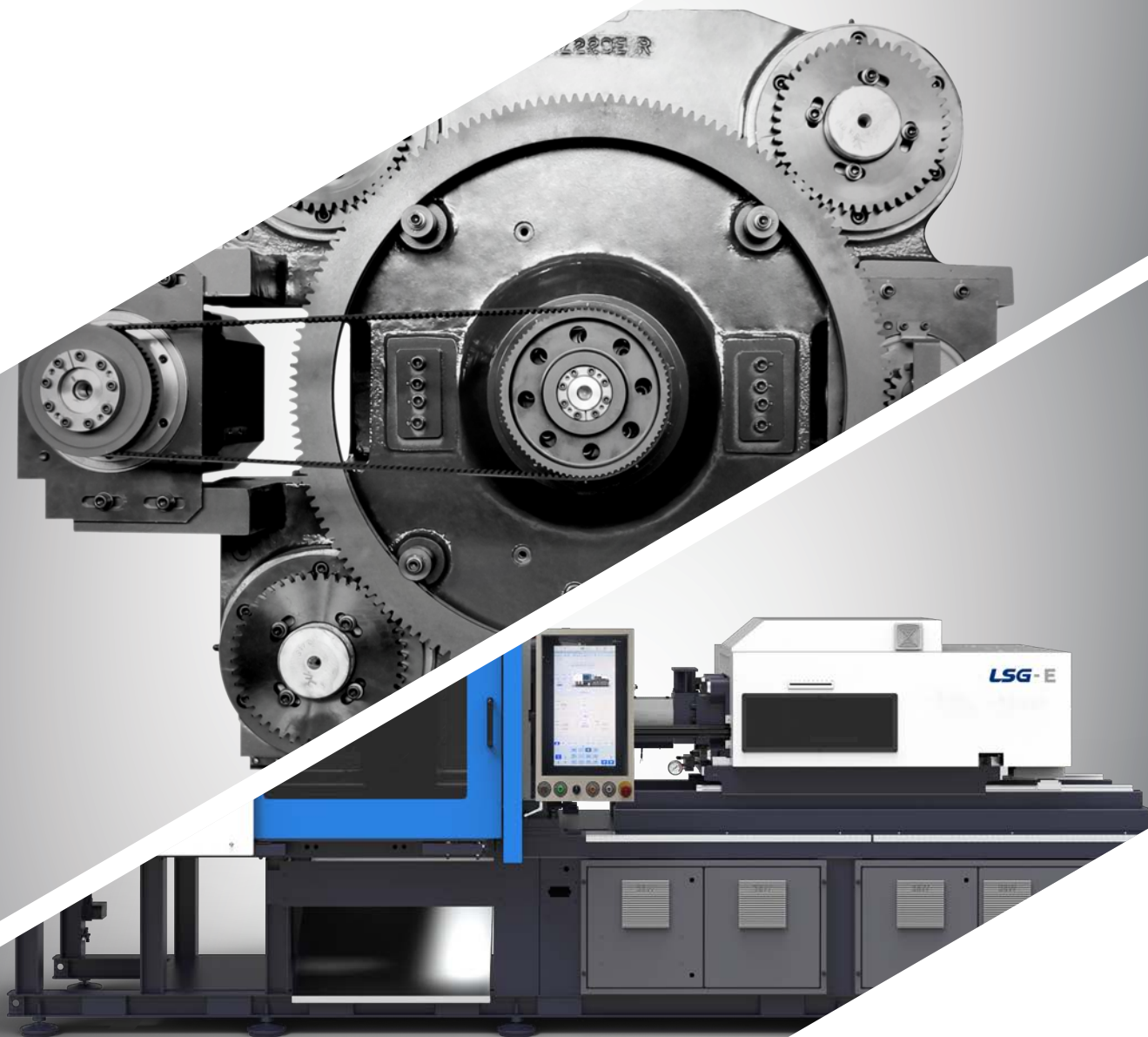


All-Electric Injection Molding Machine 35~950 (US Tons)

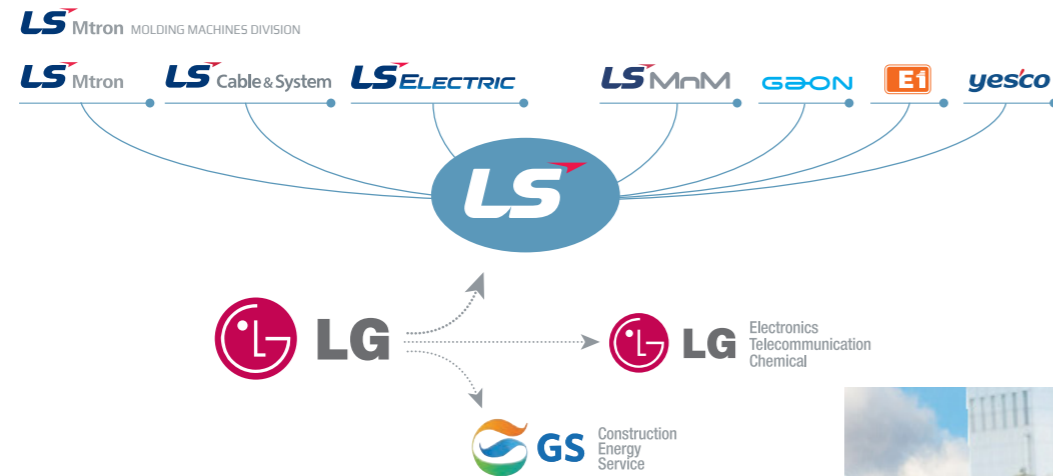
# LSG-E SERIES



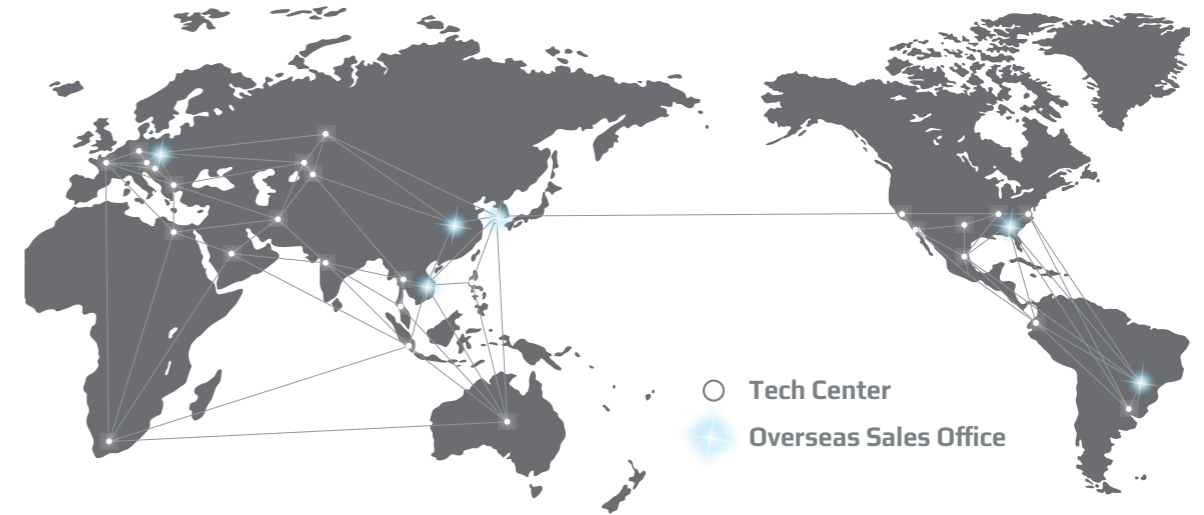
## About LS Mtron

LS Mtron, a subsidiary of the LS Group, a conglomerate based in South Korea, employs over 25,000 people and reports annual revenues exceeding USD 30 billion, with profits around USD 1 billion. The Injection Molding Machines division of LS Mtron (LS IMM) was established in 1969 by the South Korean tech behemoth LG Corporation, known as one of the largest plastic molders globally. Initially created to meet its demand for injection molded parts for their renowned TVs, appliances, electronics, and other products, LS IMM now manufactures approximately 3,000 machines annually. These machines cater not only to LS and LG-related companies but also to a global clientele of molders.

Originating with the invention of Korea's first Injection Molding Machines, LS IMM is celebrated for its commitment to quality, customer service, and rapid delivery times. Leveraging the collective capabilities of the LS Group's companies, LS IMM addresses several global supply chain challenges. This synergy enables LS IMM to offer custom molding machines to its customers in North America within just 100 days from casting to shipment, with the possibility of even quicker delivery times from its pre-stocked inventory.



## Integrated ONE Solution Smart Machine for Industry 4.0 Delivering Value



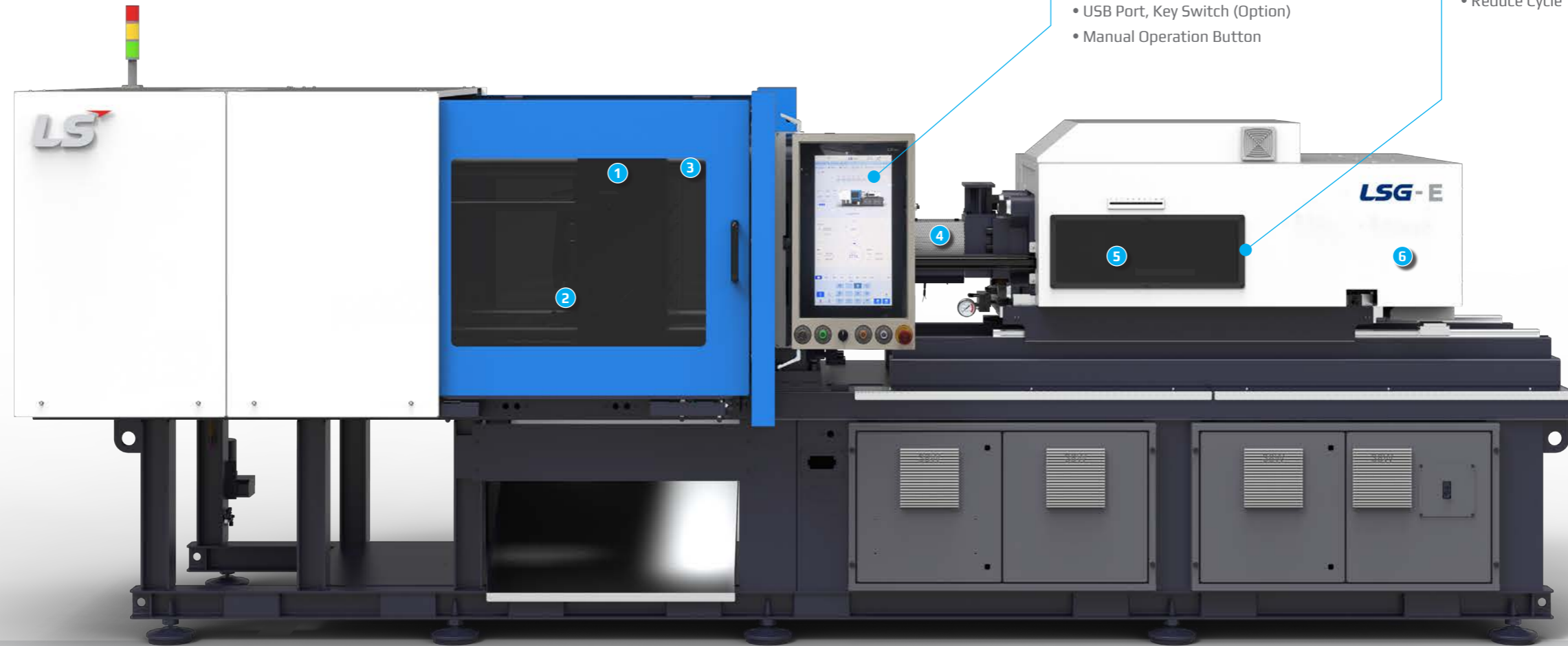
## INNOVATIVE TECHNOLOGY PARTNER



All-Electric Injection Molding Machine

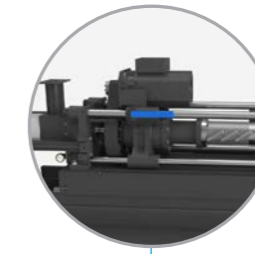
# LSG-E 35~950 (US Tons)

-   
 Fast Cycle Time
-   
 High Precision
-   
 Energy & Cost Saving
-   
 Quiet Operation



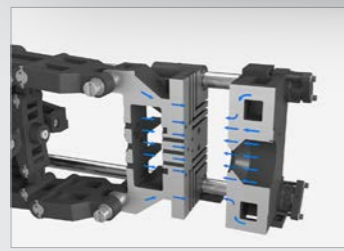
**KEBA Controller**

- Real-Time Data Setting and Operation
- User-Friendly Controls
- Hot Runner Controller (Internal)
- USB Port, Key Switch (Option)
- Manual Operation Button



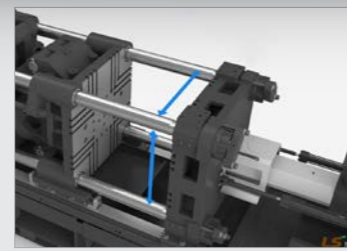
**Servo Motors Work Independently and Simultaneously**

- Mold Open During Screw Recovery / Ejection During Mold Open / Injection During Clamping
- Reduce Cycle Time



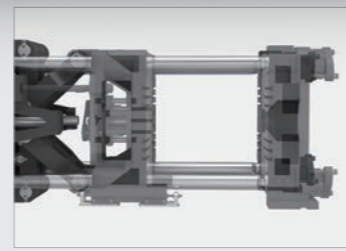
**① Rigid Clamping and Injection Units**

- Minimizes Platen Distortion
- Improve Uniform Pressure Distribution



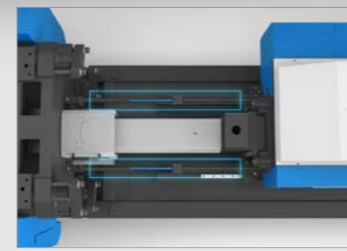
**② Extended Tie-Bar Distance (90~440Ton)**

- Standard Wide Platens
- Run Bigger Molds in Lower Tonnage IMM



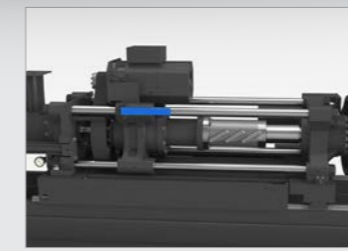
**③ Extended Daylight Available (90~440 Ton)**

- Versatile Mold Spacing



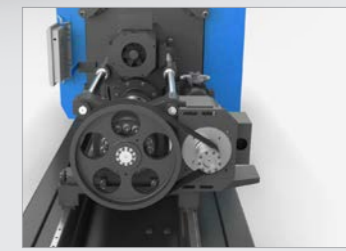
**④ Dual-Cylinder Nozzle Touch Force**

- Maintain Platen Parallelism
- Avoid Resin Leaks



**⑤ Increased Injection Volume**

- 13% - 27% Increase Compared to Previous Models



**⑥ 11.81in/sec (300mm/sec) Injection Speed**

- Strong & Quick AC Servo Motor
- Fast Response Time & Increased Speed Control Accuracy

**⑥ Pressure/Speed Priority Option**

- Customizable to the Product Being Made
- Pressure Priority Option (Thick-Wall or Cosmetic Parts)
- Speed Priority Option (Thin-Wall Parts)

MORE OPPORTUNITY AND POSSIBILITY

# LS FULL-ELECTRIC INJECTION MOLDING MACHINE



High Precision



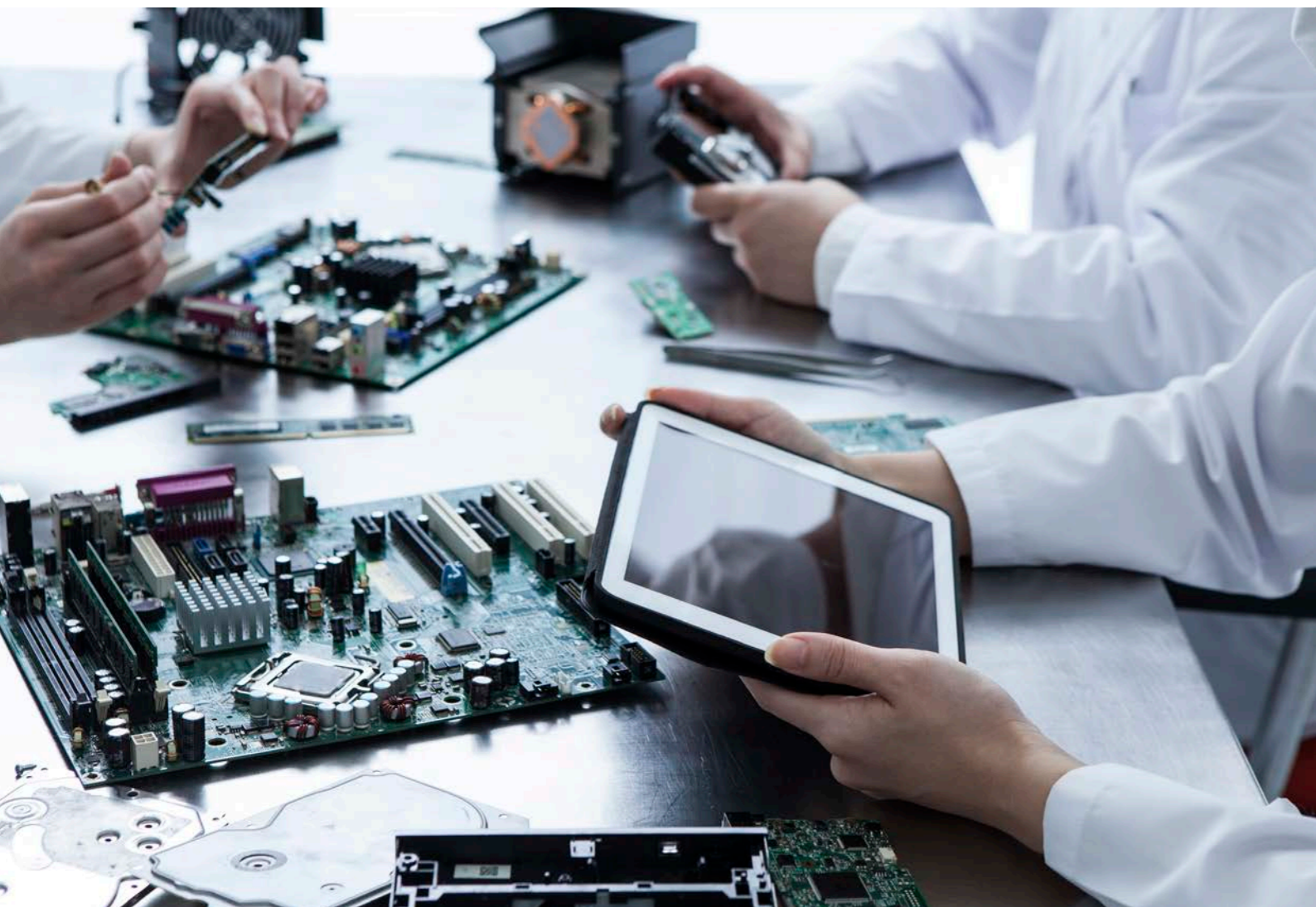
Energy Saving & Cost Saving



Fast Cycle Time



Low Noise Level



## **LSG-E** Series the best solution for your injection molding manufacturing

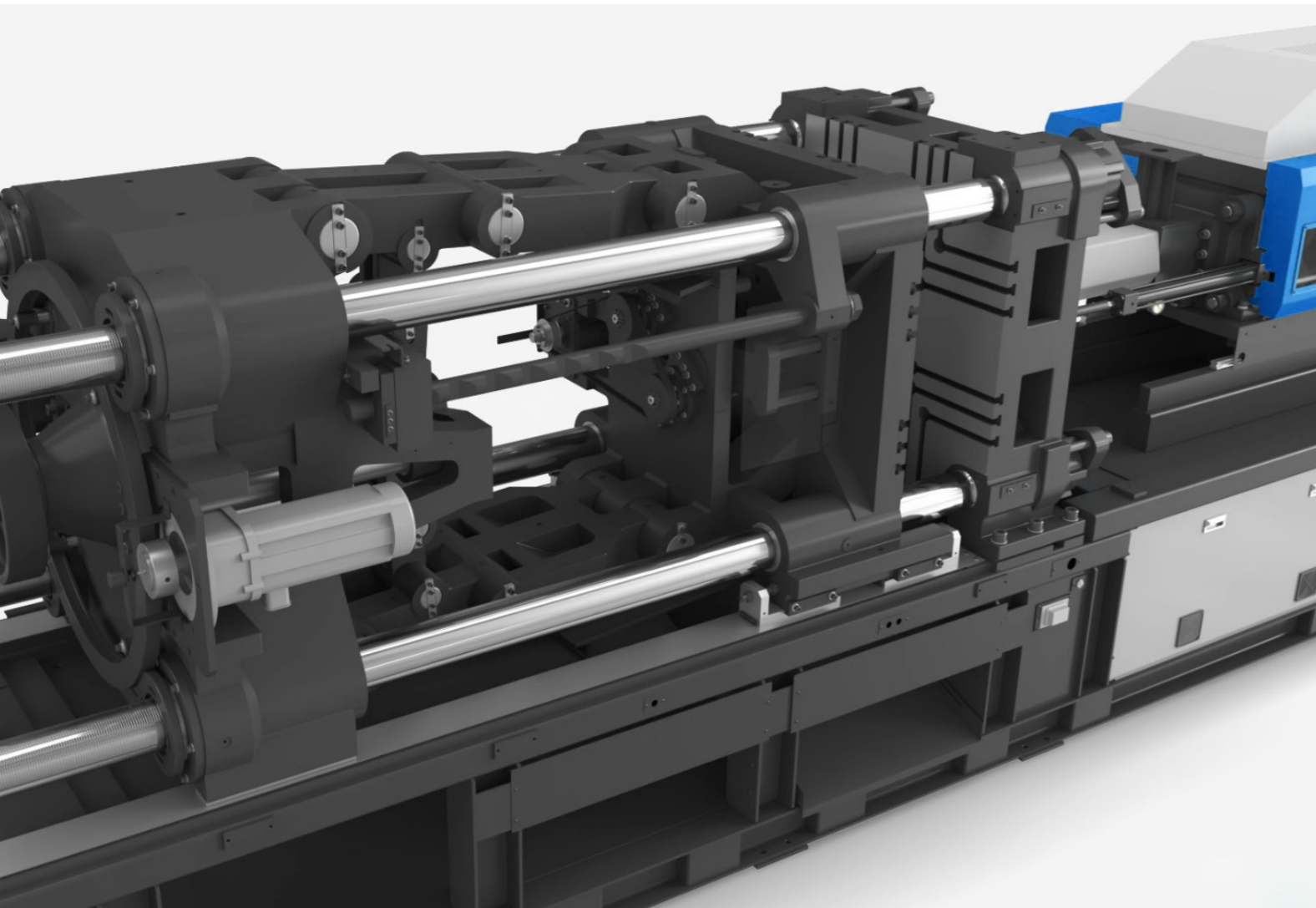
Realize whatever design you want with our high precision technology to meet the customer's needs in rapidly changing market.

Provide your end users with high-class value instead of just products.



# LSG-E Series

Provides Maximum Efficiency Through Optimized  
5-Point Toggle Design with FEA



## Extended Daylight (90~440 US Ton)

- Increase of 3~20% Compared to Previous Model

## Able to Handle Various Mold Sizes

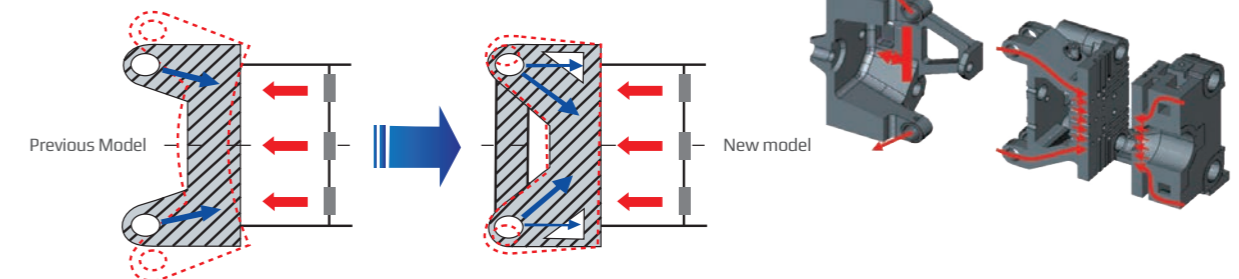
- Largest In Class: Tie-Bar Distance / Mold Height

## Wider Platen

- New Center-Press Design & Rigid Platen
- Extended Tie-Bar Distance (90~440 US Ton)
  - Increased 7~17% (Horizontal) X 2~15% (Vertical)

## Center-Press Moving platen

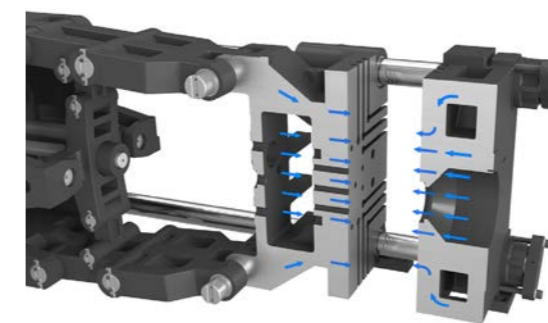
- Improves Productivity
- Minimizes Platen Distortion



- Uniform Clamping Force Prevents Short Shots, Flash and Provides for Longer Mold Life

## Rigid Platen with 5-Point Toggle and High-Speed Mechanism

- 5-Point Toggle High-Speed Clamping Unit and High intensity injection mechanism
- High-Speed Injection through High-Response High-Torque Servo Motors

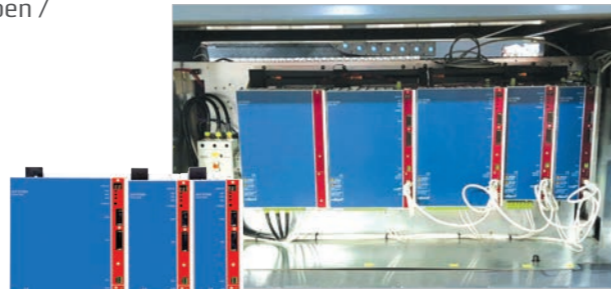


# LSG-E Series

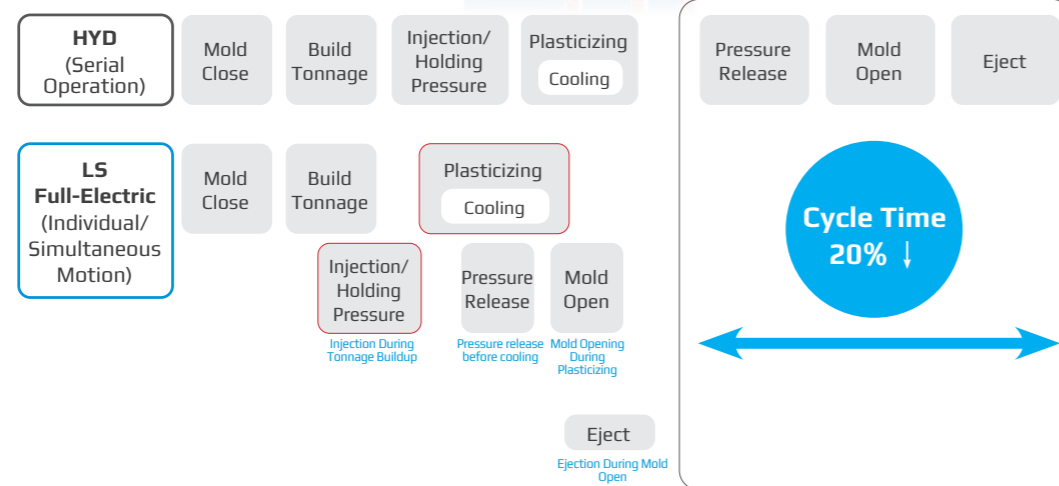
More Stabilized Molding  
with Highly Rigid Clamping Unit

## Servo Motors Operate Individually and Simultaneously

- Recovery During Mold Open / Ejection During Mold Open / Injection During Clamping
- Reduction of Cycle Time (Productivity Improvement)

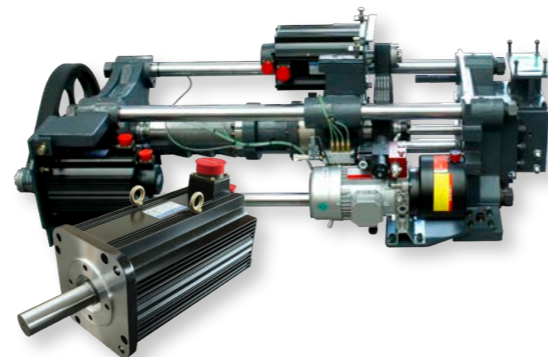


### Cycle Time Reduction



## High-Output and Quick-Response AC Servo Motors Used to Realize High Injection Speeds

- Injection Speeds of up to 500mm/s
- Multi-Step Injection Speed Control



# INTEGRATED WATTMETER FOR LSG-E ELECTRIC INJECTION MOLDING MACHINE

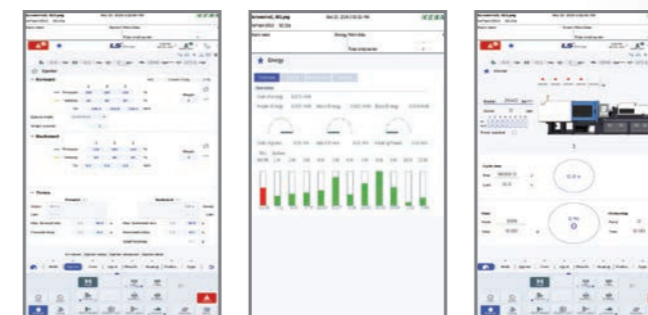
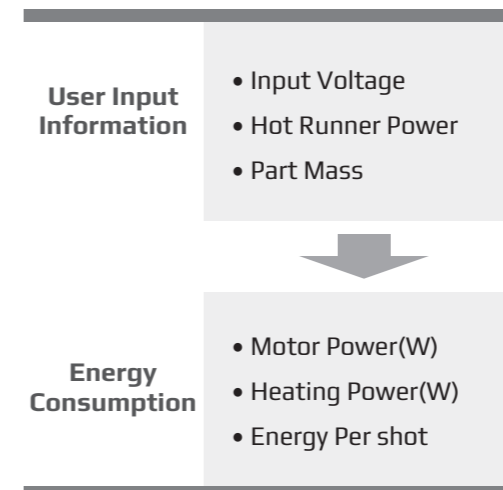
Displays Energy Use for: 1 Shot / 1 Hour / 1 Day / 12 Months  
: Possible to Monitor Energy and Manage Effectively

- Sum of Energy Use
- Energy Use Per 1 Hr
- Energy Use Per Shot
- Energy Use Per Part Mass
- Monthly Energy Consumption  
: Saves Data for 12 Months Including this Month

## Convenient and Simple Monitoring System

- Input Below Information on the Setting Screen:

→ Energy Consumption can be Monitored



Inject

Energy

Overview

# CSI 4.0\*

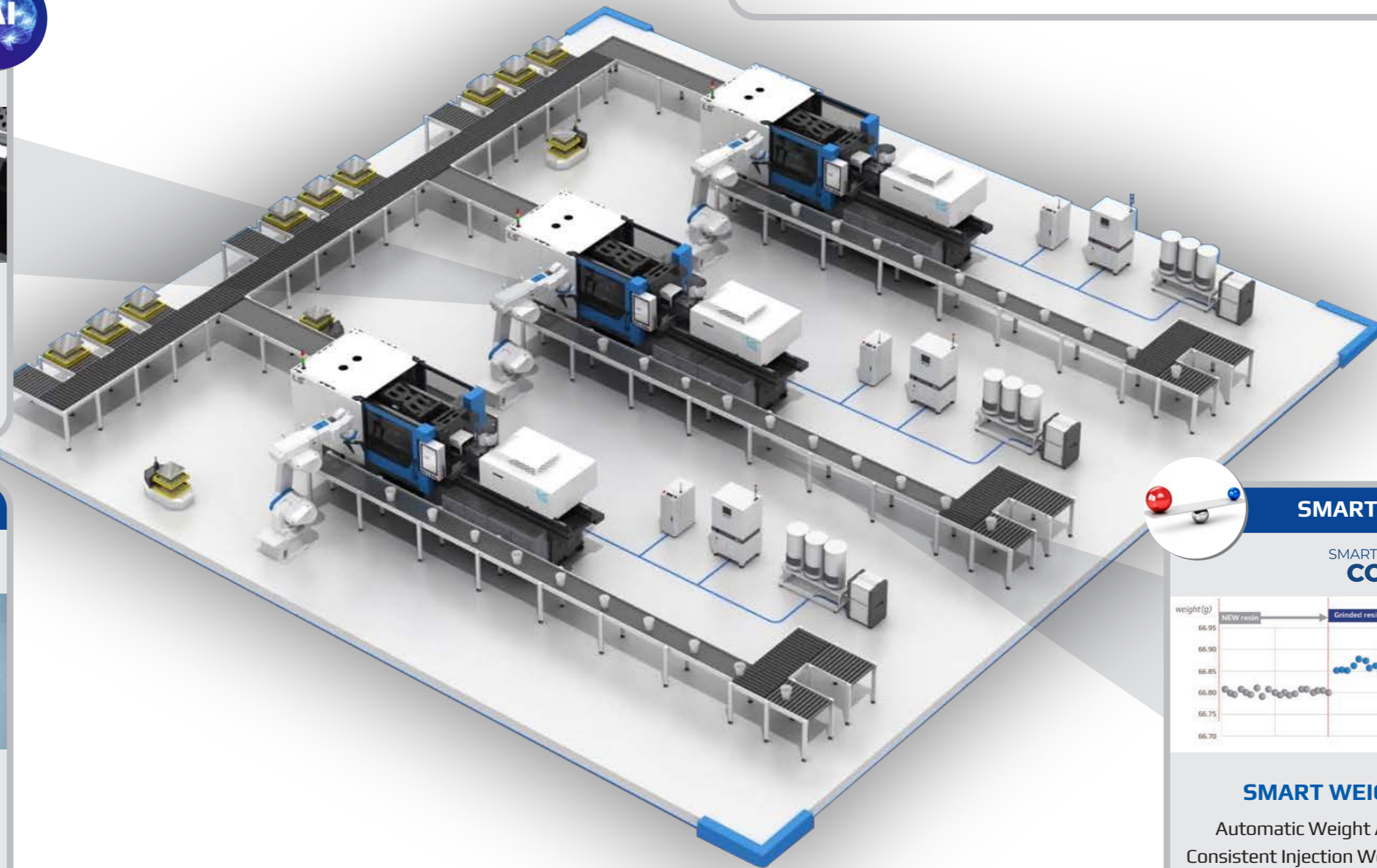
## Connected Smart Injection 4.0 option

LS-Mtron's CSI 4.0 is a solution that can help customers quickly respond to the 4th industrial revolution and digital transformation. The solution starts with accurate data collection, transforming this data into meaningful information, and using data processing technology to improve processes through intelligent applications of AI.

**SMART PRODUCTION**



<ul style="list-style-type: none"> <li><b>Smart Monitoring</b></li> <li><b>Smart Production Control</b></li> <li><b>Smart Mold Reognition</b></li> <li><b>Smart Equipment Control</b></li> <li><b>Smart Data interface</b></li> </ul>	<ul style="list-style-type: none"> <li>24/7 Mobile Access From Anywhere</li> <li>Real-Time Monitoring Control</li> <li>RFID check and Immediate Upload of Molding Parameters via QR Code</li> <li>Real-time Monitoring</li> <li>Data Transfer to Customer Monitoring Systems</li> </ul>
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**AI**






**AI Injection System**

- AI Molding Assistant
- AI Weight Control
- Smart Injection Molding Machine

**SMART SERVICE**





**SMART REMOTE SERVICE**

- Remotely Monitor
- Access and Troubleshoot Machines in Use at Customer Sites

**SMART MACHINE**





**SMART WEIGHT CONTROL**

- Automatic Weight Adjustment Maintains Consistent Injection Weight even when Blending with Recycled Resin

# How much you can save?

## Energy Savings

(When Compared with 400t Hydraulic IMM)

### SAVE 15K USD per 1 Year (vs. Hydraulic IMM)

- Power Consumption : 40% Reduced
  - Oil Consumption : 100% Reduced
  - Cooling Water : 81% Reduced
- (Not Including Mold Cooling Water)



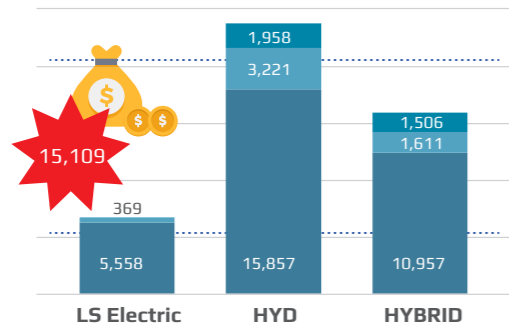
### Calculation Information:

- Operating Hours : 7200h/year
- Water Fee : 0.34 USD/ton
- Oil price : 1.61 USD/ℓ
- Electricity Fee : Based on Korean Tax System

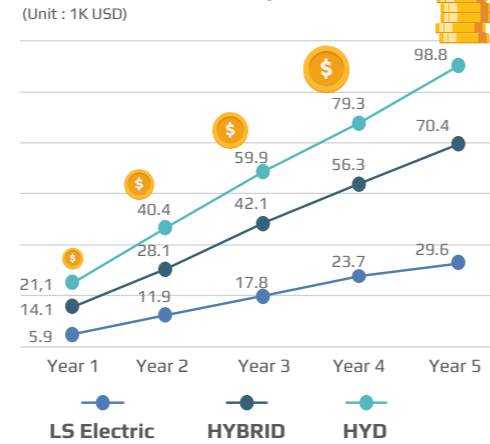
### Data

Contents	LS Electric	HYD	HYBRID
Power Consumption (kW)	10.34	25.85	18.1
Oil ( ℓ )	0	1,000	500
Cooling Water ( ℓ /min)	12.3	65	50

1 Year (Unit : USD)



Year Over Year Comparison (Unit : 1K USD)



\*currency exchange rate : ₩1120@\$1



**Integrated ONE Solution**  
**Smart Machine for Industry 4.0**  
**Delivering Value**



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**Mexico Sales & Service**

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**ONSAS18001**

