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Please visit the website for more information.

#### Dealer



2018.A



# LG

series

**LG-600**

LG-1000

LG-1400

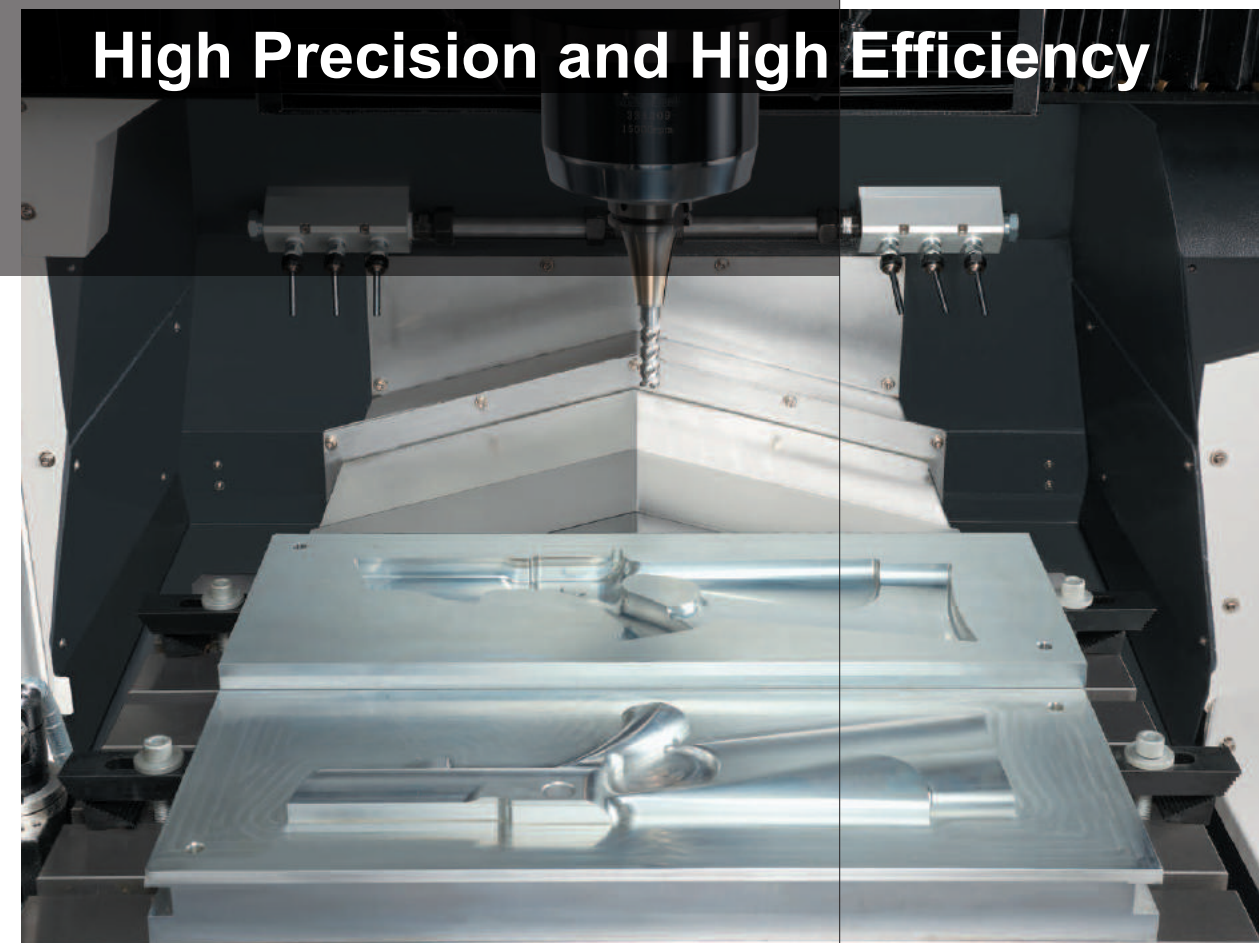
LG-1800



Vertical machining center



## High Precision and High Efficiency



LITZ HITECH CORP.

LITZ Precision Machinery (Jiaxing) Co., Ltd.

# High Performance Machining Tool

## LG series LG-600 Contents

- 02 INDEX
- 03 New Generation Gantry Structure
- 04-05 High Accuracy and Effective Temperature Stability
- 06 High-performance Machining
- 07 Technical Highlights
- 08-09 High Rigidity Structure
- 10-11 Spacious Envelop
- 12-13 Green Technology Go Green
- 14 Machine Dimensions / Installation Diagrams
- 15 Worktable / Tool Dimensions Diagrams
- 16 Machine Specifications
- 17 Standard Configuration and Optional Functions
- 18-19 Showroom Center and Technical Support



## New Generation Gantry Structure

High-quality, high-rigidity, high-efficiency, high-precision and user-friendly easy operation are combined to enable coarse and fine machining with one machine; a solid gantry structure along with outstanding rigidity fulfill the needs of customers in various industries.

LG series  
VERTICAL MACHINING CENTER





## High Accuracy and Effective Temperature Stability

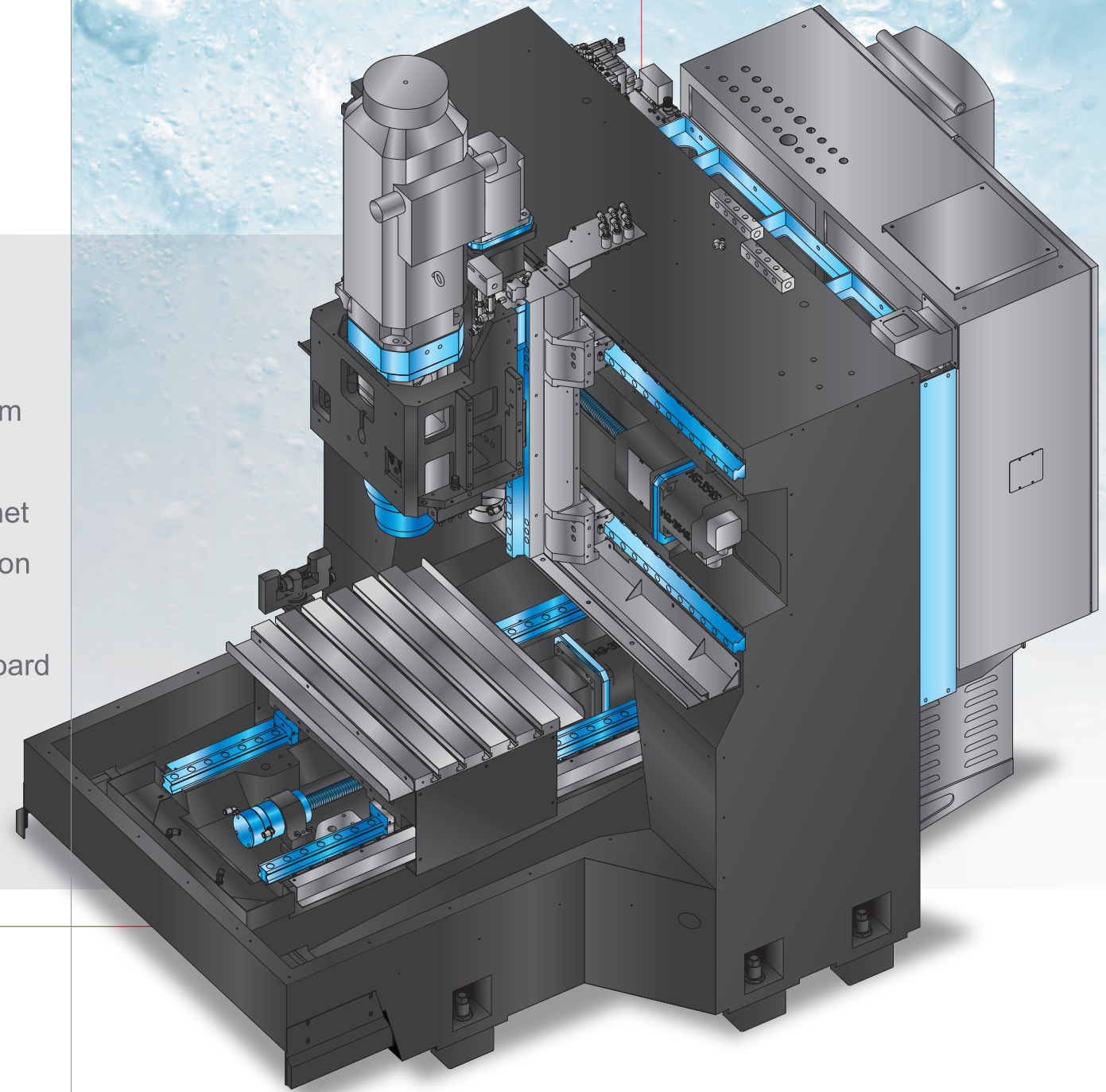
Total cooling to ensure high precision over long operating hours – cool feeder driving system for better machining accuracy.

Constant high precision through comprehensive cooling measures along with a temperature compensation system can stabilize thermal displacement and improve precision of parts.

### Thermal Stability Cooling Methods

Excellent Temperature Stability:

- Transmission ballscrews with cooling system
- Cooled linear guide
- Heat insulated back plate of electrical cabinet
- Sensor based spindle thermal compensation system
- Spindle and three-axis motor adjustment board for cooling and heat insulation
- Coolant cooling system
- Spindle cooling system



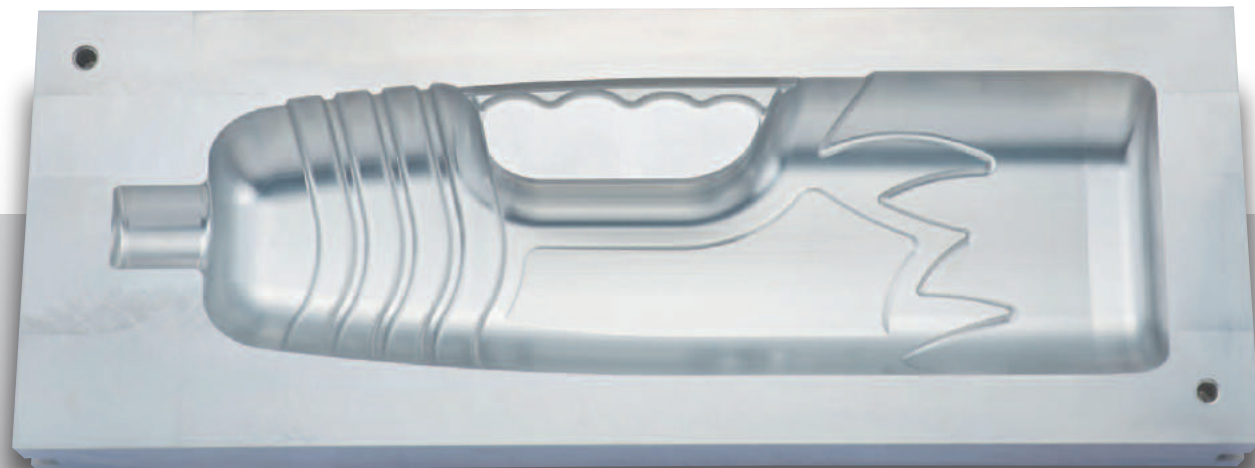
## High-performance Machining

### Empower Your Success

- Best surface quality
- High precision
- High-performance material cutting
- High efficiency
- High benefits



Bottle Mold Core



PET Bottle Mold Cavity

## Technical Highlights

### Your Correct Choice

- Artificial marble bed to ensure optimal vibration absorption
- Thermal stable bed
- Stable high-performance CNC system
- High-performance spindle system
- Ergonomic accessibility
- Easy to automate





## Stable Precision

Sustainable stability and high rigidity, high precision remains even when performing hard surface milling; a symmetrical gantry structure design and the excellent thermal stability of artificial marble ensures high precision.

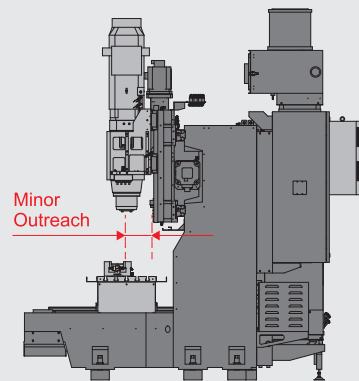
### High Rigidity Machine Structure

The dynamic rigidity design possessed by the high-strength gantry structure solution is ideal for molds, stamping dies, and parts that require high surface quality, extremely high positioning accuracy, and contour accuracy.

### High-speed, Powerful, Long-life Spindle

(Direct connect spindle and internal spindle)

### Wide Machining Scope



#### LG-600

Bench Dimensions : 750 x 450mm

Machining Scope : 600+200 x 470 x 350mm  
(X) (Y) (Z)

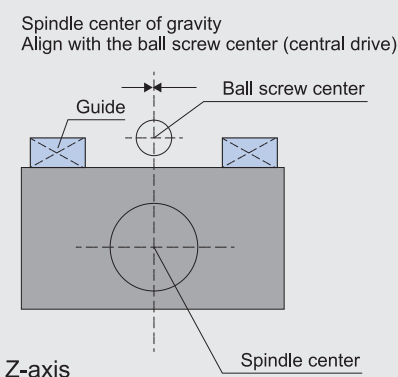
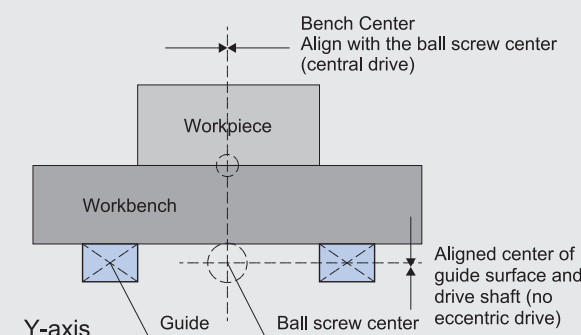
#### LG-1000

Bench Dimensions : 1,300 x 560mm

Machining Scope : 1,050+200 x 560 x 460mm  
(X) (Y) (Z)

Minor outreach design for better and more efficient machining.

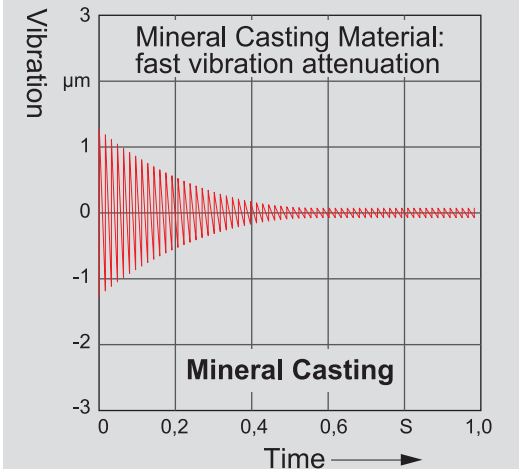
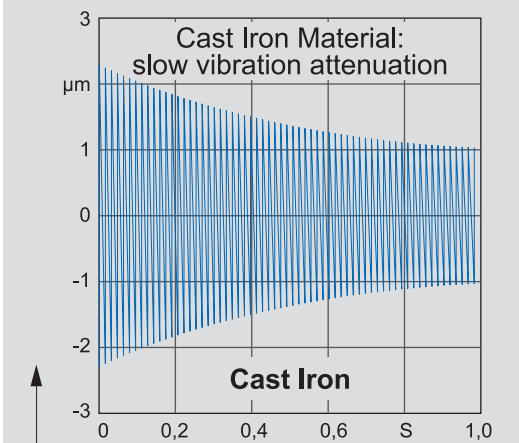
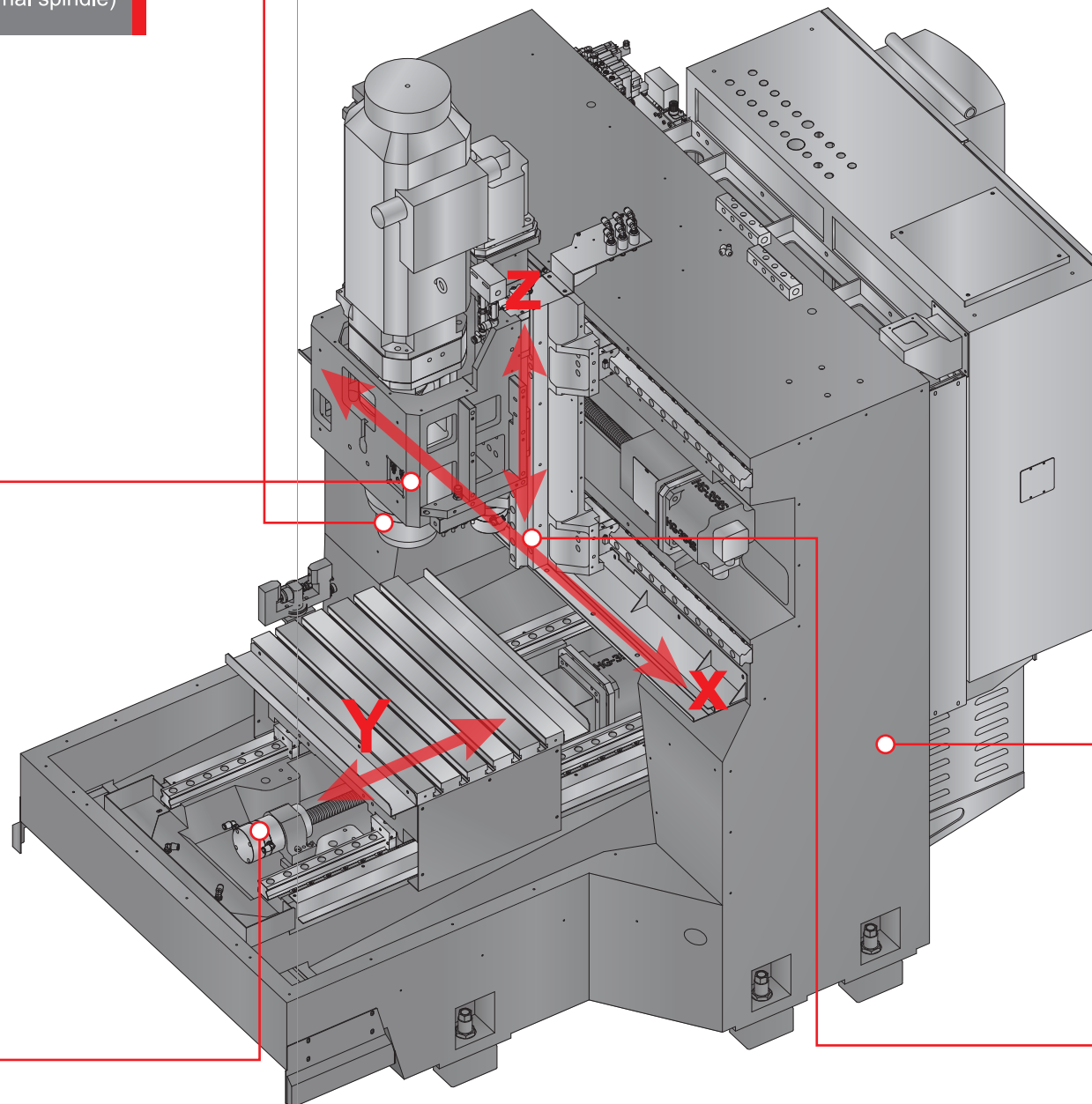
### No Eccentric Center Drive



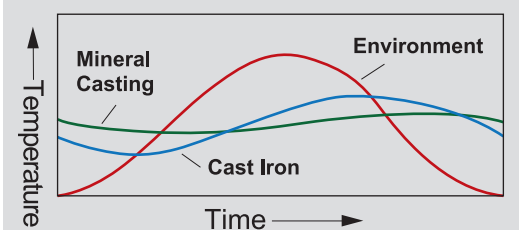
## High Rigidity Structure

### Benefits of Mineral Castings

- Constant rigid mineral casting base
- Improved dynamic machining performance
- Guaranteed machining repeatability and positioning accuracy
- Good shock absorption to dampen cutting vibration
- Extends the service life of the machine
- Low thermal conduction rate and temperature deflection for improved machining accuracy



Vibration absorption of mineral castings signifies when dynamic and large loads are applied to the machine.



Change of temperature hampers dimension accuracy of the machine in almost every aspect and may result in high precision.

**Ball screw bearing housing and main body integrated structure**



# Spacious Envelop



## Green Technology Go Green

### Go Green Focus on Environmental Protection and Green Technology

LITZ respects the earth and nature with a mind-set of gratitude and humility. This nurtures its proud corporate culture of heavy investment in meeting demanding environmental protection requirements. LITZ won ISO 14001 environmental standard certification for its products in 1999. It makes green products through green processes. LITZ fulfills its promises of "respecting the earth" by not only employing components that are almost always "recyclable and renewable" but also maximizing the use of metal packaging materials rather than wooden ones.

**Green Technology: green building, manufacturing, products**

**Committed To: energy recovery, energy saving, carbon reduction, renewable energy**



#### Employed Mineral Casting Materials

- Environmentally friendly
- Crushable
- Recyclable

#### Employed Iron Packaging Materials

- Repeated use
- Recyclable

## Energy Saving Functions & Technology

Spindle cooling unit motor OFF

Internal lighting turned off

Chip removal system motor stops

Auto screen on/off

Employs grease lubrication

Chip cleaning stops once cutting fluid has stopped



## Earth Friendly Energy-saving Machine

### Balance Effective Use of Limited Resources and Environmental Protection

The LG Series machine employs multiple energy saving designs for environment protection.

#### To Improve Energy Saving

- The standard configuration comes with auto on/off internal lighting.
- The chip remover stops once the auto operation program has ended.
- The heat exchanger remains inactive when the temperature in the electric box is lower than the given settings.
- Employs LED lighting.
- The work light turns off once the working door is closed.
- The oil mist recovery system employs M code for startup control (M08/M09).
- Features auto power off.

#### Based on an Environmental Protection Perspective

- Employs an oil mist recovery system.
- Lubrication oiling stops once the stroke axis has stopped.
- Fully sheet metal enclosed body design reduces noise and oil mist diffusion.
- Direct connect transmission design to cut noise and kinetic energy losses.
- Delivery in recyclable iron pallet to save trees.
- Employs a grease lubrication system.

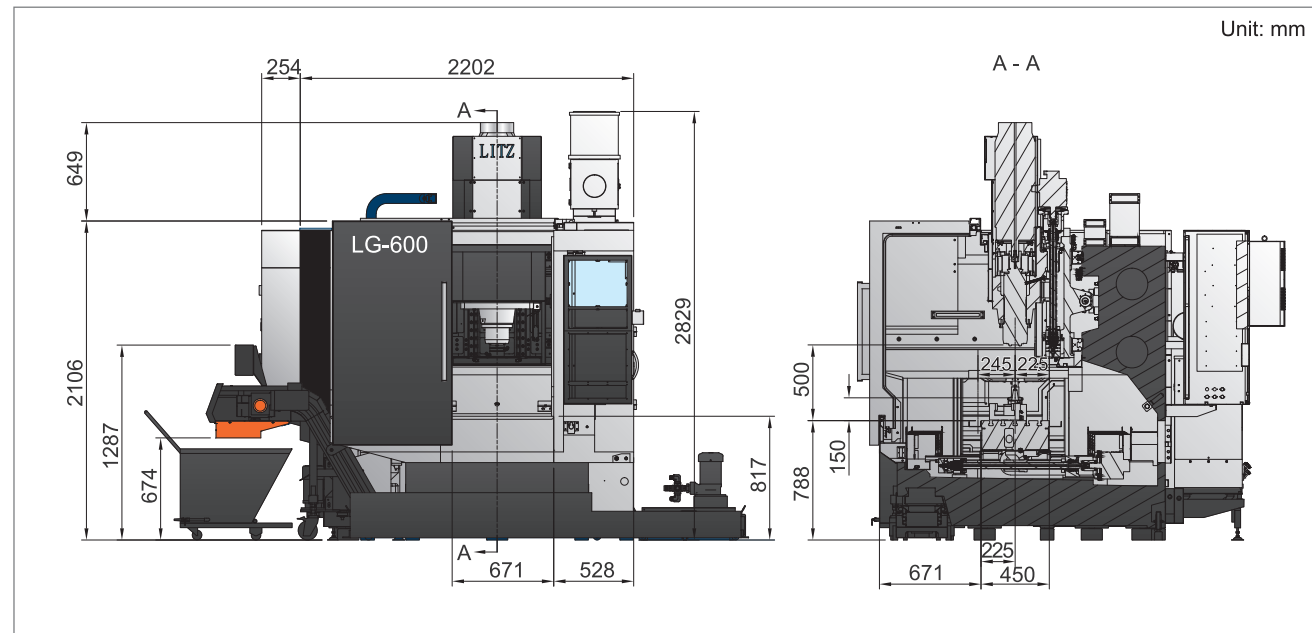
#### Delivery in Iron Pallet and Container



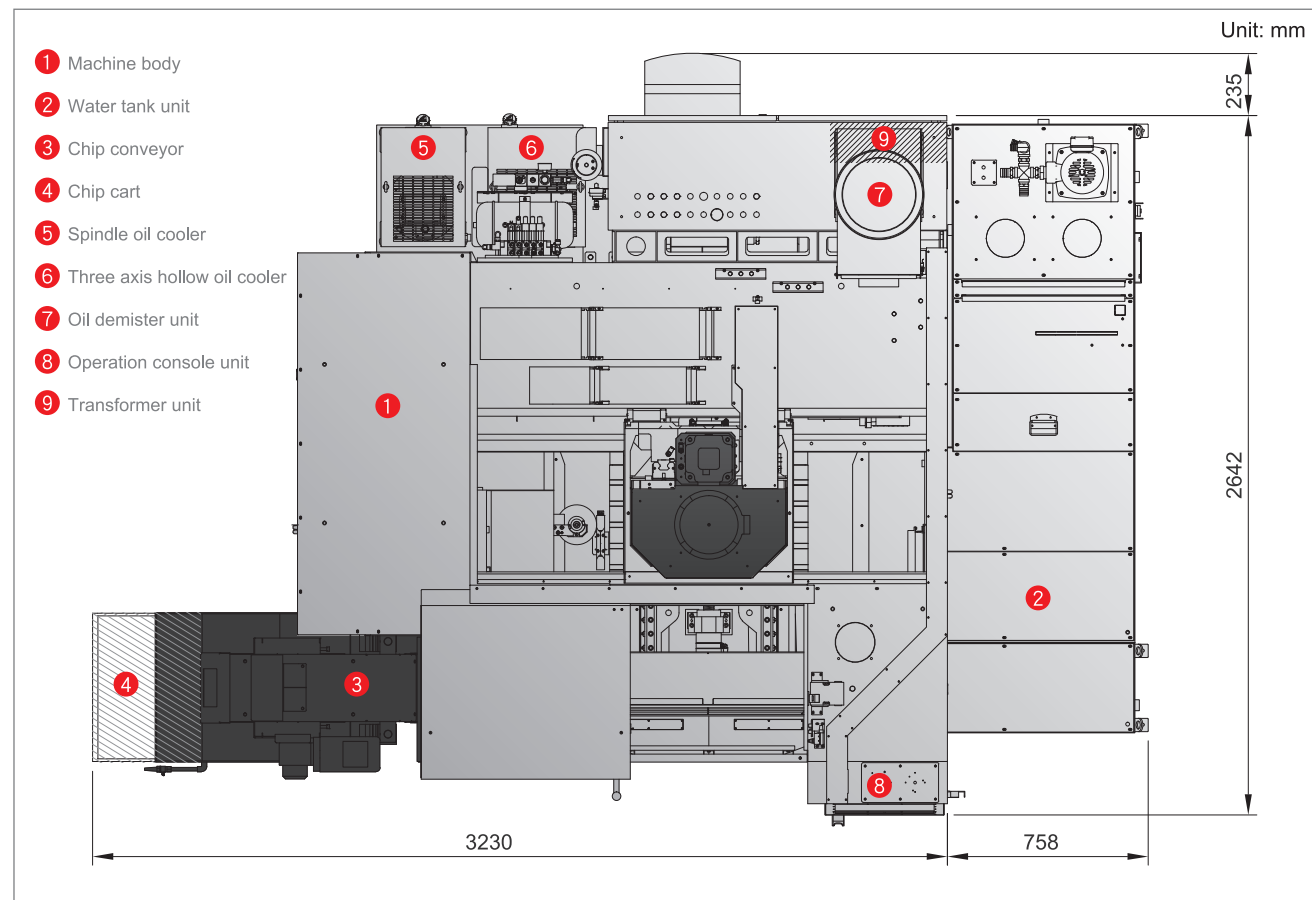


## Machine Dimensions / Installation Diagrams

### Layout Diagram

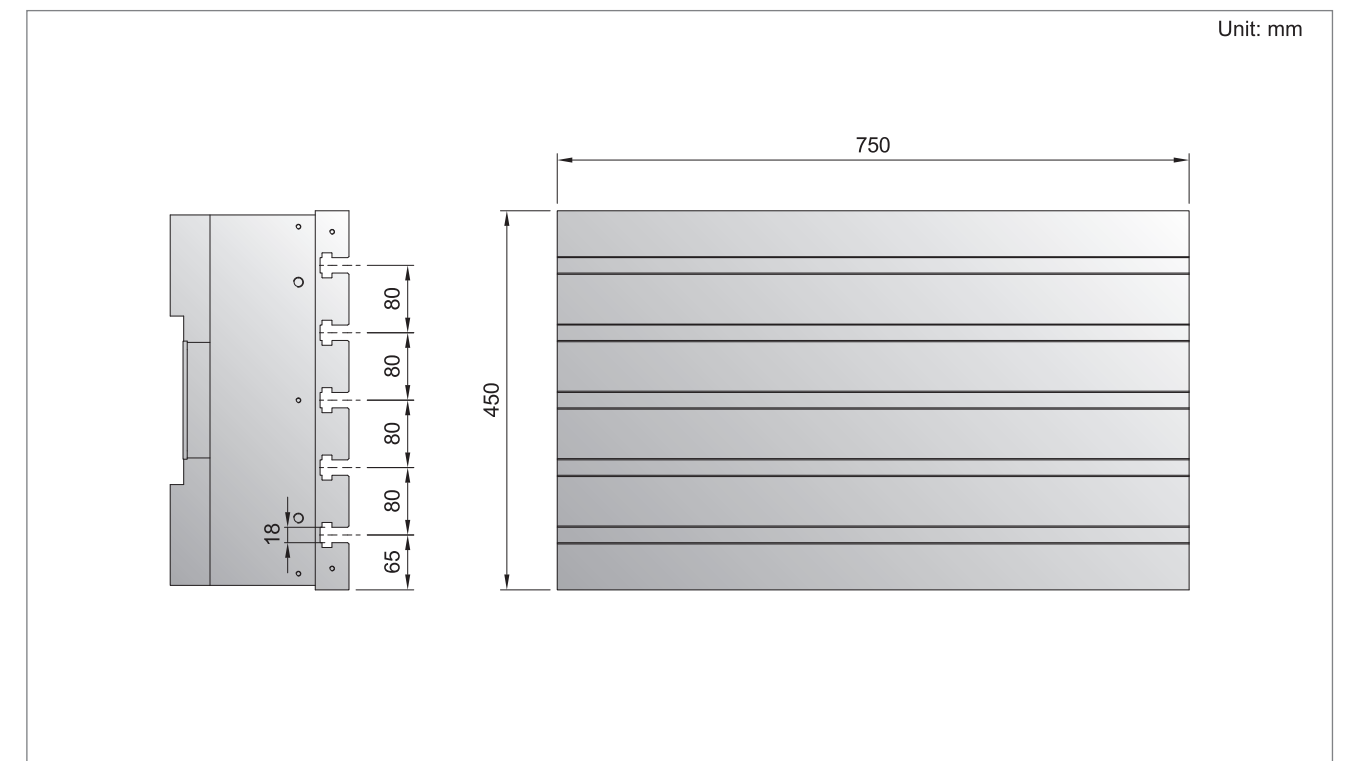


### Installation Diagram

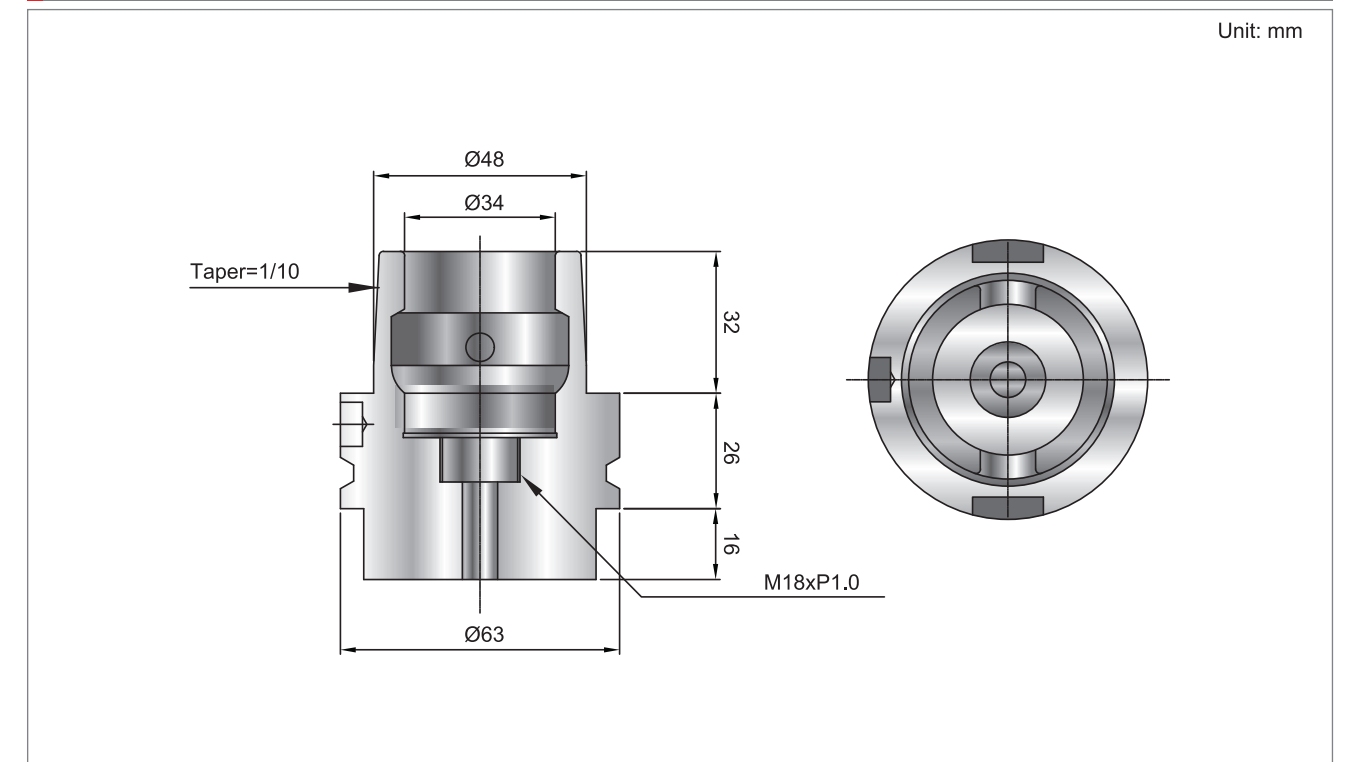


## Worktable / Tool Dimensions Diagrams

### Worktable Dimensions



### HSK-63A Tool Dimensions Diagram





Mechanical Specifications

Items		Unit	LG-600
Travel	X axis travel + tool change travel	mm	600+200
	Y-axis travel	mm	470
	Z axis travel	mm	350
Spindle	Spindle speed	rpm	15000
Rapid speed	X-axis rapid speed	m/min	30
	Y-axis rapid speed	m/min	30
	Z axis rapid speed	m/min	24
Automatic Tool Exchange System	Number of tools	pcs	24T
	Maximum tool diameter	mm	75/150(24T)75/127(32T)
	Maximum tool length	mm	300
	Maximum tool weight	kg	7
	Tool exchange method		Arm
	Tool type		HSK63A
Motor	Spindle motor	kw	15/18.5/22
	X/Y/Z-axis motor	kw	3.5/3.5/3.5
Table	Table size	mm	750x450
	Table load capacity	kg	500
Controller	Mitsubishi		M830
Other Specifications	Machine weight	kg	7970
	Power requirement	KVA	25
	Coolant tank capacity	L	340
	Air pressure requirement	kg/cm³	6

Standard Configuration and Optional Functions

● Standard equipment   ○ Optional equipment   ★ (please call for details)	
<b>Spindle</b>	<b>3-Axes Transmission System</b>
Spindle speed 15000 RPM (direct drive) ●	Coolant thru ballscrew ●
Spindle speed 20000 RPM (motor spindle) ○	Spindle and three-axis motor plate cooling ●
Spindle oil cooler ●	3-axes linear scale ○
Coolant through the spindle system (CTS) ○	Three axis roller guide ●
Spindle oil-air lubrication (for high-speed cutting) ○	
	<b>Controller</b>
<b>Cooling System</b>	Mitsubishi M830 ●
Programmable air blowing system outside the ●	Siemens 840D ○
Spindle internal ring spray ●	FANUC31i-B ○
Cutting fluid cooling system ○	
	<b>Electrical Parts</b>
<b>Chip Removal System</b>	Working lamp ●
Chip conveyor ★●	Alarm indicator ●
Chip flushing device ●	Spotlight lighting ●
Coolant tank filter system ●	M30 auto power off system ●
	Electric cabinet cooling system ●
<b>Measurement System</b>	
Infrared tool break detector ○	<b>Others</b>
Tool length measurement system ★○	Oil demister system ○
Workpiece measurement system ○	4th/5th axis (rotary axis) ○
<b>Oil-water Separator</b>	
Disc-type oil-water separator ●	
<b>ATC System</b>	
Automatic tool changing mechanism (ATC) ●	
Tool specifications HSK63A ●	
Arm type tool magazine 24T ●	
Arm type tool magazine 32T ○	



## Showroom Center and Technical Support



### Business and Service Locations Around the World



**Showroom Centers** are aimed at providing high-quality, fast, comprehensive, and professional top grade services for customers in neighboring areas. They fulfill the business vision of LITZ—"LITZ, your life long good partner"—by satisfying each and every customer's needs, including spare parts provision and maintenance, training, machining demo, process solution preparation, and information sharing.

#### Trustworthy

During the usage of LITZ machines, we provide great service and rapid spare parts supply, to assure the machine is in good condition.



### Showroom Centers

- Planned 5S Centers
- Established 5S Centers



### 5S Stores Around the Country

(Sales, Service, Showcase, Service and Spare Parts, Technical Support)

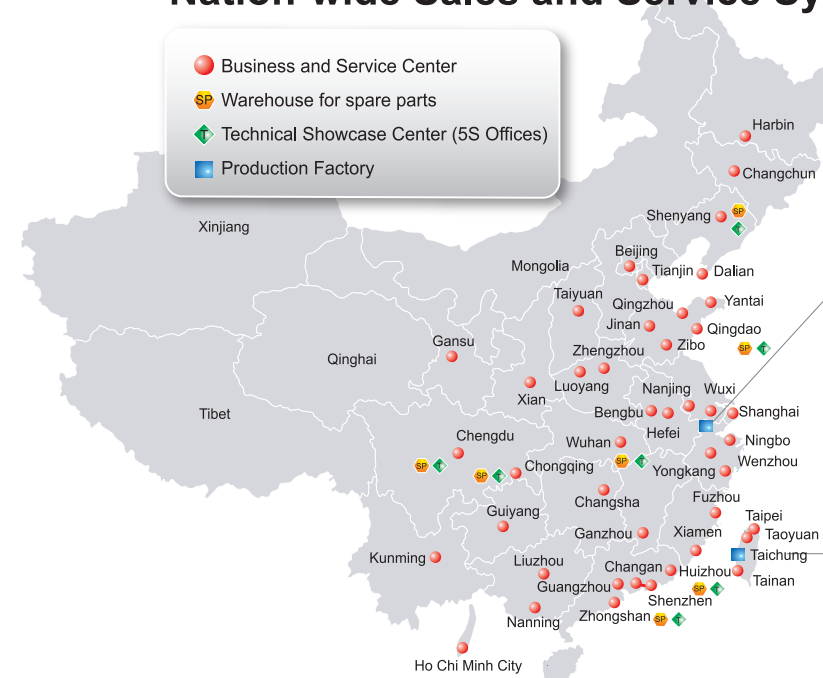
**LITZ Machinery provides demonstrations and services within an arm's length.**

The marketing system from LITZ Showcase Center reflects LITZ's commitment to customer service. The well-established, fast and professional technical support, along with adequate equipment supply and well-organized training systems assure excellent machine operation. This is the priority concern for the majority of our machine customers.

The concept of the LITZ Showcase Center is to create a close relationship among the machine manufacturers, machine dealers, and customers. In addition to showing the latest products from LITZ, the center is also equipped with a CNC training workshop and spare parts warehouse. The professional technical teams provide training, maintenance, accessories and sales to our customers to achieve a comprehensive and thoughtful one-stop service.

### Nation-wide Sales and Service System

- Business and Service Center
- Warehouse for spare parts
- Technical Showcase Center (5S Offices)
- Production Factory



Jiaying LITZ



Taiwan LITZ