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Welcome to Litz website for more information

Dealer

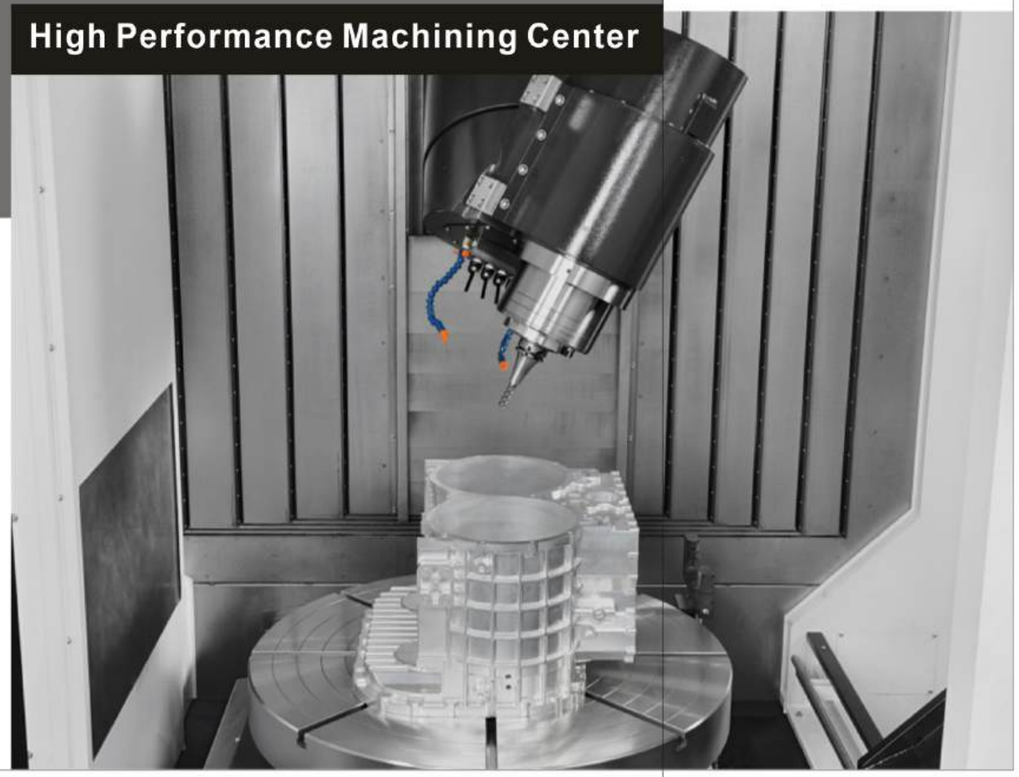
2025.A

HU Series

800
1000
1200
1600

5 AXES Efficiency Horizontal Machining Center

High Performance Machining Center



Litz Hitech Corp. | Litz Machine Tools (JiaXing) Corp.

A new benchmark in five-axis machining

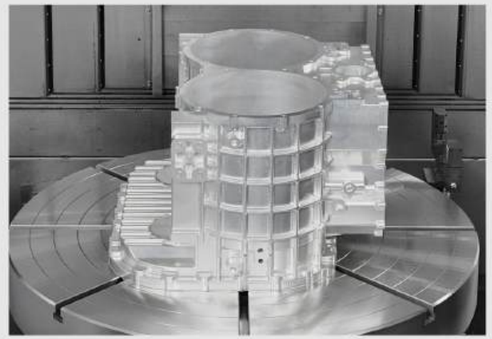
The HU series machine tools feature highly stable precision, performance, and efficiency, achieving optimal machining capabilities and part accuracy under high dynamic conditions. Whether processing difficult-to-cut materials in the aerospace industry or meeting the highest surface quality requirements in mold manufacturing, they provide ideal machining conditions.

Unique

The all-new HU series transforms every workpiece into a masterpiece. With comprehensive cooling measures and a newly designed structure, it not only ensures exceptional rigidity but also lays the foundation for outstanding precision and performance. The innovative tool magazine can hold up to 40 tools, offering maximum flexibility within the smallest footprint.

Processed workpiece: oil drill bit

Processed workpiece: New energy vehicle motor housing



5-axis vertical and horizontal machining center

The structure of the whole machine has been optimized and designed, with larger working space, smaller interference, stronger cutting rigidity, and more compact installation space.

Axial structural properties

X, Y, Z axis guide rails use linear rolling guide rails
Good rigidity, high static load and dynamic wear capacity, smooth operation and low friction ensure high precision and stability of the machine tool.

High rigidity and high precision B-axis structure
The B-axis adopts a high-precision and high loading turntable bearing structure and is directly driven by a torque motor. The B-axis reaches a high-precision indexing of 0.001°.

Axial specifications

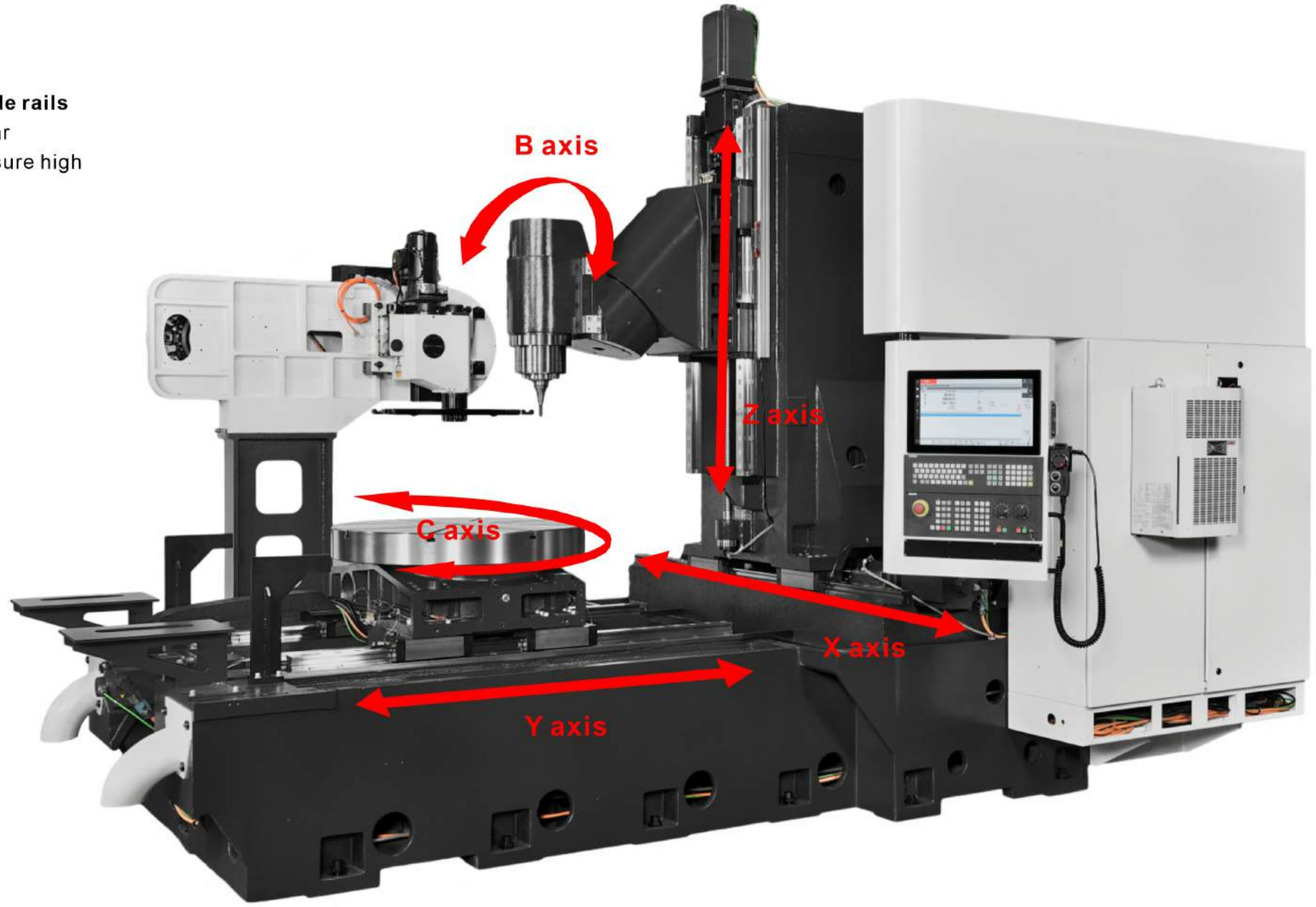
X-Axis Travel 1000 mm

Y-Axis Travel 880 mm

Z-Axis Travel 710 mm

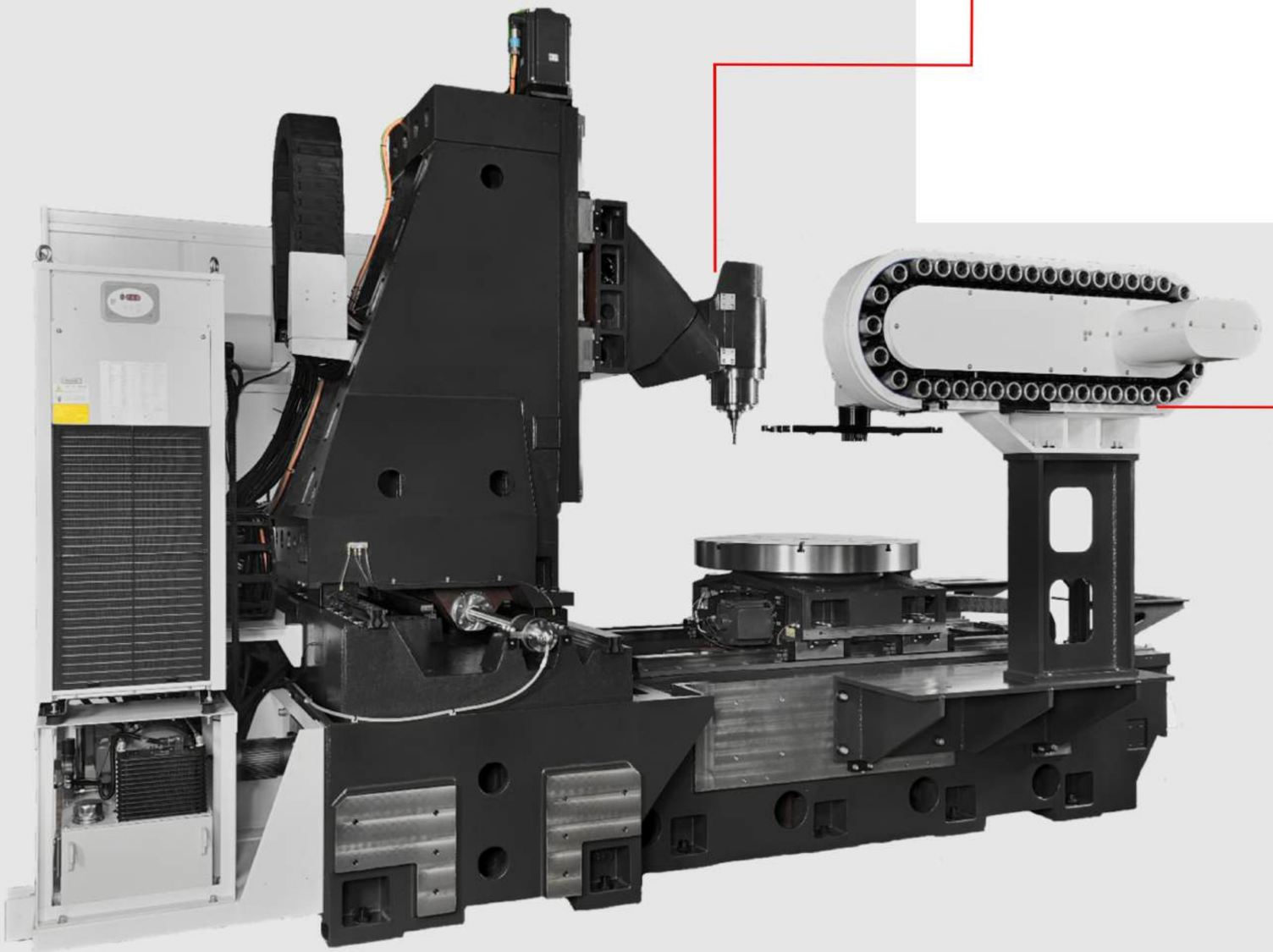
B-Axis Rotation range 0-180°

C-Axis Rotation range 360°



Highest rigidity ensures maximum processing performance

Highly stable and high-precision structural design further improves overall rigidity. Equipped with B axis and HSK-63A motorized spindle, Highly rigid design supports high torque for higher machining performance



Spindle Transmission

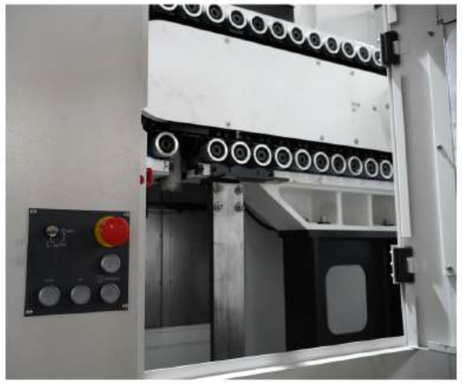
5-axis universal milling head for mechanical spindle

Tool specification

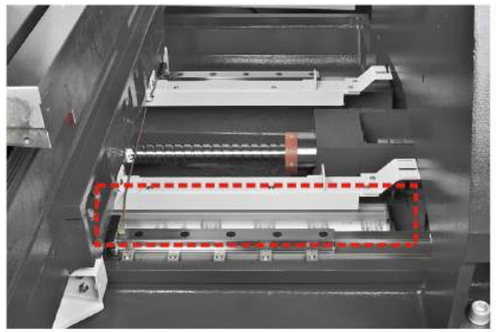
- Max. tool length : 340 m/m
- Max. tool dia (Without Tool Adjacent): Ø70 / (Ø125) m/m
- Max. tool weight : 7 kg
- Number of Tools : 40T ST 60T OP

1 Full enclosed ATC

Full enclosed ATC design to prevent duct or oil mist go inside the ATC area.



2 High Precision Linear Scale

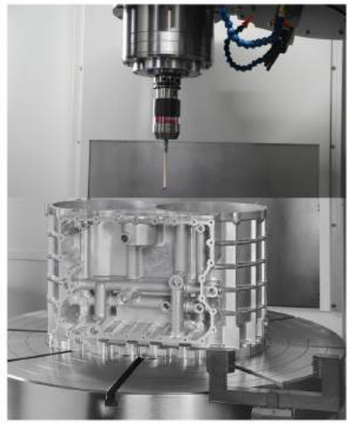


The X/Y/Z-axis can be equipped with a linear scale system to detect thermal displacement due to rapid movement of the machine. The thermal displacement result will be sent to the controller for compensation, suitable for high precision parts machining.

3 Tool Length Measurement OP

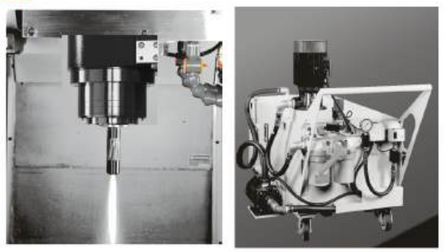
The automatic tool measuring system will measure the tool length and input the result into the controller automatically for compensation

4 Workpiece Measurement System OP



- Accurate contact measurement characteristics without circular error
- Wear-free photoelectric measuring structure
- Two measurement systems can share one infrared receiver
- Better battery life
- High measurement accuracy even with cutting fluid
- Rugged design

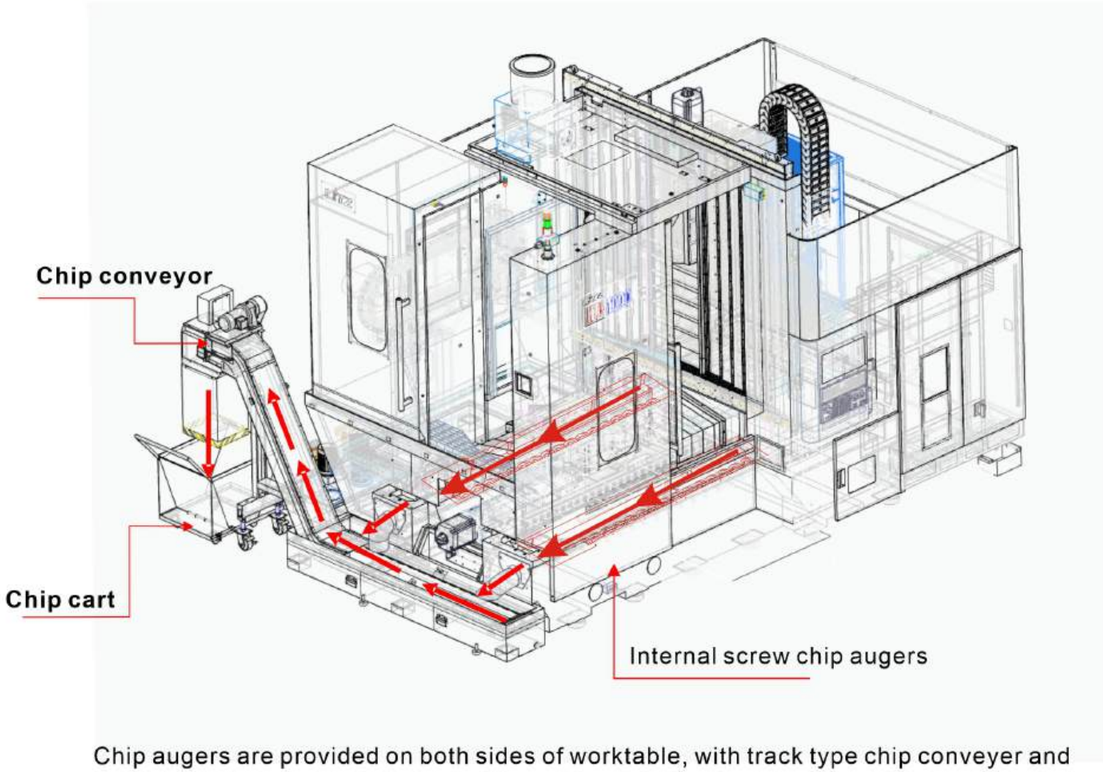
5 Workpiece Measurement System OP



With the addition of the coolant through spindle system, the cutting coolant passes through the center of the spindle and is ejected at the tip of cutter to directly cool the workpiece and the cutting blade of the cutter by removing the heat generated from cutting in order to ensure excellent cutting quality, and it is suitable for component parts of deep hole processing.

6 Three-color signal light

7 Chip Management



Chip augers are provided on both sides of worktable, with track type chip conveyer and chip storage cart installed in front of machine. Via this chipremoval mechanism, large amount of metal chips can be handled.

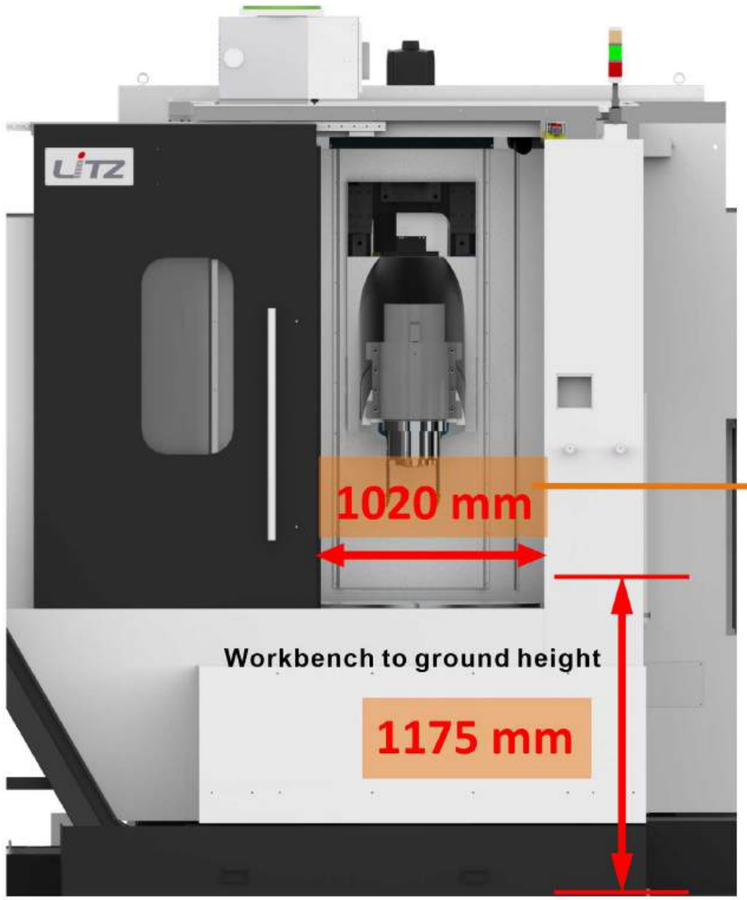
8 Selection of track type chip conveyor devic

● : Excellent result ○ : OK X : Inferior result

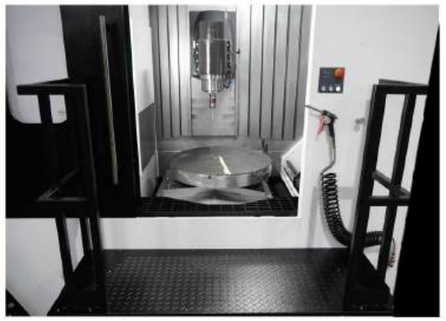
Material		Steel	Cast iron	Al / colored metal	Mixed chips
Shape of chips					
Internal chip remover	Screw type	○	○ (Dry cutting)	○	○
Track type chip conveyor	Scrap type: Cast iron (heavy)	×	●	×	○
	Scrap type: Aluminum (light)	×	×	●	○
	Chain-type	●	○	×	○

Front and top door in one piece.

Wide opened front for easier loading/unloading.



Front operating platform



Front stairs and door pedals make it easy for people to work in a safe area

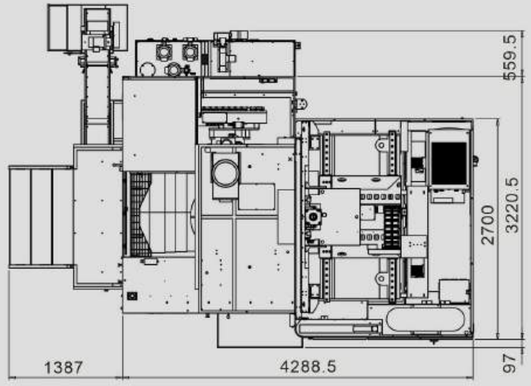
Rotatable operation panel

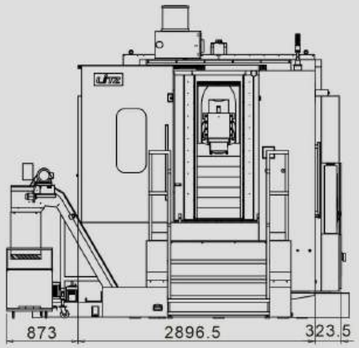
Ergonomic operation panel design..

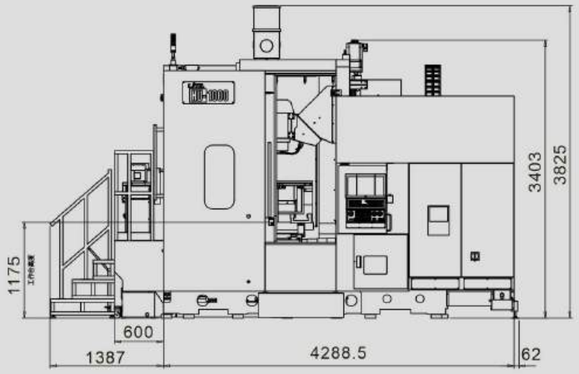
Machine Layout

Outline Dimensions

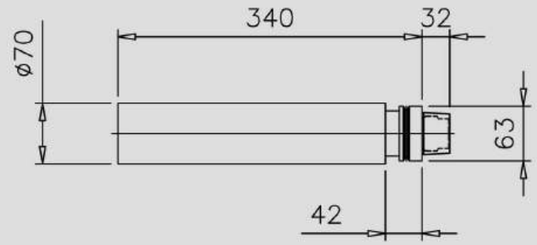
Unit: mm





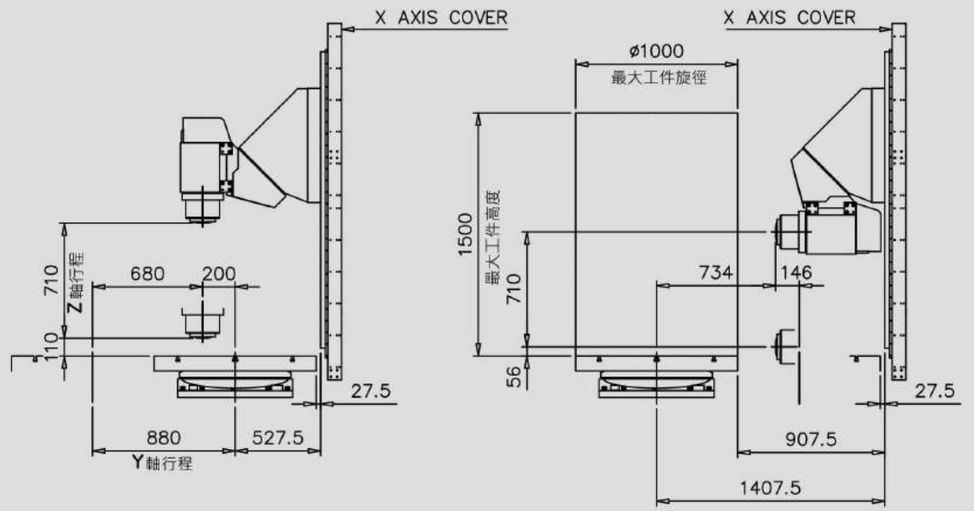


HSK-63ATool Dimensions Diagram

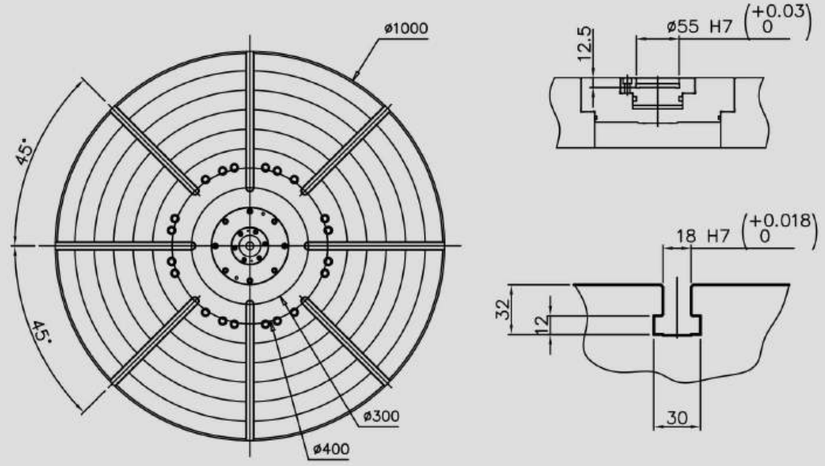


Maximum processing range

Unit: mm



Worktable Dimensions



Technical Data

		HU-1000
Movement		
X/Y/Z Axis Travel	mm	1000/880/710
B axis (Swivel Head)	deg	-0~+180
Spindle Nose To Work Table (Vertical)	mm	110~820
Spindle Center To Work Table (Horizontal)	mm	56~766
From The Nose Of The Spindle To The Center Of The Work Table (Horizontal)	mm	-146~734
Work Table		
Work Table Size	mm	Ø1000
Max. Workpiece	mm	Ø1000
Max. Height Of Work Piece	mm	1500
Max. Load Of Work Table	Kg	1500
T-Slot	mm	18
Mini. Worktable Division Angle	deg	0.001
Work Table To Ground Height	mm	1175
Spindle		
Max. Spindle Speed	RPM	18000
Max. Torque	N-m	154
Spindle Taper		ISO40
Spindle Bearing Inner Diameter	mm	Ø65
Spindle Transmission Mode		Build-In Motor
Feeds		
X/Y/Z Rapid Speed	mm/min	36000
Cutting Feed	mm/min	1-20000
Manual Feed	mm/min	1260
A.T.C.		
Tool Handle Type		HSK63A
Tool Storage Capacity	T	40
Max. Tool Diameter (Without Tool Adjacent)	mm	ø70 (ø125)
Max. Tool Length	mm	340
Max. Tool Weight	kg	7
Control system		
Controller system		Siemens ONE
Power Supply		
Power requirement	KVA	42
Capacity of oil tank/coolant tank		
Capacity, Hydraulic System	L	60
Capacity, Lubrication System	L	4
Capacity, coolant system	L	620
Mechanical Specifications		
Height	mm	3825
Floor area	mm	5737x4200
Weight	Kg	18000

- All the photos contained herein are for reference only. In case of any discrepancy with the actual machine parts, the actual machine shall prevail.
- LITZ reserves the right to modify the product specifications, appearance, equipment or discontinue the products.

Optional List

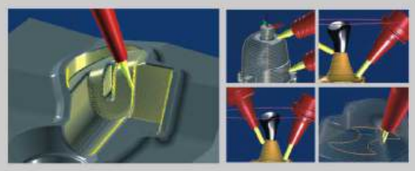
HU-1000	
Spindle system	
Spindle System HSK-63A	●
Spindle System BT-40	○
Spindle System CAT-40	○
Spindle System DIN-40	○
Spindle Speed 18000 RPM	●
Torque motor drive	●
Spindle cooling system	●
B-axis rotary milling head	
Torque motor drive	●
0.001 degree division	●
C-axis rotary table	
Worm gear drive	●
0.001 degree division	●
Workbench T-slot (W18)	●
High-precision correspondence	
3-Axis Linear Scale	●
X/Y/Z Hollow cooling of shaft guide rod	●
B-Axis Linear Scale	●
C-Axis Linear Scale	●
Measuring System	
Tool length measuring system	★ ○
Centering Calibration Function	★ ○
Environmental response	
In-machine oil-water separation system	●
Oil demister system	○
Disc oil-water separator	○

Cutting fluid corresponding	
Spindle annular water spray	●
Water spray outside the spindle	●
Spindle outer blowing system	●
Coolant Through Spindle ECO(30Bar)	○
Coolant Through Spindle (70Bar)	○
Control system	
Siemens ONE (5-Axis/5-Interactive)	●
FANUC 31i-B5 (5-Axis/5-Interactive)	○
HEIDENHAINTNC7 (5-Axis/5-Interactive)	○
Electrical Components	
M30 Automatic Shutdown System	●
Worklight	●
Alarm light	●
Electrical box heat exchanger	●
Air conditioner	○
Chip Conveying System	
Chain-type Chip Conveyor	★ ●
Chip Collector	●
Internal screw chip augers	●
Machine top chip removal system	●
ATC Unit	
Tool Magazine Capacity 40T	●
Tool Magazine Capacity 60T	○
Automated response	
automatic front door	○
Safety System	
Front door/side door safety switch	●
CE Safety Specification	○
Others	
Rotary Window	○

● Standard ○ Options ☆ **Upon request**

Total Production Solution

Highly efficient manufacturing fashion, equipped with high performance control system. The high speed contouring capability can achieve best possible surface quality under most demanding machining cycle time. Highly dynamic five axes machining provides solution for complex tasks.



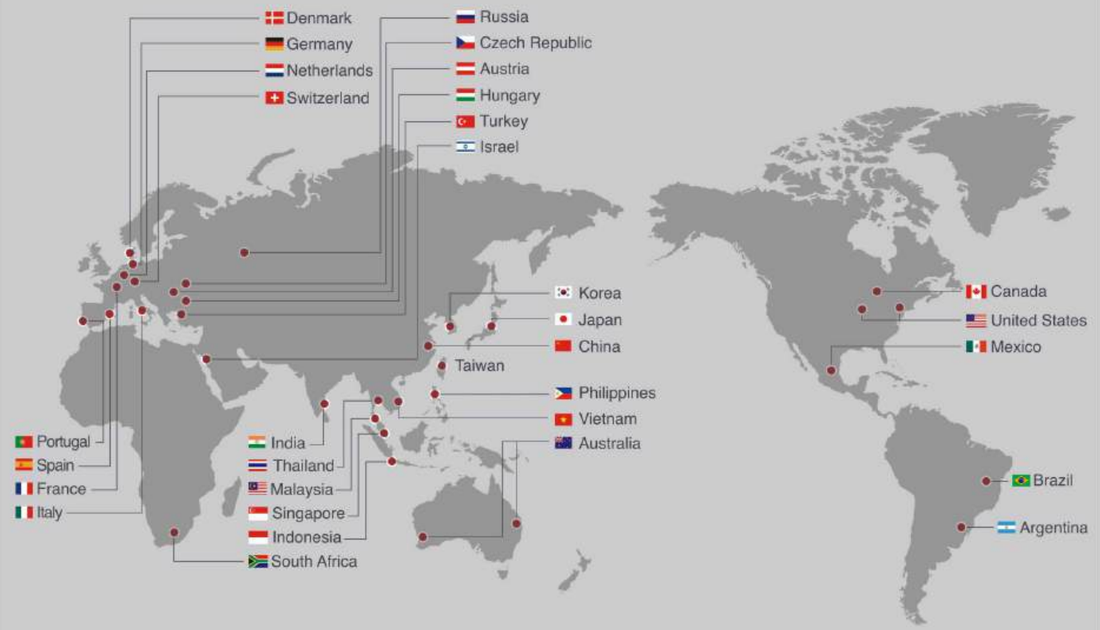
LITZ

Litz Hitech LU Series

5 Axes Series employs U shape base with dual-support A/C axes rotary worktable's high rigidity mechanism. The machine is equipped with 12000RPM direct-drive high speed spindle. High durable roller type linear guideways, 3 axes high precision linear scales along with other high quality components brings out the excellences of the 5 axes simultaneous control. Mill, drill, tap, spiral, irregular and other complex machining can be easily achieved.

Technical Support Global Presence

SALES & DISTRIBUTION NETWORK



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