



LU-800

5-Axes



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G General Machine Overview

LU-800

Five Axes



The Most Advanced 5 Axes Machining Center

The Litz LU-800 gantry-type 5 axes machining center is built & designed with high rigidity mechanism and high precision in mind.

To achieve high rigidity, the LU-800 employs the U-Shape base, with dual sides A axis support and high quality rotary table C axis. It is also equipped with 12000RPM direct drive spindle, heavy duty roller-type linear guideway and 3 axes linear scales.

The LU-800 is capable to perform high precision cutting, with X, Y, Z,

A, C axes moving simultaneously. Inclined Surface Machining, Spiral Contour Machining, Irregular Contour Machining and other complex cutting tasks can be made simple with the LU-800.



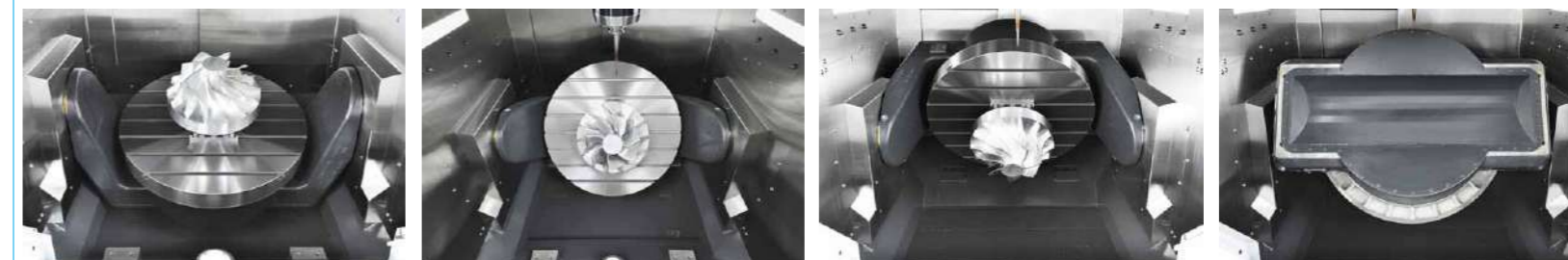
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A, C Axes



A, C Axes

The Litz LU-800's A, C rotary axes utilize the direct drive motors, at the same time, the motors are complimented with rotary encoders. This setup is superior to the conventional worm gear setup in drive transmission & power efficiencies. The A axes is also dual sides supported, each side is powered with a powerful motor. Thus, rigidity and precision quality is top of the class.



Highlight

- Maximum Work Area
- High Worktable Load (1000Kg For Max. Precision)
- C Axis 360 Degrees Rotational Angle
- Minimal Table To Door Distance (For Easy Workpiece Loading)

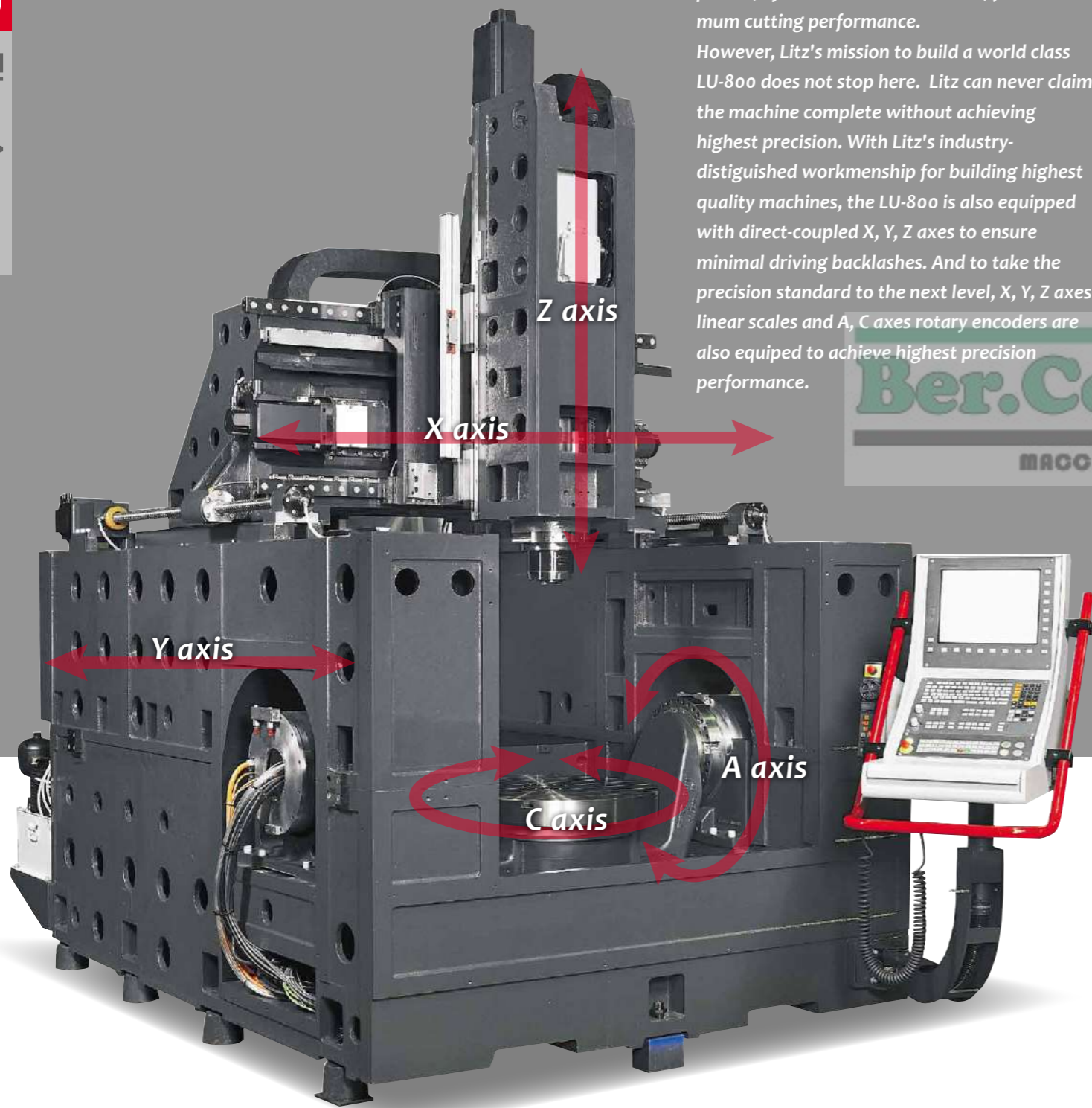
M Machine Mechanism

LU-800

Five Axes

Rigid, High-Powered Without Compromising Precision

The Litz LU-800 is designed to be an ultra rigid 5 axes to handle heavy workpieces. The mechanism itself is a state of art design. To compliment the LU-800's rigid structure, the A & Y axes are each powered by a pair of high power / synchronous servo motors, for maximum cutting performance. However, Litz's mission to build a world class LU-800 does not stop here. Litz can never claim the machine complete without achieving highest precision. With Litz's industry-distinguished workmanship for building highest quality machines, the LU-800 is also equipped with direct-coupled X, Y, Z axes to ensure minimal driving backlashes. And to take the precision standard to the next level, X, Y, Z axes linear scales and A, C axes rotary encoders are also equipped to achieve highest precision performance.



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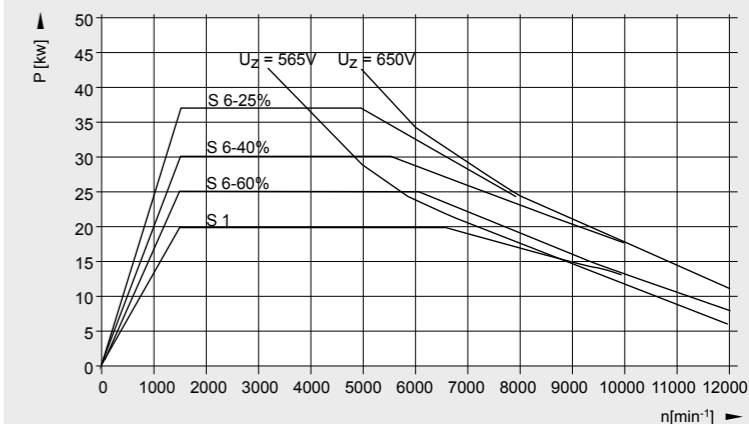


The Cutting-Edge Spindle

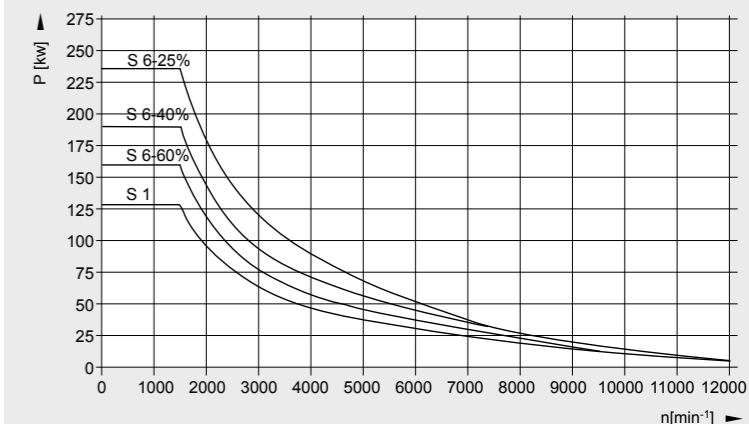
The Litz LU-800 is equipped with the most industry advanced spindle technology: a direct coupled spindle. It ensures highest torque at low rotation range. The compound ceramic spindle bearing provides the spindle with highest rotational stability. Meanwhile, the spindle housing is temperature controlled by a cooling unit for ultimate precision stability.

S Spindle Unit

Power characteristic curve



Torque characteristic curve



Direct Coupled Spindle

- * High Performance & High Torque
- * Coolant-Through-Tools Can Be Used w/ The Spindle
- * Compressed Air Through Spindle For Spindle Cooling
- * The Spindle Is Water Cooled For Ultimate Temperature Control

ATC

Slidable Roof

LU-800

Five Axes

Dual Magazine (A, B) Mechanism



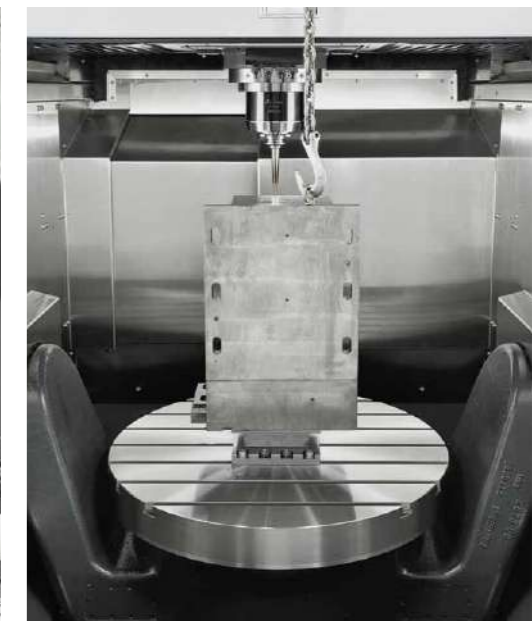
ATC Unit

Tool Storage: 32T
 Max. Tool Length: 300mm
 Max. Tool Diameter: 125mm
 Max. Tool Weight: 7Kg
 Max. Magazine Loading: 128Kg

A, B Magazine Unit

A Magazine Unit (Standard)
 Tool Storage: 32T

B Magazine Unit (Optional)
 Tool Storage: 32T



Litz is not only satisfied by just developing a reliable machine. The LU800 takes the Litz's commitment to offer a most operator-friendly machine into highest level, by featuring a slidable roof. The LU800's sliding roof brings a less-stressing experience into operation, operator can load and unload workpieces with ease.

Controller iTNC-530 & 840DSL

LU-800

Five Axes

Controller

The Litz LU-800 is available with Heidenhain iTNC530 and Siemen 840D SL controllers. Both controllers are the leaders in NC controller market, they represent highest production efficiency, maximum reliability in automated machines. Both iTNC530 and 840D are unquestionably also the advanced controllers for 5 axes machining.



Chip Removal Mechanism



Chip Removal Mechanism

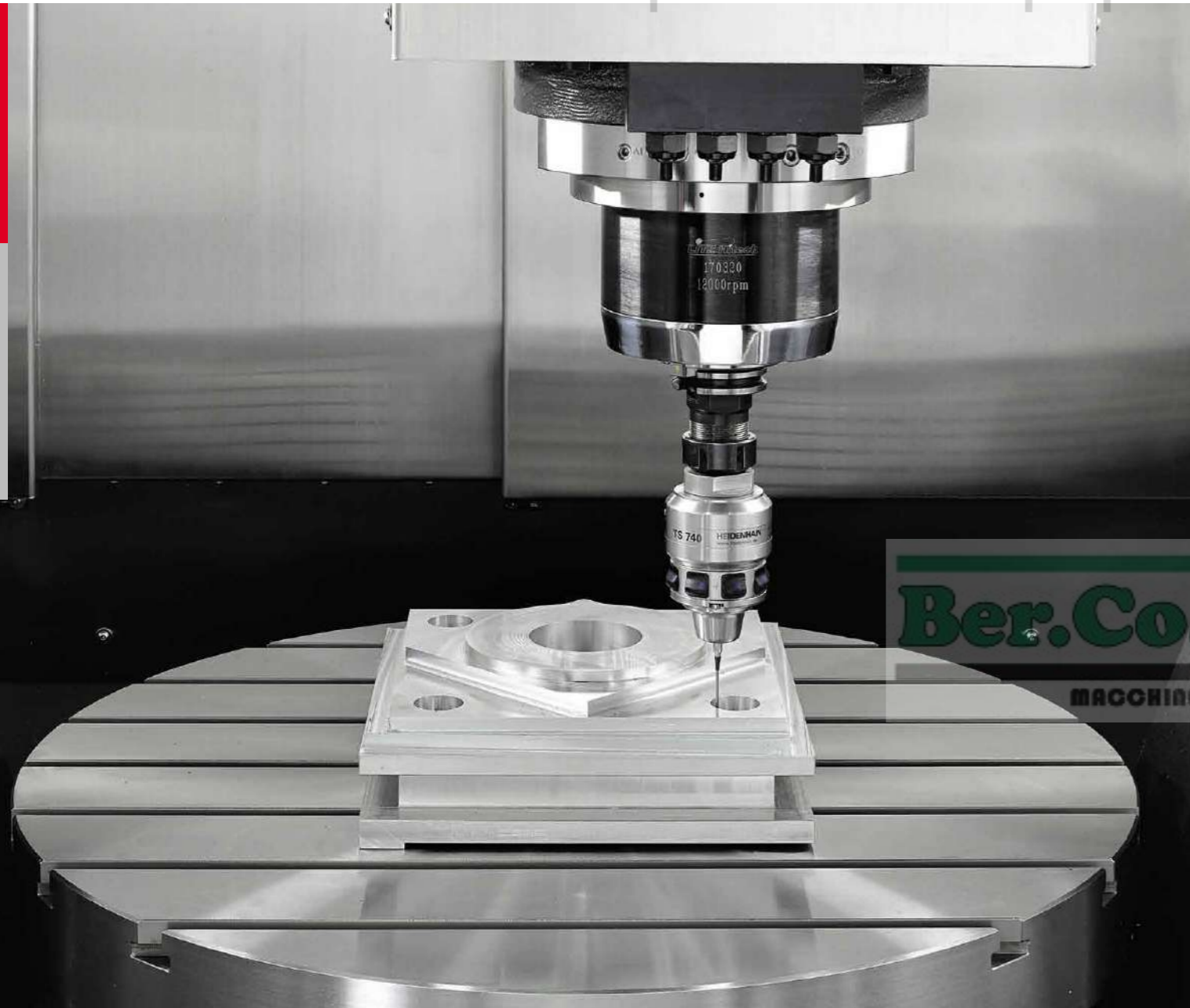
The meticulously designed chip removal mechanism in the machining area allows the chips to smoothly flow down. The slanted angle can also avoid accumulation of these chips inside the working area, and eliminate the machining down time. Additionally, the optional washdown system and chip conveyor can be equipped for maximum efficiency.

S

Standard & Optional Equipment

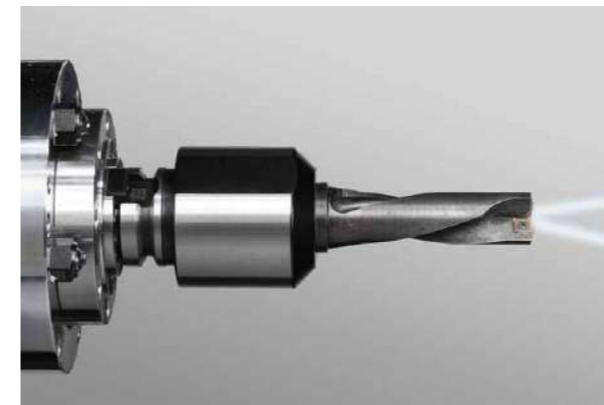
LU-800

Five Axes

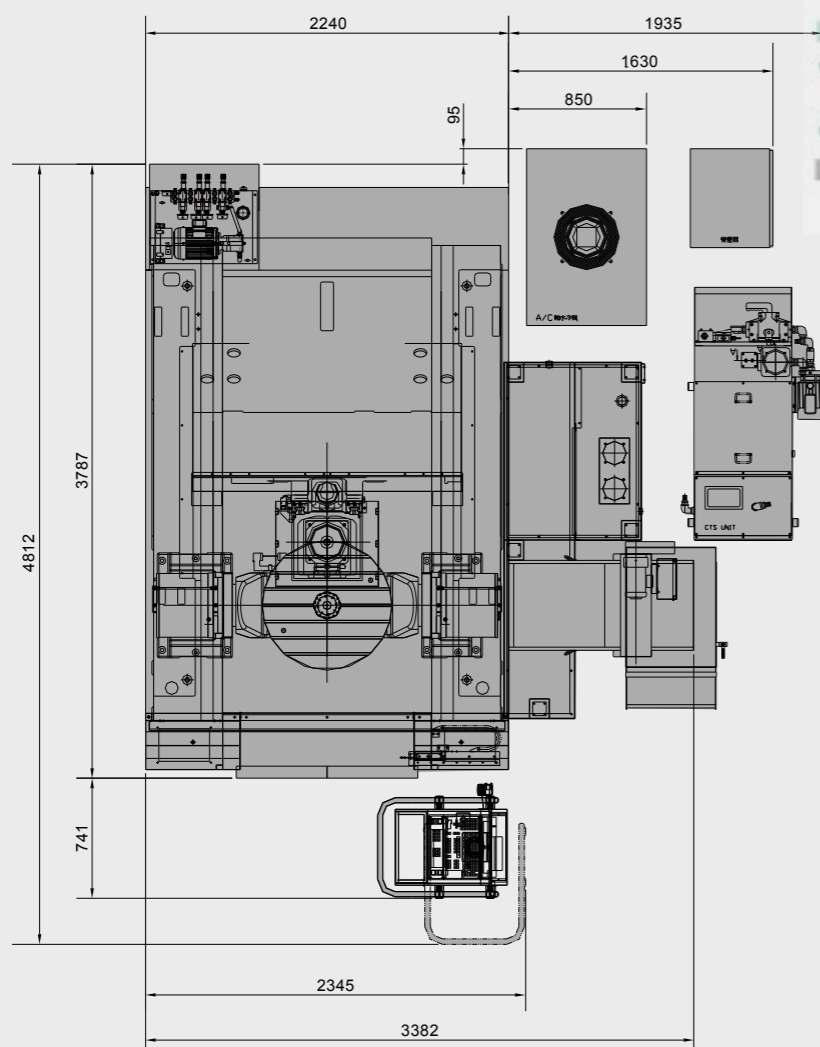
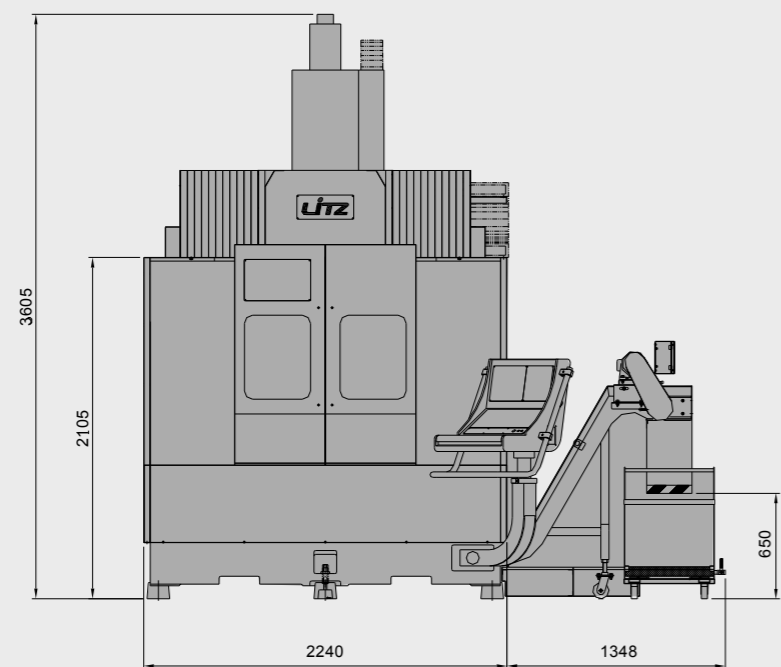


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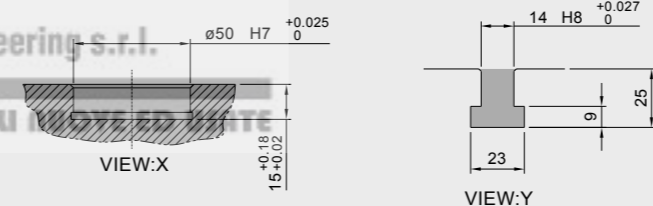
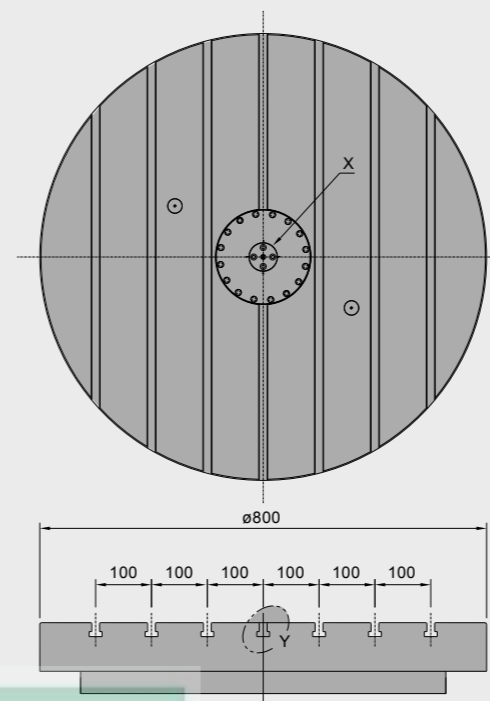
To compliment the already well-built LU800, Litz offers a series of accessories to better accommodate user's demand in every aspects. These accessories can bring the best out of the LU800, and having the machine to maximize its performance.



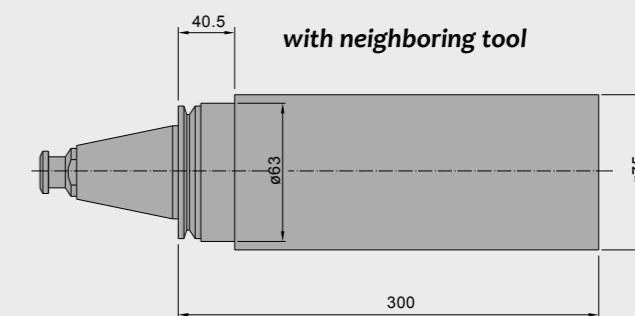
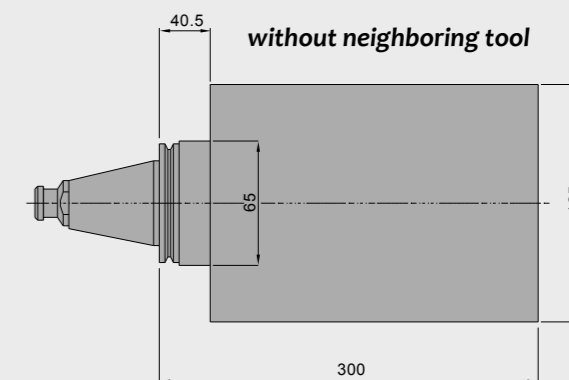
Machine Layout & Diagram



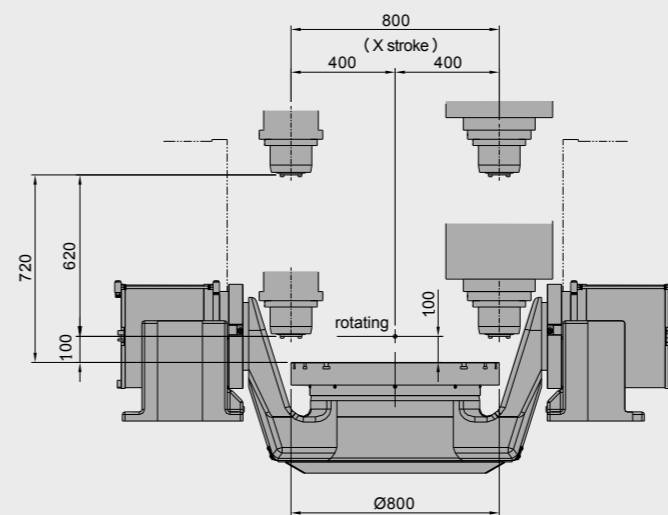
Rotary table dimension



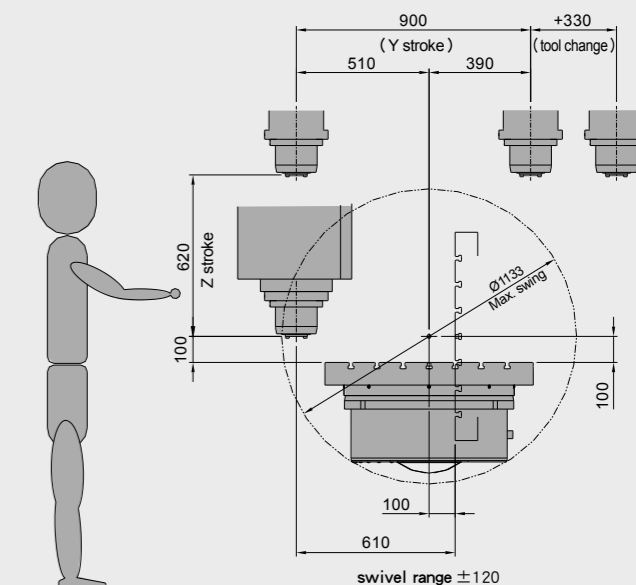
Tool dimension



Working area



Interference area



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M Machine Spec

LU800 Technical Information

Machine Spec

X Axis Stroke	mm	800
Y Axis Stroke	mm	900+330
Z Axis Stroke	mm	620
Spindle Nose To Worktable	mm	100~720
Worktable Size	mm	800 Dia
Worktable Load	kg	1000

Drive System

Rapid Speed (X/Y/Z)	m/min	48/48/48
Cutting Feedrate (X/Y/Z)	m/min	0.001~20

Rotating Axis

A Axis Rotating Angle	degree	+/-120
C Axis Rotating Angle	degree	360
A Axis Max Speed	rpm	75
C Axis Max Speed	rpm	100

Spindle System

Spindle Drive Method	Direct Drive	
Max Spindle Speed	rpm	12000
Spindle Power (Cont./30mins)	kw	20/37
Max Torque	Nm	236
Tool Shank	#40 BBT/CAT/DIN/HSK A63	

ATC System

Tool Magazine	set	32T
Tool Changing Mechanism		Drum
Max Tool Diameter & Adjacent Tool	mm	75Dia/125Dia
Max Tool Length	mm	300
Max Tool Weight	kg	7

Controller

Controller		iTNC530
Chip Conveyor		Chain Type
Machine Size		4528*2240*3605
Machine Weight		19000

Accuracy

X/Y/Z 3 Axes Positioning	mm	0.010
X/Y/Z 3 Axes Repeatbility	mm	0.006
A/C Axes Positioning	arc sec	10
A/C Axes Repeatbility	arc sec	5

Optional List

Spindle

Spindle Speed 12000RPM	<input checked="" type="radio"/>
Spindle Speed 18000RPM	<input type="radio"/>
Spindle Oil Chiller	<input checked="" type="radio"/>
Spindle Motor Plate Cooling System	<input checked="" type="radio"/>
Coolant Through Spindle	<input type="radio"/>
Spindle Air Seal System	<input checked="" type="radio"/>

Cooling System

Spindle Programmable Air Blow	<input checked="" type="radio"/>
Oil Toolholder Stopping Block	<input type="radio"/>
Spindle Splash Ring	<input checked="" type="radio"/>
Cutting Fluid Cooling System	<input type="radio"/>

Chip Removal System

Chip Auger * 2	<input checked="" type="radio"/>
Chain Type Chip Conveyer	<input type="radio"/>
Chip Cart	<input checked="" type="radio"/>
Water Gun	<input checked="" type="radio"/>
Air Gun	<input checked="" type="radio"/>
Washdown	<input type="radio"/>
Full Enclosure	<input checked="" type="radio"/>

Measuring System

Laser Tool Length Measurement	<input type="radio"/> ★
Wireless Workpiece Measurement TS640	<input type="radio"/>

Worktable

Worktable Fixture Air/Hydraulic Source	<input type="radio"/> ★
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Safety

Front Door/Safety Switch	<input checked="" type="radio"/>
CE Safety Compliance	<input type="radio"/>

ATC System

ATC Tool Changing	<input checked="" type="radio"/>
Tool Spec ISO 40	<input checked="" type="radio"/>
Magazine Capacity 32T	<input checked="" type="radio"/>
Magazine Capacity 32T+32T	<input type="radio"/>
3 Axes Drive System	
3 Axes Roller Type Linear Guideway	<input checked="" type="radio"/>
3 Axes Linear Scale	<input checked="" type="radio"/>
A Axis Encoder	<input checked="" type="radio"/>
C Axis Encoder	<input checked="" type="radio"/>
Z Axis Motor Brake System	<input checked="" type="radio"/>

Electrical

Work Light (LED)	<input checked="" type="radio"/>
Alarm Light (LED)	<input checked="" type="radio"/>
M30 Auto Shut Off System	<input checked="" type="radio"/>
Electrical Cabinet Air Conditioning	<input checked="" type="radio"/>

Controller

Siemens 840D	<input type="radio"/>
TNC-620 (4 Axes Simultaneous)	<input type="radio"/>
iTNC-530 (5 Axes Simultaneous)	<input checked="" type="radio"/>
Transformer Unit (220V Region)	<input type="radio"/> ★
Anti Collision Software	<input type="radio"/> ★
Center Calibration Function	<input type="radio"/>

Micellaneous

Oil Mist Collector Unit	<input type="radio"/>
Rotatable Window	<input type="radio"/>

● Standard ○ Optional ★ Inquiry Required

