



L.K Machinery Corp.

力盡淬鍊 勁是完美

BTC series



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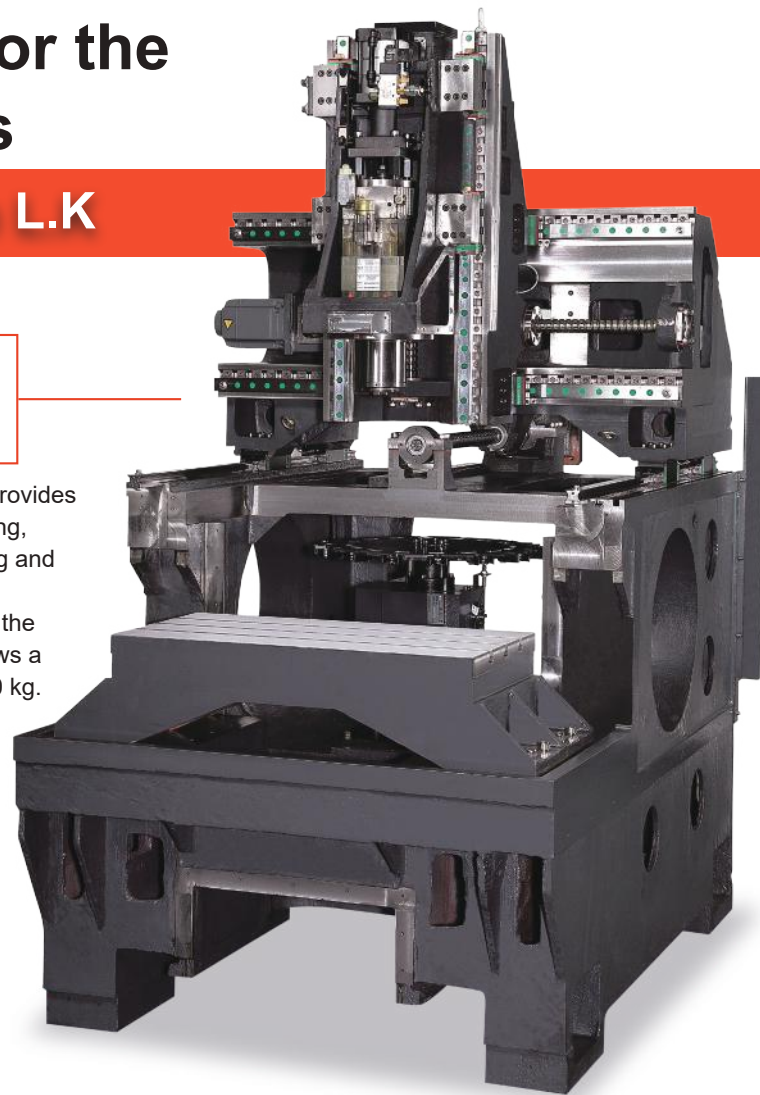
BTC-550

The Right Solution for the Various Applications

All Aspect Solution from L.K

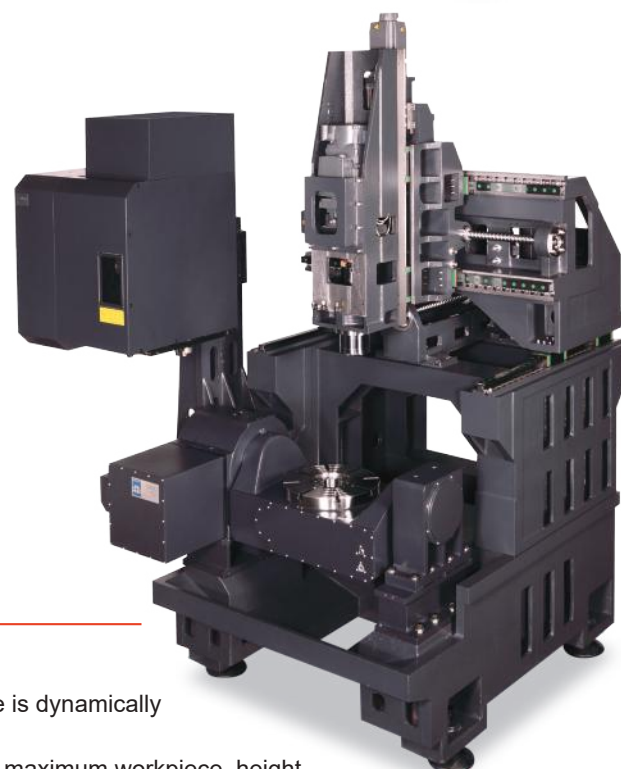
BTC-550 Fixed Table

The BTC-550 design provides 3-axis high speed milling, perfect for mold making and all general processes. The superior rigidity of the machine structure allows a loading capacity of 600 kg.



BTC-550 APC Pallet Changer

The machine is built for high productivity. The rapid APC system eliminates work place loading and unloading with a 3.2 second pallet change.



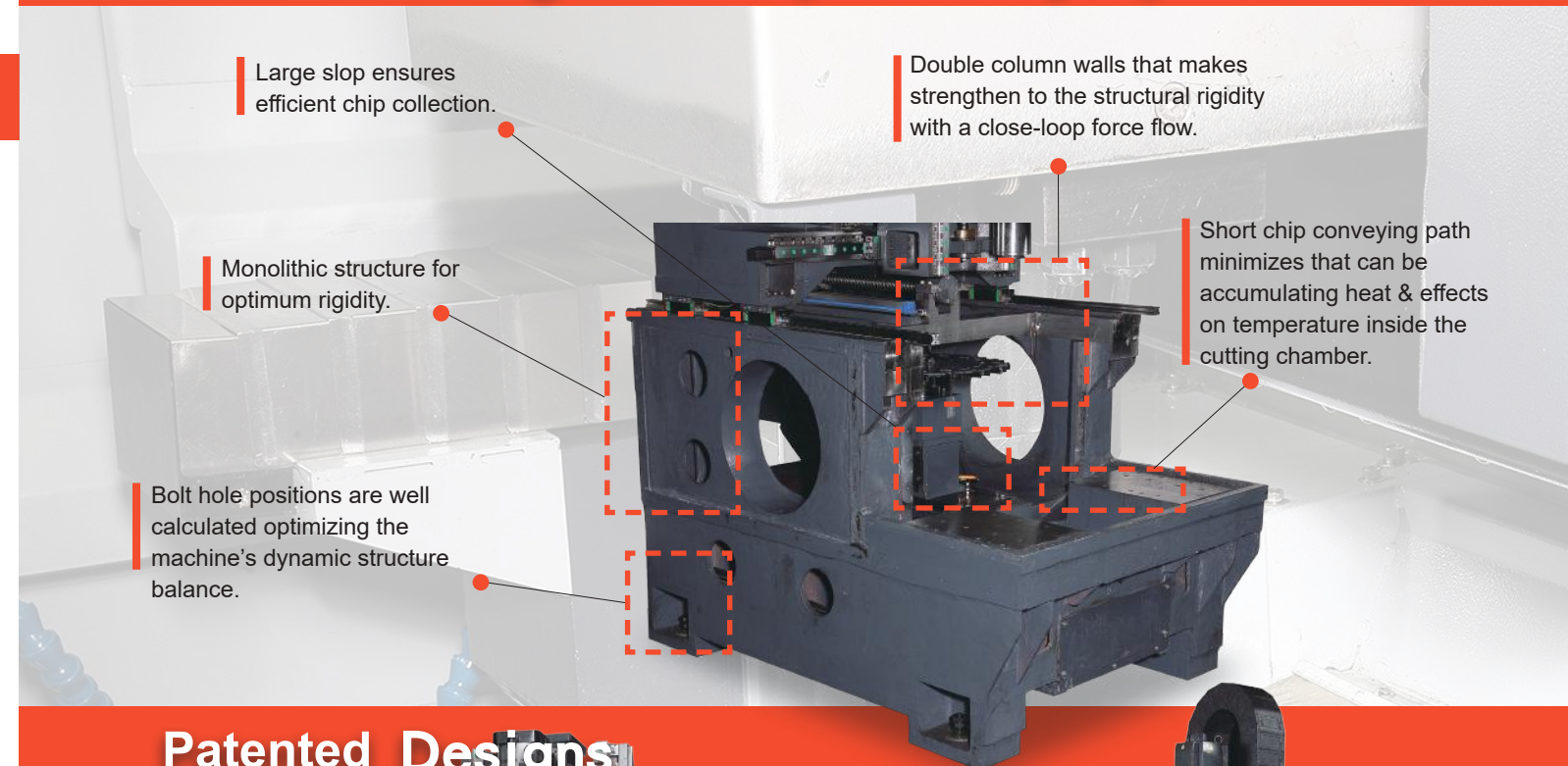
BTC-550 AX 5-Axis

The servo driven 5-axis rotary table is dynamically accurate and reliable. The integrated structure allows the maximum workpiece, height up to 300 mm on a round table of the diameter is 350 mm.

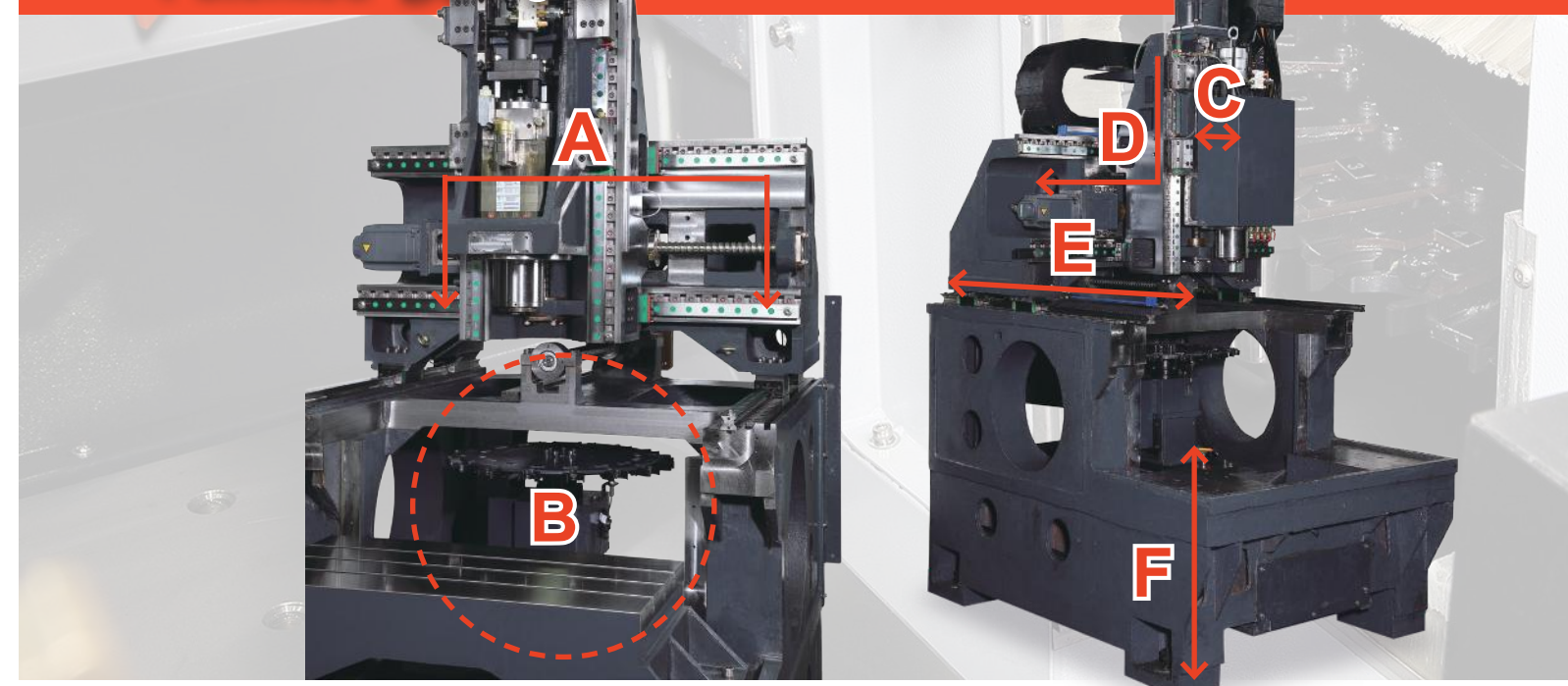
Ultimate Cubical Structure

Monolithic Cubical Structure Modular Concept for All the Requirements

BTC-550 Casting Features (Based on part)



Patented Designs



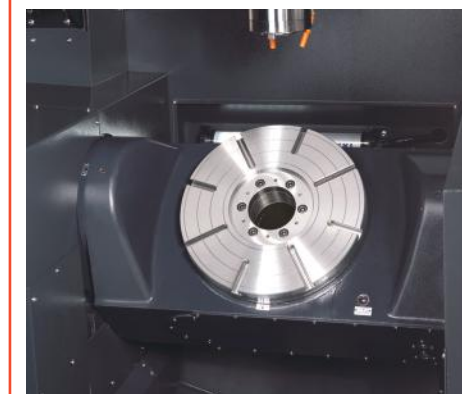
- A The "U-shaped" cast iron design provides structural rigidity during vibration on clamping in addition to distortion resistance.
- B Cubical structure features, close-loop force distribution ensuring best dynamic performance of the machine and optimum workpiece surface finish.
- C The distance from the spindle center line to the slide way surface is minimized, which are in the box-structured ram that can be guaranteed the best cutting performance from the machine, specially on hardened materials.
- D A remarkable increase of axial rigidity is obtained by the step deployment of the X axis slide ways, and at the same time extends the life time of linear guide ways and ball screws.
- E The base length of the cross beam is widely extended to rule out the metallic bending torque.
- F To allow operators to load / unload the workplace easily.

- A** The headstock's is cast iron & symmetrically designed which minimizes and stabilizes the thermo deformation.
- B** The choice of roller linear guide ways instead of ball guideways are determined by the need for high rigidity and high efficiency, which provides full load-carrying capacity, less power consumption and low friction. The maximum rapid federate
- C** The premium grade, oversized and pre-tensioned ball screws are applied on all 3 axes of the BTC series machines. The ball screws are directly coupled with a servo motor which features low temperature rising, low noise and long life.

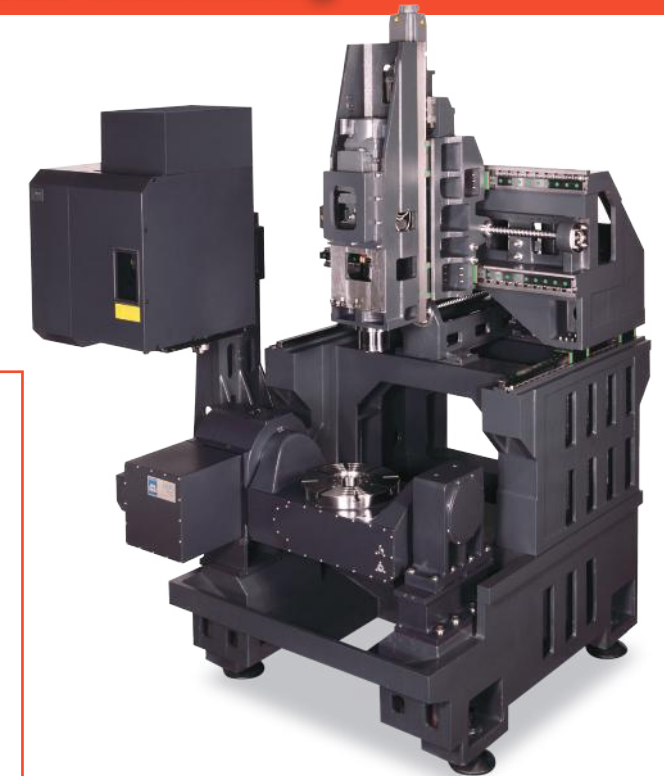
High Speed 5-Axis Simultaneous Machining

Used in production for complicated mold and dies for aerospace, medical equipment, optical-electronics, semi-conductor and all high precision industries, the BTC-550AX is the technology flagship model, and the machine with best price-performance ratio.

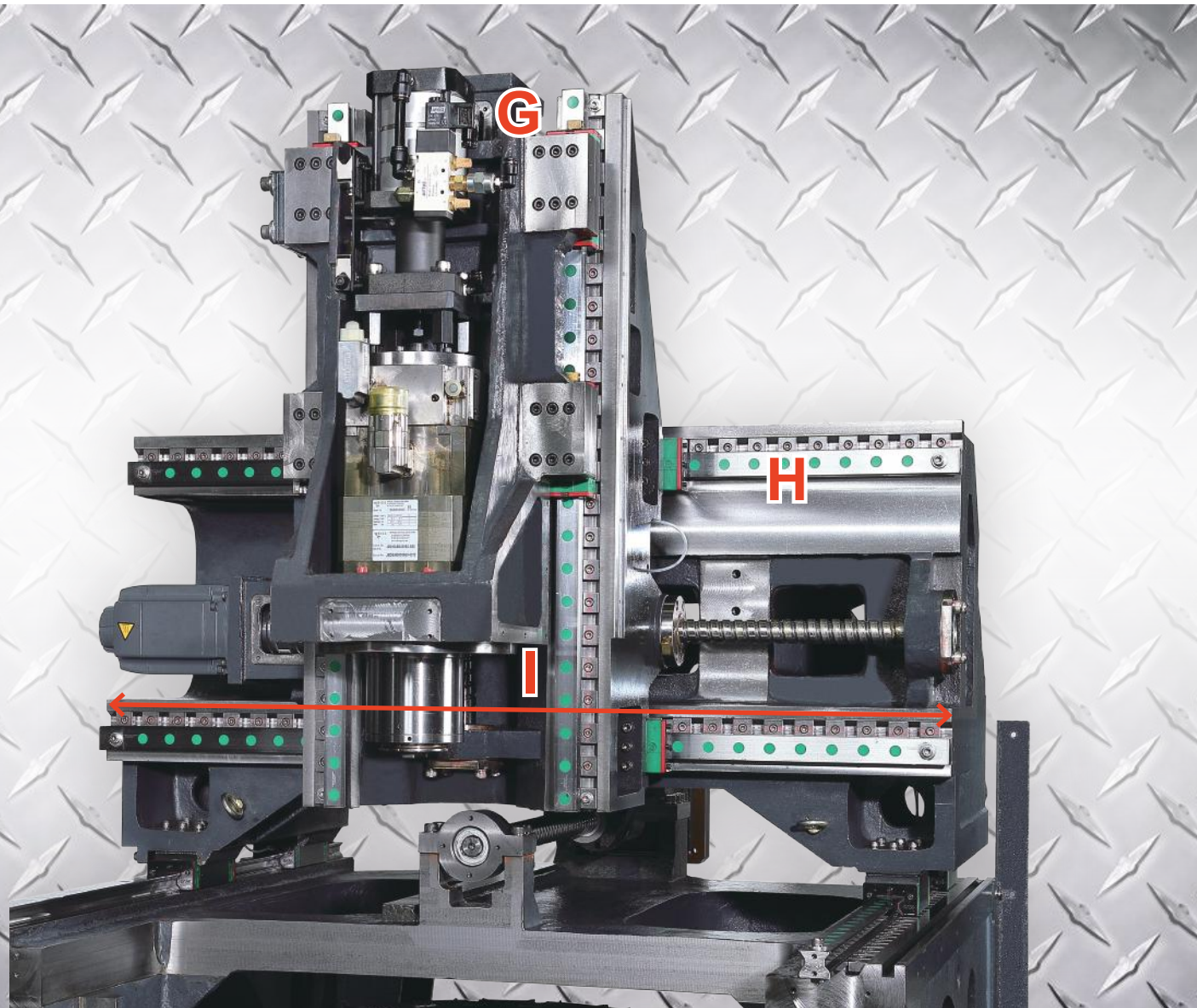
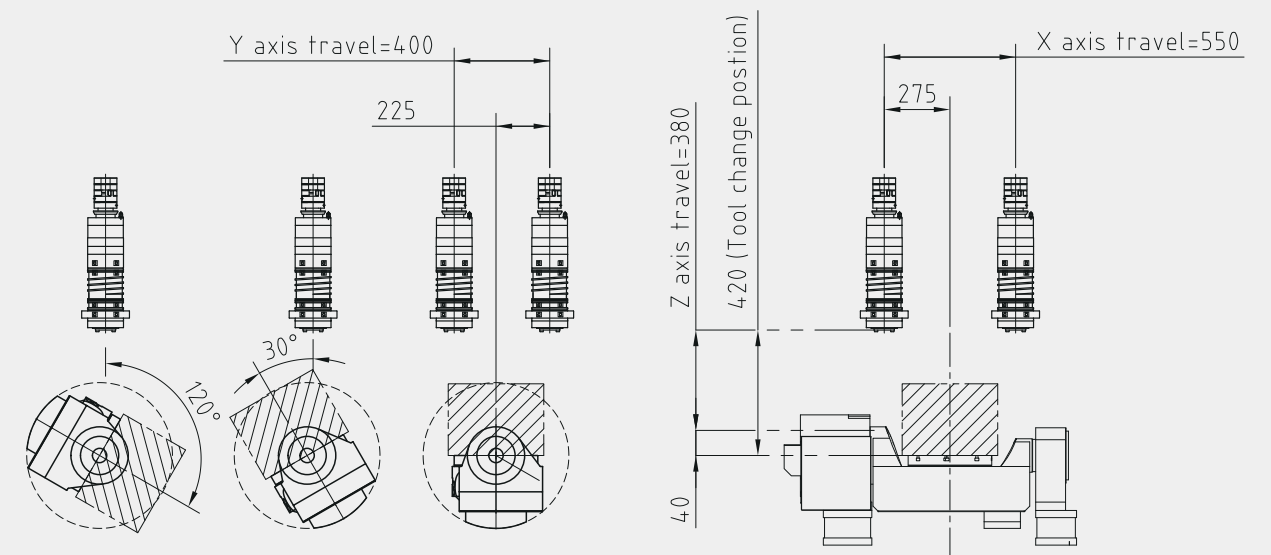
The L.K. BTC-550AX is the ultimate solution for sophisticated parts machining. The integrated rotary/tilting table provides accuracy, stability and flexibility.



The flexible and wide tilting range offers the maximum Z axis distance for cutting application.



BTC-550AX Interference Diagram



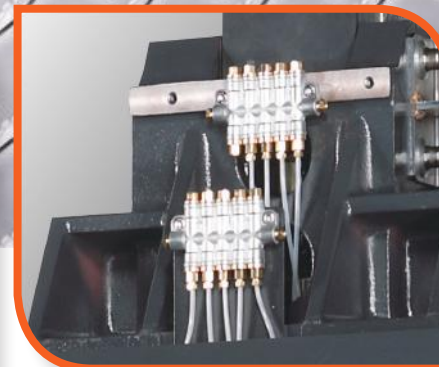
Link-up Type Chip Conveyor

High efficiency and convenient to move in space arrangement.



Turret Type tool magazine

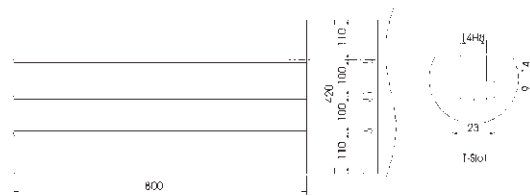
Provide the best alternative for quick tool change and easy management.



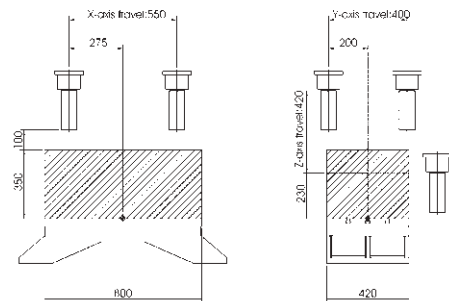
Automatic Lubrication System

The lubrication system automatically distributes oil to all critical components with proper oil amount. The lubrication interval can be easily adjusted for the maximum performance.

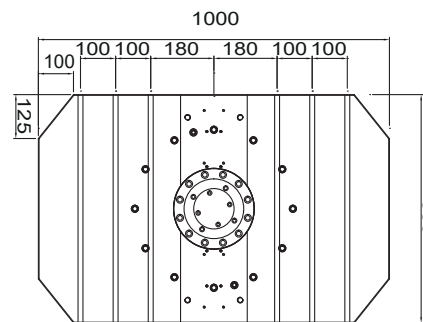
BTC-550 Table Dimension



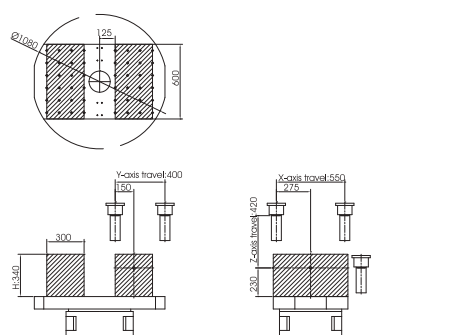
Working Range



BTC-550APC Table Dimension



Working Range



Specifications

Item/Model	Unit	BTC-550	BTC-550APC	BTC-550AX
CNC Control system		Mitsubishi M80	Mitsubishi M80	Siemens 840D
Travel				
X-axis Travel	mm	550	550	550
Y-axis Travel	mm	400	380	400
Z-axis Travel	mm	410	410	420
A-axis Travel(Tilting)	degree	-	-	+30 ° ~ -120 °
C-axis Travel(Rotary)	degree	-	-	360 °
Spindle Nose to Table Surface	mm	230-650	230-650	85-505
Spindle				
Spindle Speed	rpm	Direct Driven12,000	Direct Driven12,000	Direct Driven12,000
Spindle Nose	BT	BT-30	BT-30	BT-30
Spindle Motor(Continual/30min)	kw	3.7/5.5 Mitsubiishi	3.7/5.5 Mitsubiishi	4.1 Siemens
Table				
Table Size	mm	800X420	One Pallet 650X1000	Ø255
T Slot	mm	14X3X100	14X3X100	12x4x90 °
Table Load	kgs	600	200	100 Horizontal 75 Tilt
Rapid Travel				
Rapid Travel(X/Y/Z)	m/min	48/48/48	48/48/48	48/48/48
Axial Motor(X/Y/Z)	kw	1.5/3.0/2.3	1.5/3.0/2.3	2.3/3.8/2.3
Tool				
Tool Change Type		Turret Type	Turret Type	Arm Type
Tool Capacity	set	16	16	20
Max. Tool Weight	kgs	3	3	3
Max. Tool Length	mm	200	200	200
Max. Tool Diameter	mm	80	80	80
Tool Change Time (T-T)	sec	2.5	2.5	2.5
Others				
Machine Dimensions(LxWxH)	mm	3678X1500X1700	4284X1672X2095	3499X1750X2790
Machine Weight	kgs	4700	5250	5100

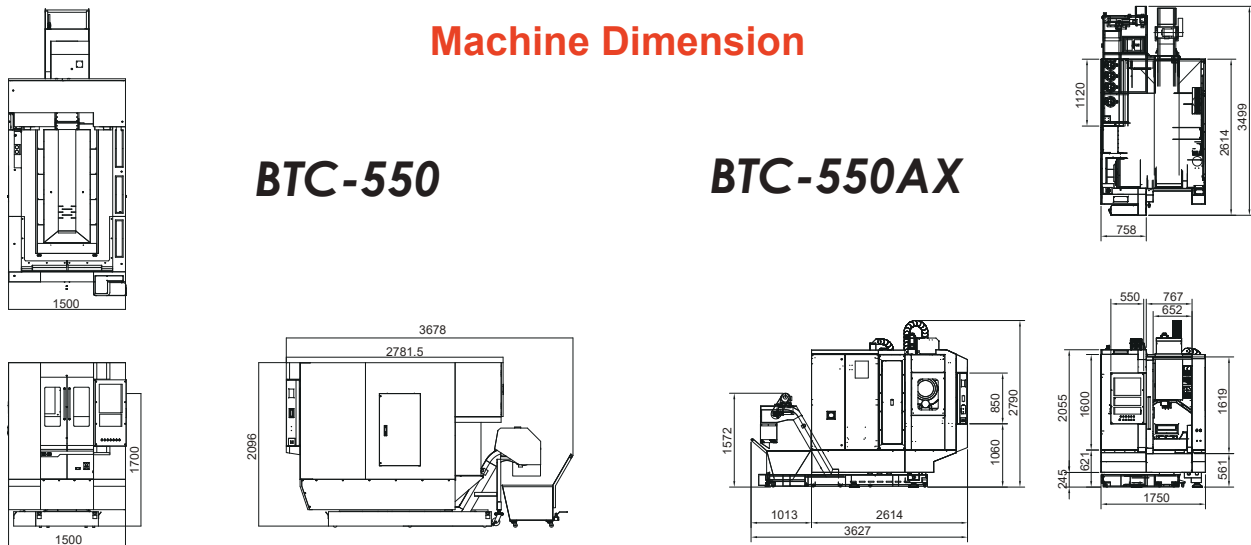
* All specifications design and characteristics shown in this catalogue are subject to change without prior notice.

* L.K. Machinery Corp. will not be legally responsible for any unauthorized modification on the machine or other equipment.

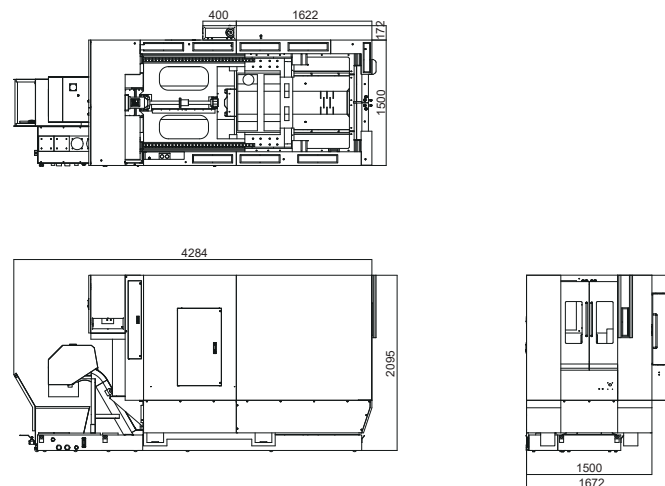
Machine Dimension

BTC-550

BTC-550AX



BTC-550APC



Standard Accessories

- BTC-550APC Mitsubishi M80 Direct Driven 12,000
- BTC-550AX Siemens 840D Direct Driven 12,000
- Turret type tool magazine 16 tools
- Spindle Tool Change Sir Blow
- Side Flush System
- MPG Hand Wheel
- Full Body Enclosure
- Work Light with Tri Color Indicator Lamp
- Leveling Bolts & Pads
- Tool Bax
- Heat Exchanger
- Automatic Lubrication System
- Link Type Chip Conveyor

Optional Accessories

- Direct Driven 15,000
- Direct Driven 20,000
- Direct Driven 24,000
- Grease Lubrication, Linear Guideways, Ball Screws
- CTS(Coolant Through Spindle)
- Rapid Traveres 60x60x60m/min
- Tool Length Measurement System
- BT-40
- HSK-A63