

LEADYANG
Professional Technique & Service

LEADYANG
Professional Technique & Service

Since 1997 we always insist on this sincere service



LEADYANG PRECISION TECHNOLOGY CO.,LTD.

ADDRESS: 55, Lane 357, sec. 1, Road, Wurih Dist.,
Taichung City, Taiwan.

Tel: (886)42335-8355 Fax:(886)-4-2335-1907 Post: 41467

<http://www.leadyang.com.tw> Email: LY@leadyang.com.tw

AGENT



2019/02

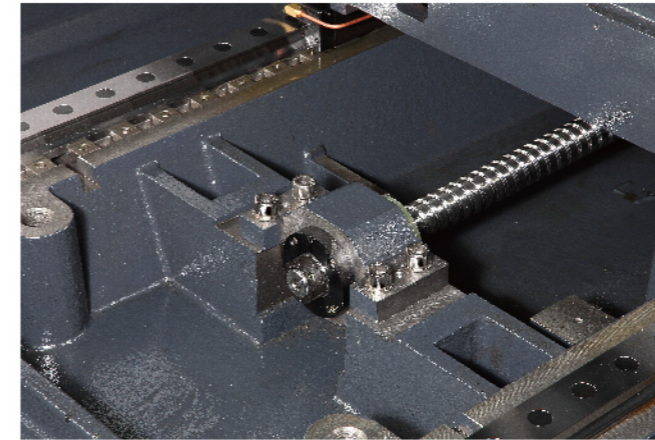
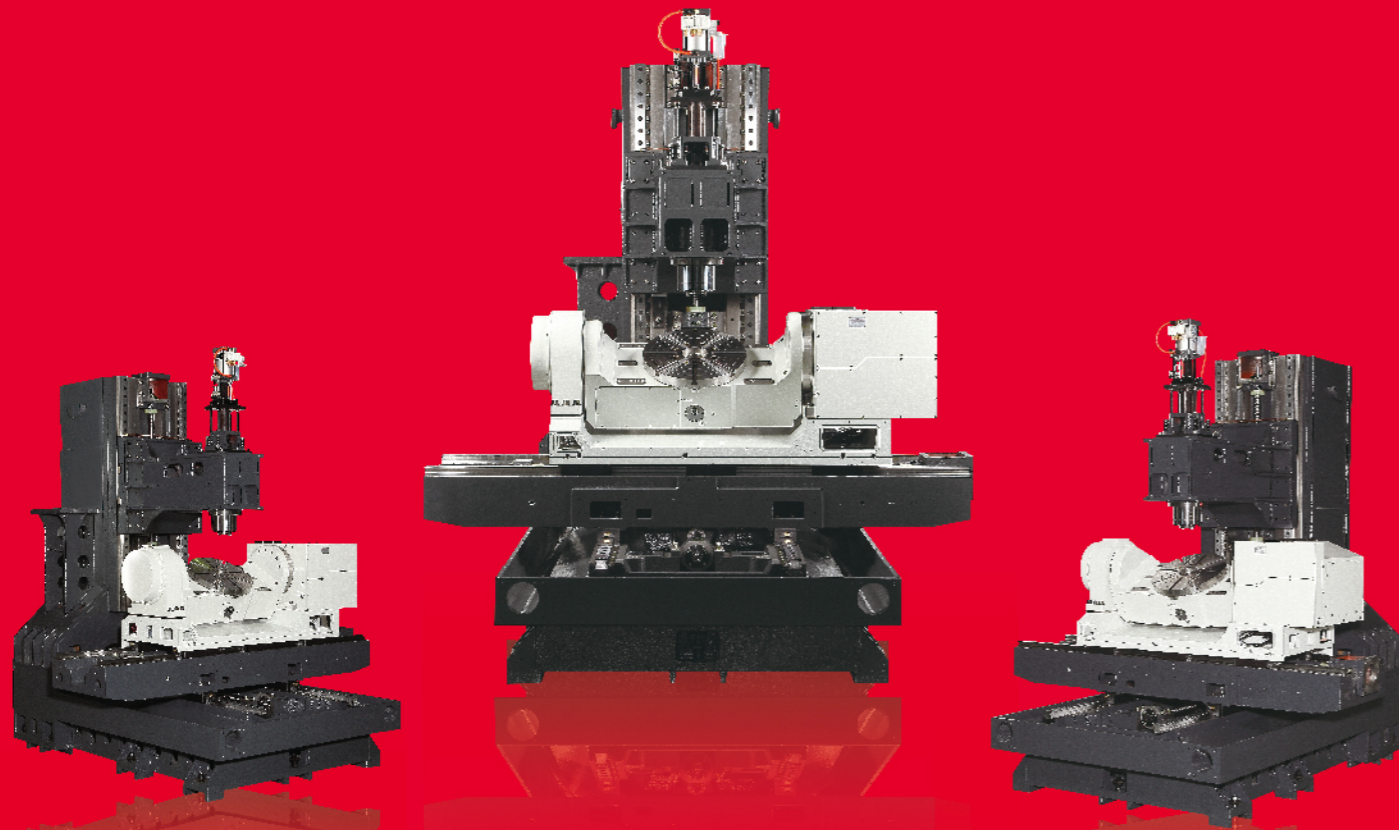
Design & Print 04-22423355

VU series
Five-Axes Machining Center



Five-Axes Machining Center

VU400 · VU500



Various Spindle Selections

Direct transmission

BBT40 10000/12000/15000rpm
HSK A63 15000/18000rpm

Belt transmission

BBT40 10000rpm



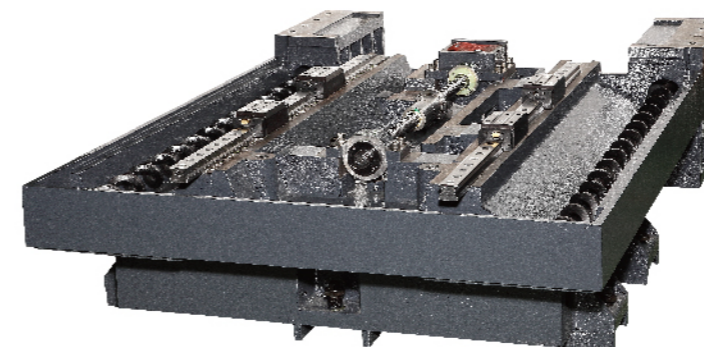
Strengthening the Support of the Ballscrew Both Ends

The both ends of the ballscrews are installed with 3 sets supporting bearings separately. The machine base is supported by nine points of leveling pads and bolts.

Heavy Loading Roller Linear Guideway

	VU400			VU500			VU500EX			VU500GL	
	X	Y	Z	X	Y	Z	X	Y	Z	X	Y
Guideway Width mm	35	45	45	35	45	45	45	45	45	35	45
Guideway Quantity	2	2	2	2	2	2	2	2	2	2	2
Slider Quantity	6	4	4	6	4	4	6	4	4	6	4

Using enlarged slider blocks to enhance machine rigidity and loading.



Dual Screw Chip Conveyors

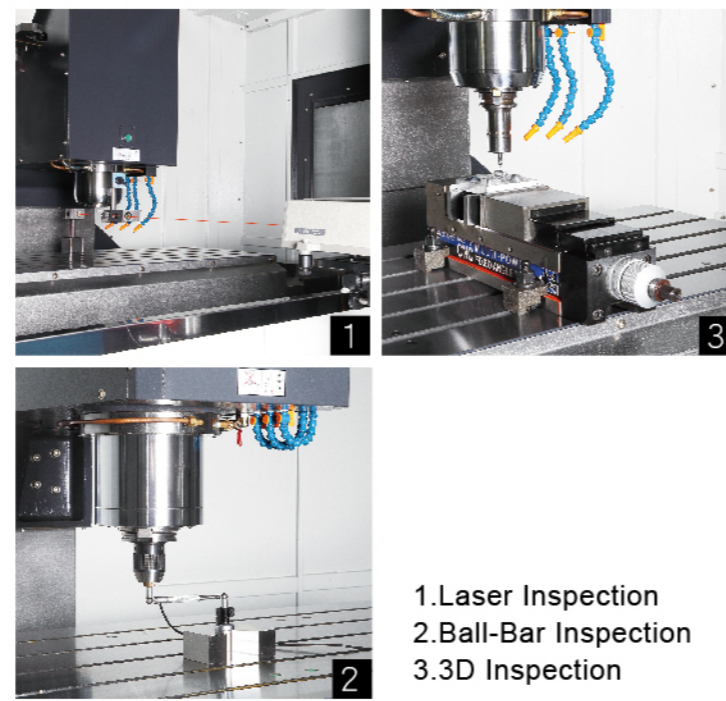
One piece casting for chip flute and bottom base could solve the problem of leaking.

High Accuracy Rotary Table

A Tilting Axis and C Rotary Axis can be selected with ± 5 secs or ± 10 secs linear scales.

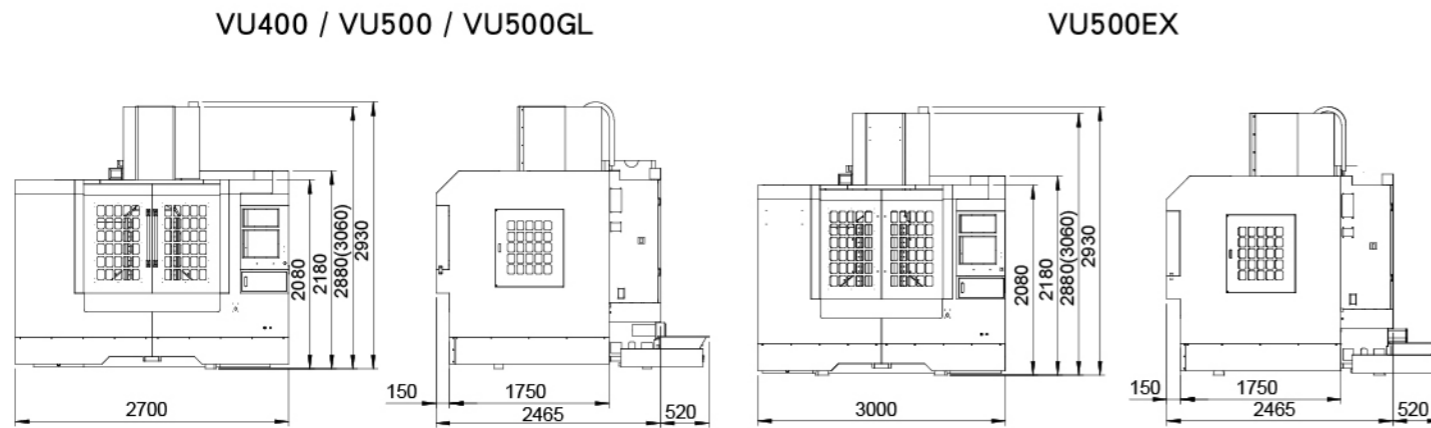
Strict Quality Inspection Regulation

- ① Each machine has 100% full inspection.
- ② Entire machine has Geometric Accuracy Test.
- ③ Ball-Bar inspection: Use circular tester to adjust accuracy of roundness and machine.
- ④ Laser inspection: According to VDI33441 (ISO230-2) standard, machine will do multiple back and forth operation with compensation to meet the suitable machine accuracy. Each machine has individual inspection report.
- ⑤ Spindle dynamic balancing correction, This can ensure spindle stability during high rotation speed.



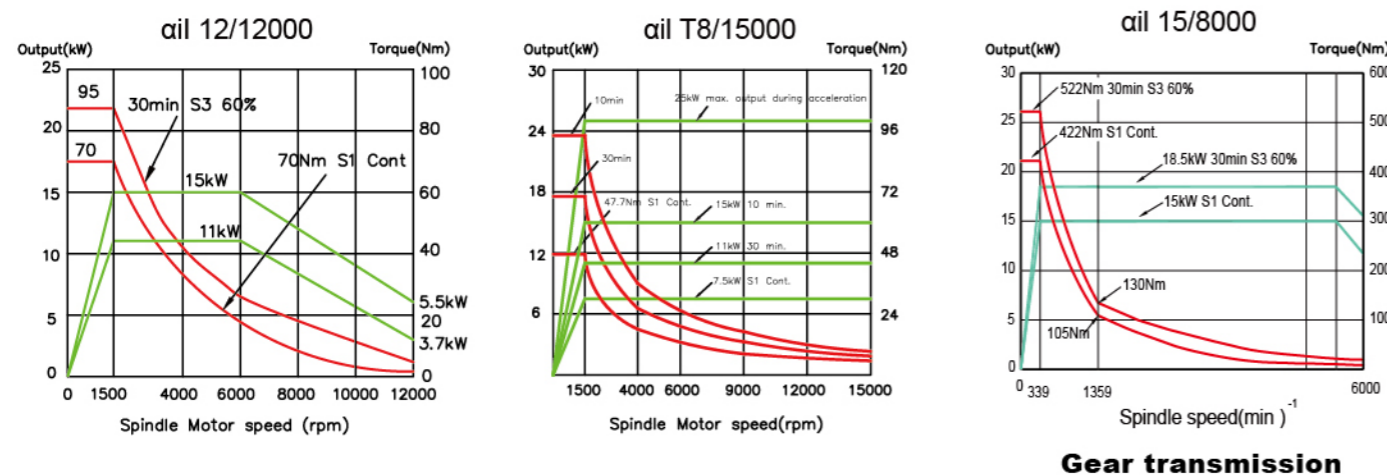
1.Laser Inspection
2.Ball-Bar Inspection
3.3D Inspection

Machine Dimension(mm)

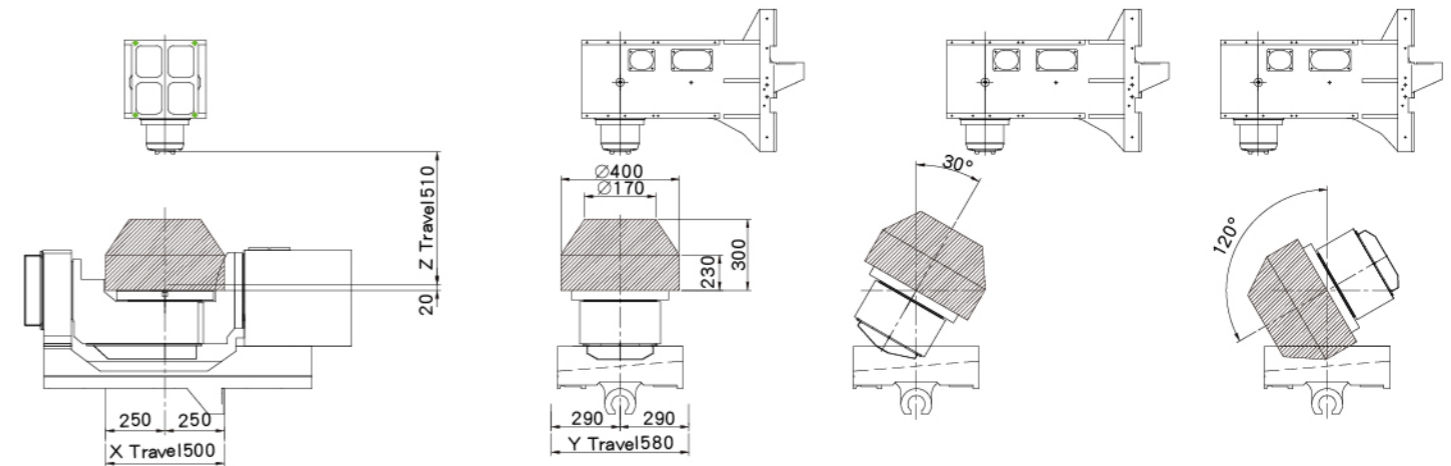


LEADYANG reserves the right to change the appearance design and specifications.
And the above specifications are subject to change without notice.

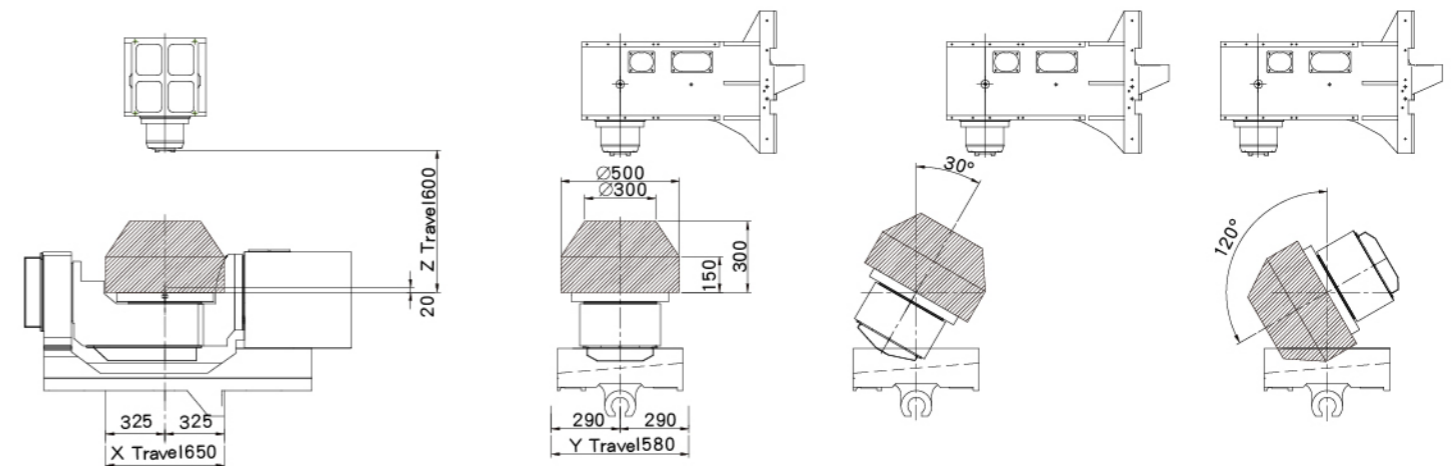
Spindle Power and Torque



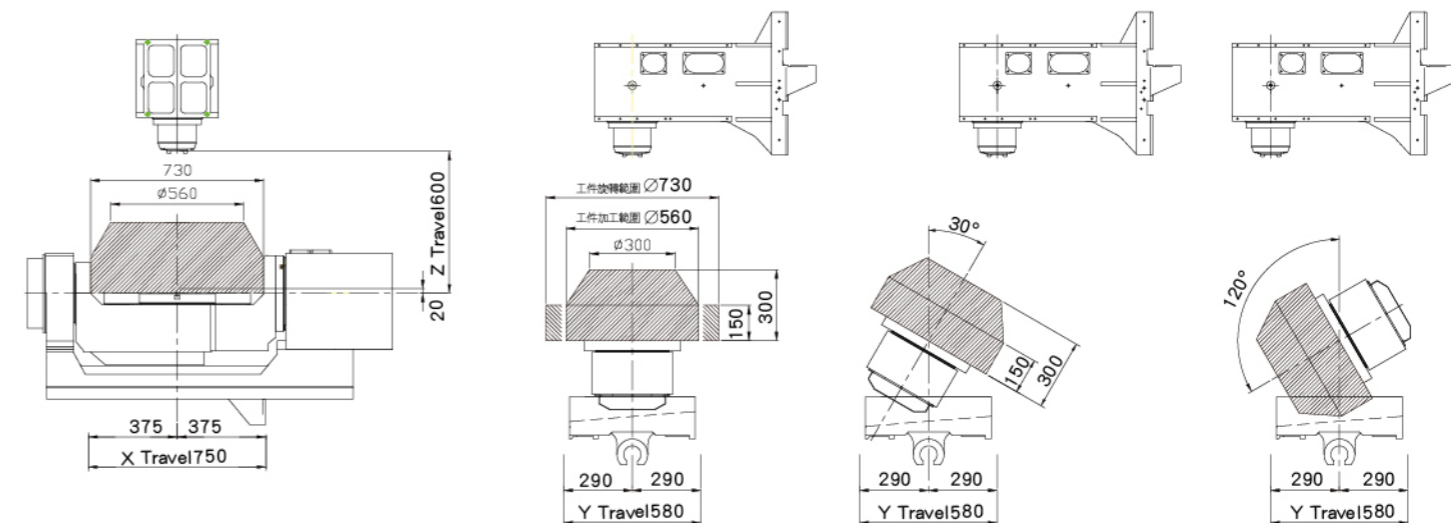
VU400 Cutting Area and Interference Area



VU500 Cutting Area and Interference Area

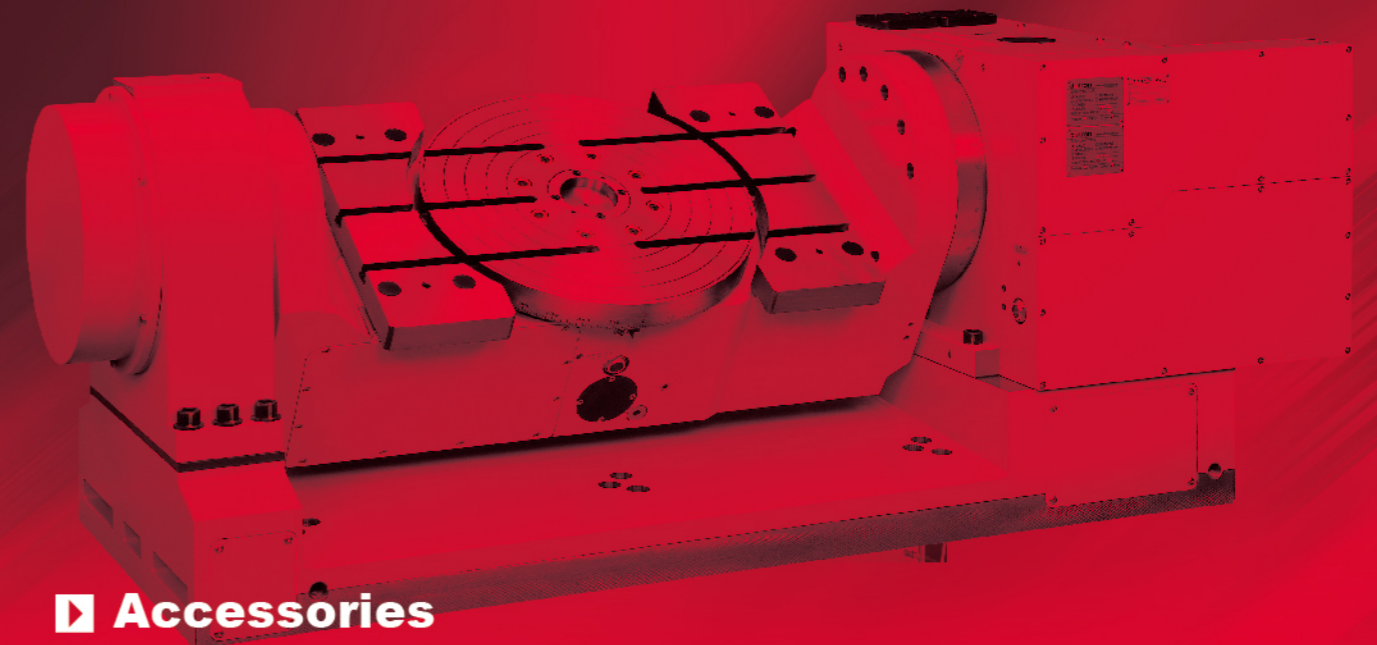


VU500EX Cutting Area and Interference Area



Machine Specification

Model	Unit	VU400	VU500	VU500EX	VU500GL
TRAVEL					
X/Y/Z Axis Travel	mm	500/580/510	650/580/580	750/580/580	650/475/580
A Tilting Axis	degree	+30~-120	+30~-120	+30~-120	+30~-120
C Rotary Axis	degree	360(Con.)	360(Con.)	360(Con.)	360(Con.)
Spindle Nose to Table	mm	-20~530	-20~580	-20~580	-20~580
Spindle Center to Column	mm	680	680	680	680
Types of Linear Guideway (X/Y/Z)		Roller/Roller/Roller	Roller/Roller/Roller	Roller/Roller/Roller	Roller/Roller/Box way
Width of Guideway (X/Y/Z)	mm	35/45/45	35/45/45	45/45/45	35/45/Box way
Slider Quantity (X/Y/Z)		6/4/4(6)	6/4/4(6)	6/4/4(6)	6/4
TABLE					
Table Size	mm	Φ320	Φ410	Φ410	Φ410
Max. Diameter of the Workpiece Rotation	mm	Φ400	Φ500	Φ730	Φ500
Max. Table Load	kgs	150	200	200	200
Servo Motor (A Tilting Axis)	(F)	a8	a8	a8	a8
Servo Motor (C Rotary Axis)	(F)	a8	a12	a12	a12
Table Rotation Speed (C/A)	RPM	25/25	16.6/11.1	16.6/11.1	16.6/11.1
SPINDLE					
Spindle Transmission		Direct type	Direct type	Direct type	Gear type
Spindle Taper		BBT-40	BBT-40	HSK A63	HSK A63
Spindle Speed	rpm	12000	15000	15000	20000/24000
Spindle Motor (cont./30mins)	kw	11/15(15/8.5)	7.5/11(15/8.5)	7.5/11(15/18.5)	18.5/22
CUTTING FEED RATE					
X/Y/Z Rapid Travel Rate	m/min	36/36/30	36/36/30	36/36/30	30/30/15
X/Y/Z Cutting Feed Rate	m/min	1-12m/min	1-12m/min	1-12m/min	1-12m/min
A.T.C (Optional)					
Tool Change Method		Cam arm type	Cam arm type	Cam arm type	Cam arm type
Magazine Capacity	set	24/30/36	24/30/36	24/30/36	24/32
Tool Change Time (Tool to Tool)	sec	2	2	2	3.5
Max.Tool Diameter	mm	75/150	75/150	75/150	125/200
Max.Tool Length	mm	250	250	250	300
Max.Tool Weight	kgs	7	7	7	15
ACCURACY STANDARD ISO 230-2 (VDI3441)					
Positioning Accuracy	mm	0.007	0.007	0.007	0.007
Repetitive Positioning Accuracy	mm	0.006	0.006	0.006	0.006
Ball-bar Accuracy	mm	0.01/300	0.01/300	0.01/300	0.01/300
ACCESSORY EQUIPMENT					
Spindle Coolant Ability	Kcal	1500	3000	3000	4500
Cutting Coolant Pump	W	1270x2	1270x2	1270x2	1270x2
Grease System Pump	W	60	60	60	60
OTHERS					
Air Pressure Requirement	kgs/cm ²	6	6	6	6
Electric Power Requirement	Kva	35	35	45	35
Machine Weight(Approx.)	kgs	7800	8000	8300	9000



Accessories

Standard Accessories

- 10.4 Inch LCD screen
- Four axes simultaneous movement
- Fully enclosed splash guard
- Dual screw chip conveyor for Y axis
- Three axes telescopic covers
- Heat exchanger for electric cabinet
- Spindle oil coolant system
- Spindle air blast system (automatic controlled by M07 program)
- Spindle air blow device and cutting coolant system
- Chips flushing system on both sides
- 3-axes auto grease lubrication system
- Removable MPG
- Spindle water ring with 4 water blast
- Oil purifier (proportion type)
- Leveling pads and bolts
- Tri-color indicating light
- Air/water gun for chip remove
- Work lights on both sides
- Auto power off (M30)
- RS232C interface
- Fine molding machining function
- Tool box and adjustment tools
- Accuracy inspection report
- Machine operating and maintenance manual
- E-Book of FANUC program operating and maintenance manual

Optional Accessories

- Five axes simultaneous movement (Need to apply for export permission)
- A / C axis linear scale : ±5 secs or ±10 secs
- Sub-table for VU500EX (620 X 410mm)
- Six sliders for Z axis
- Independent water pump for water gun
- Oil coolant device of deep drilling coolant
- Chain type or scrape plate type chip conveyor
- Air conditioner for electric cabinet
- Auto tool length measurement
- Auto work-piece measurement
- Data server
- Three axes linear scales
- Oil mist blast system
- Oil mist collector
- Disc type oil skimmer
- 20/30/70 bar C.T.S and external filtration tank
- Japan NSK ballscrews of three axes
- Transformer (380V)
- BT40/BBT40 24/30/36 Tools magazine capacity
- BT50/BBT50 24/32 Tools magazine capacity

NOTE

1. Standard controller : Fanuc series. Depend on customer's demand can choose Siemens series or Mitsubishi series.
2. LEADYANG reserves the right to change the design and planning. And the above specifications are subject to change without notice.
3. The machine's accuracy value is in accordance with the new machine and standard inspection status.
4. Depends on customer's request, the columns can be heightened by one 200mm riser blocks as option.