

CNC VERTICAL MACHINING CENTER

CNC VERTICAL
MACHINING CENTER
Linear type

i SERIES

Mission and Vision

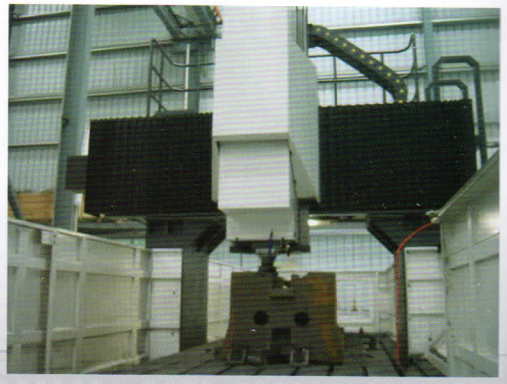
P.R.I.D.E.

» **P** Perpetuity » **R** Reliab

ECOM was founded in 1976 at Taiwan. Our products included CNC Vertical Machining Center, CNC Tapping center, Horizontal Machining Center, and Bridge Type Machining Center. We're dedicated to provide our customers with reliable machines and the best services. Certifications of ISO and CE that we obtained are just ways we let our customers feel comfortable of using our machines. Our research and development department has received many patents in Taiwan and other foreign countries such as Japan.







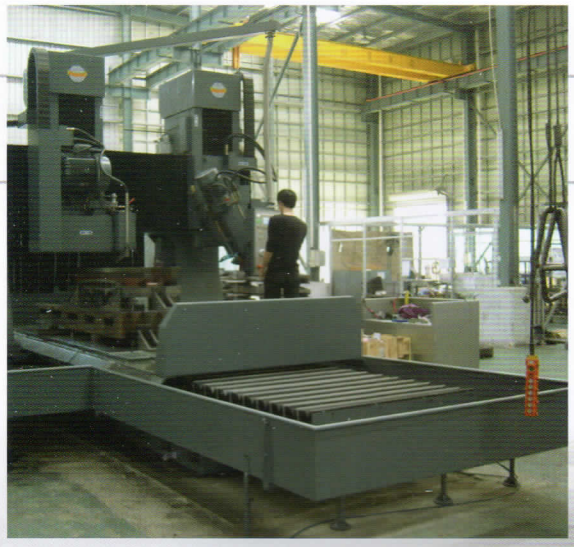
ECOM, You can rely on.

e » I Innovation » D Dedication » E Expertise

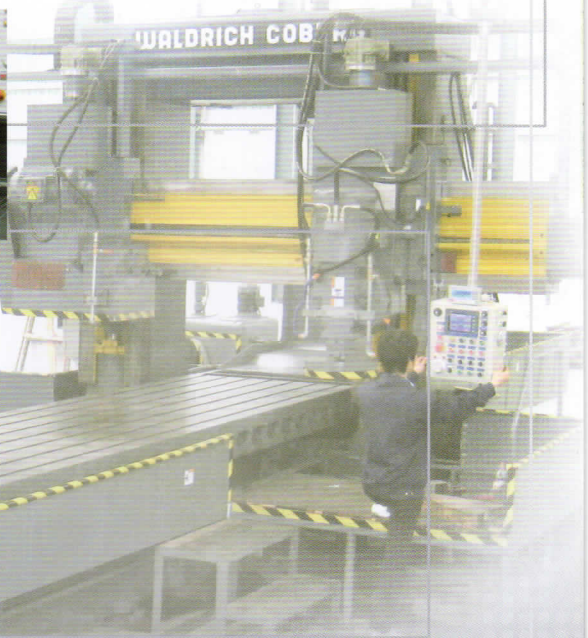
Apply high tech into our machines is our agenda of keeping our customer within of today's challenge of milling.

In 2006, we set up a manufacture plant in Zhangzhou, Fujian Province in main-land China. The manufacture plant covers an area of 43,000 square meters. The production process is performed in a streamlining mode. From milling, drilling, boring, heat-treating, grinding and painting of machining, scraping and correcting during assembly, laser equipment testing and circular test and test processing during quality inspection to stocking out of finished products, the overall process is carried out under strict quality control. The purpose is to ensure that our products meet the international level.

ECOM will continue to develop global market and innovative products, to expand service system, and to support all our customers.



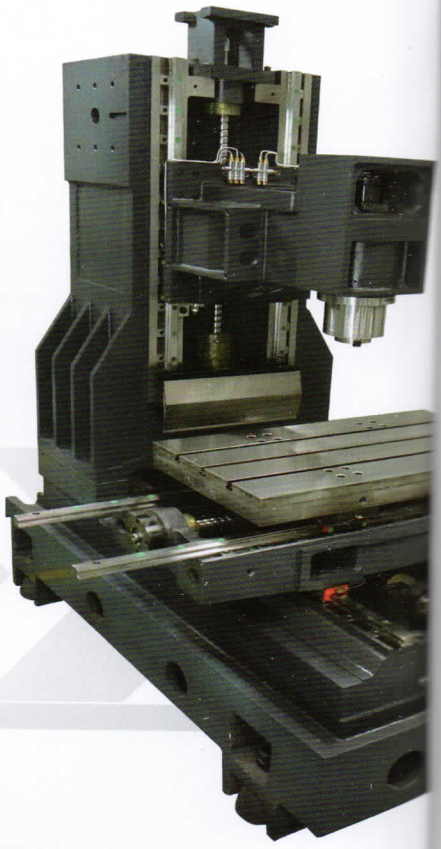




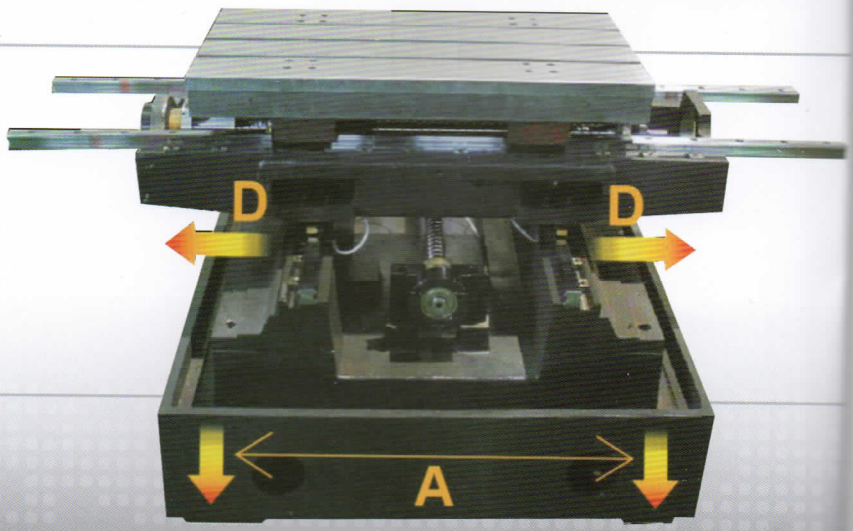
VL-6i

Expertise in High Efficiency and sharp





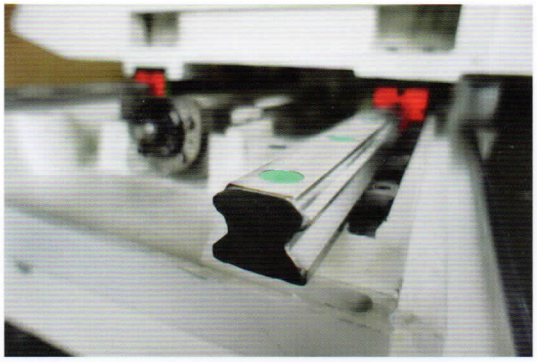
- The Large-span base effectively supports and evenly disperses the load force the saddle.



productivity



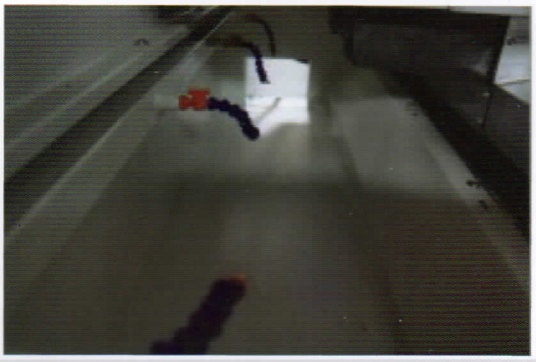
» IDD spindle is designed with heat-insulated coupling to reduce heat deformation and efficiently increase the spindle precision. It can also be optionally adapted with the optimal direct type spindle design.Motor can drive directly with spindle to increase the motor efficiency, providing a higher quality of rigid tapping. Direct type driving has no problems of noise, backlash and vibration.



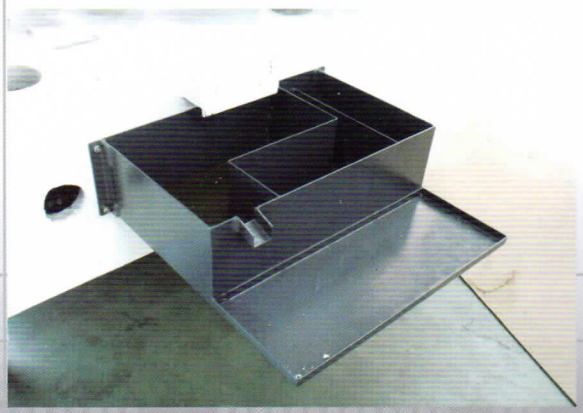
- 3 Axis Design with high precisionball screw and linear guide to enhance the rigidity and inertia of the servo bearing.



- Flush device: Optimal chip removal angle provides ultimate chip removing capabilities, enabling smooth flow of chips into the s torage cart.



- Labyrinth oil-water separated design.



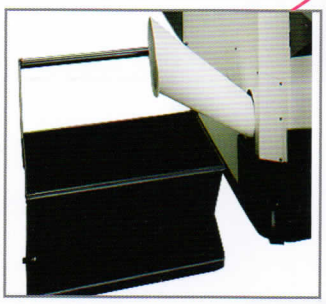
VL-8i

The New Generation,

Concise Western style: Complete all convenience

Entire machine and accessories with unique off-the-ground design and with tool cabinet, desk and chair.



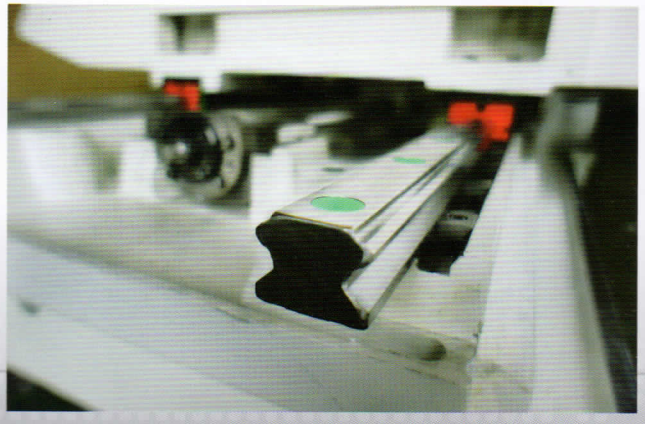




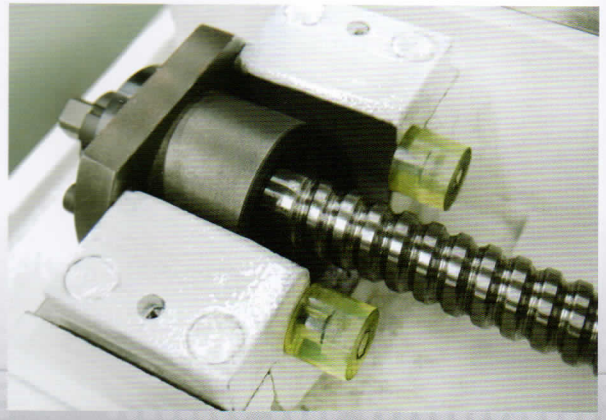




◉ X/Y/Z Axis upgrade to Φ35/45/35 roller type linear guide way.



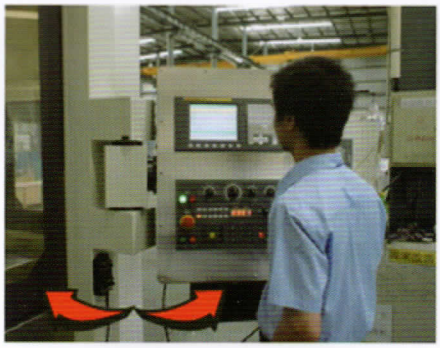
◉ **3 Axis** Design with precision **Φ40** ball screw

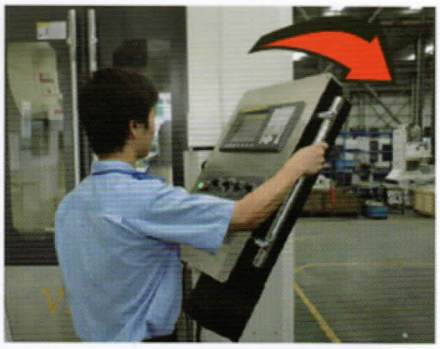


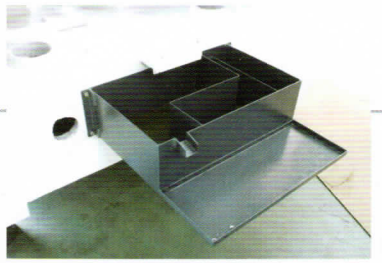
» Context » Concept » Collaboration

Multiple axis control panel

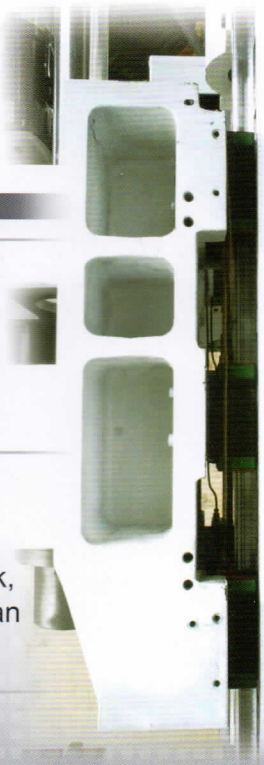
- The ***4-way swivel controller panel*** complies with safety requirements. Users may rotate it in any direction for an easier control.



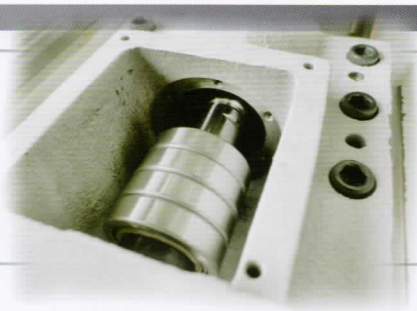




- Labyrinth oil-water separated design.



- ***4 bearings*** on the fixing end of triaxial motor to increase servo rigidity.



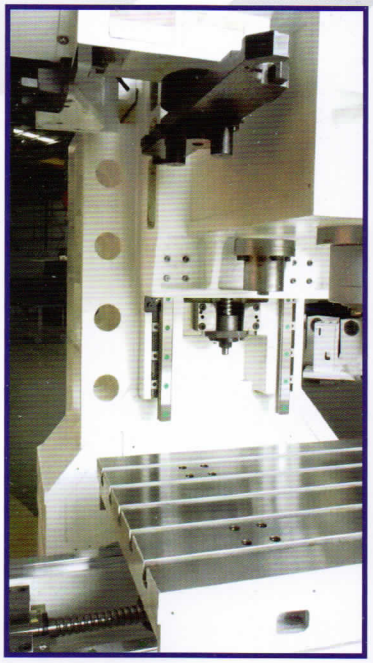
- With ***6 heavy duty roller blocks*** installed on the ***Z-axis*** headstock, consistent contact is made between head stock and stand, which provides an incomparable rigidity to the machine.

VL-10i

Excellent Features, Provide Our Value

Concise Western style:





◉ One-piece ATC saddle.

Context Concept Collaboration

» Multiple axis control panel

» MPG



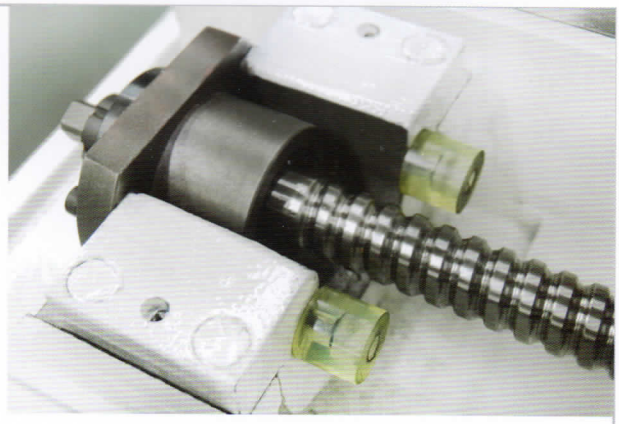


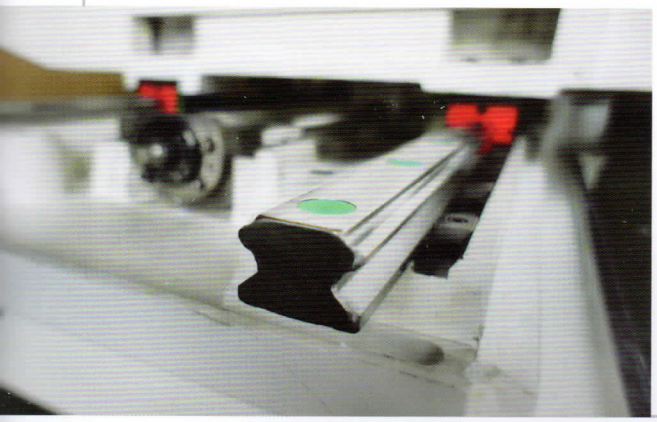


Complete all convenience

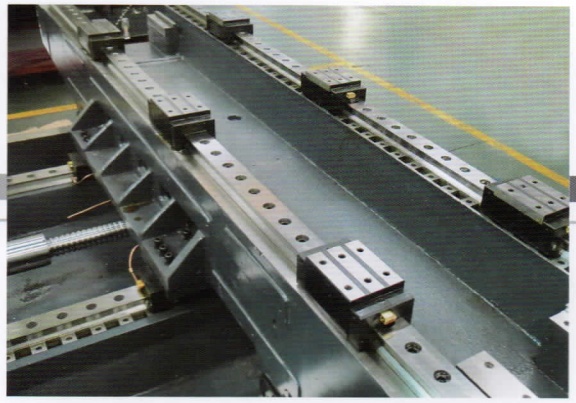
Multiple axis control panel

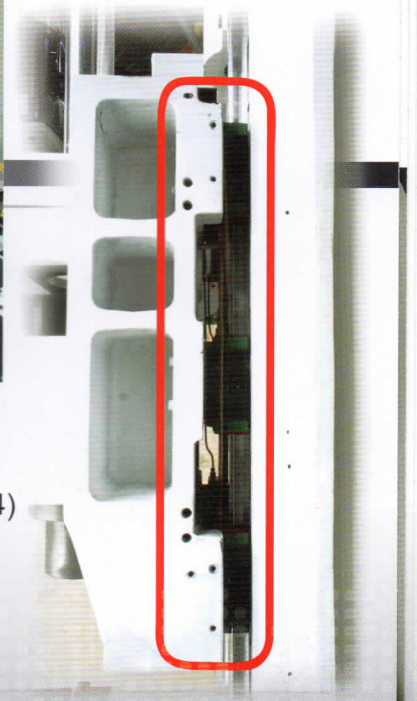
» **3 Axis** Design with precision ***Φ40*** ball screw



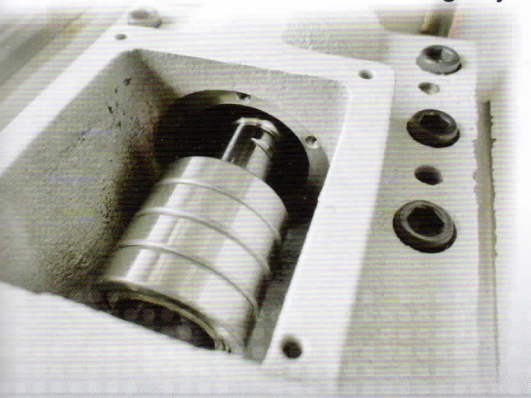


» **X.Y. Z.** design with high precision ***Φ35 /Φ45 /Φ35*** Roller type Linear guideway.



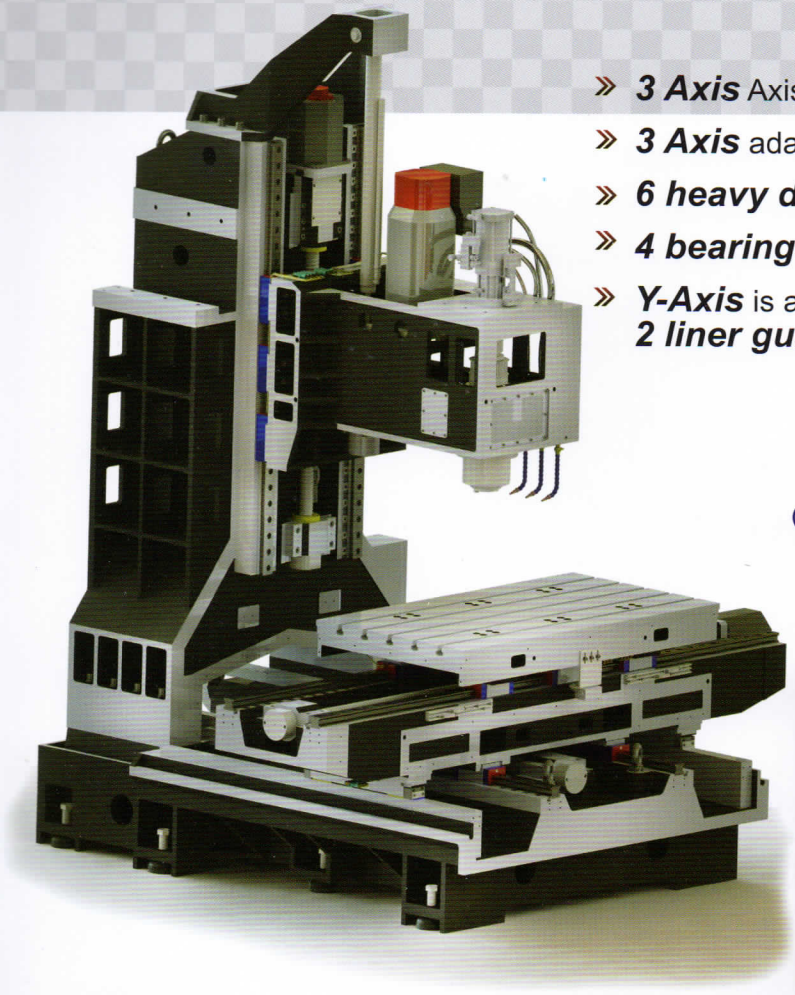


◉ **4 bearings** on the fixing end of triaxial motor to increase servo rigidity.



◉ With **6 heavy duty roller blocks** installed on the **Z-axis** headstock and **X-axis** (X-axis will valid from Sept.2014)

VL-12i SUPERIOR CONSEQUENCE OF EXPERT

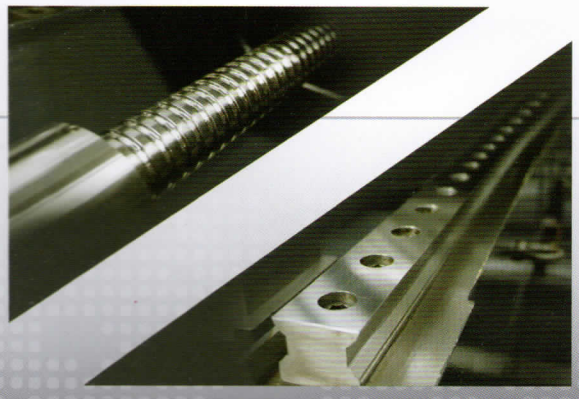


- » ***3 Axis*** Axis Design with Φ***45 ballscrew***.
- » ***3 Axis*** adapted with Φ***45 Roller linear guideway***.
- » ***6 heavy duty roller blocks*** installed on the ***X*** and ***Z-axis***.
- » ***4 bearings*** on the fixing end of triaxial motor.
- » ***Y-Axis*** is adapted with ***2 box way and 2 liner guideway onY-Axis***.

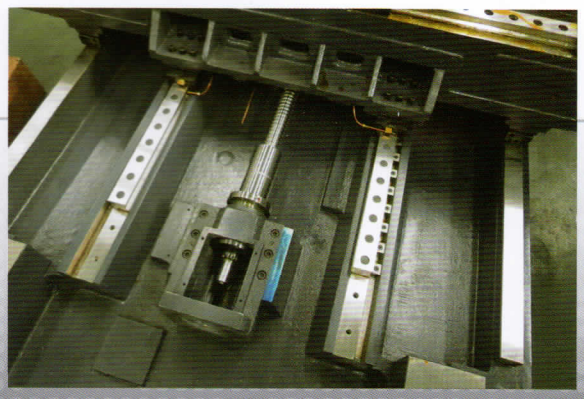
◉ With *6 heavy duty roller blocks* installed on the *X-axis* and *Z-axis* headstock.



◉ *3 Axis* Design with *Φ45 ballscrew* and all adapted with *Φ45 Roller linear guideways.*



◉ *Y- Axis* is adapted with *2 box way and 2 liner guide ways* to reduce the abrasion and shock-absorbing effect.

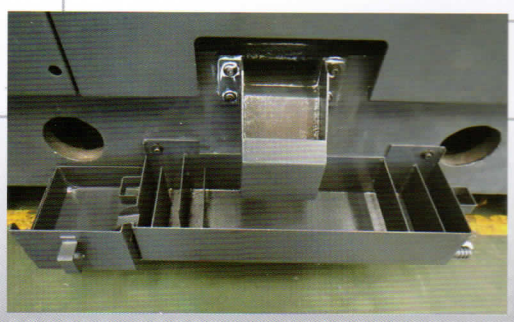


Huge double doors >>





- Labyrinth oil-water separated design can separate oil and water to cost down the cost.



***Z-Axis** is adapted with **Nitrogen counterbalance** to enhance precision and production capacity.*

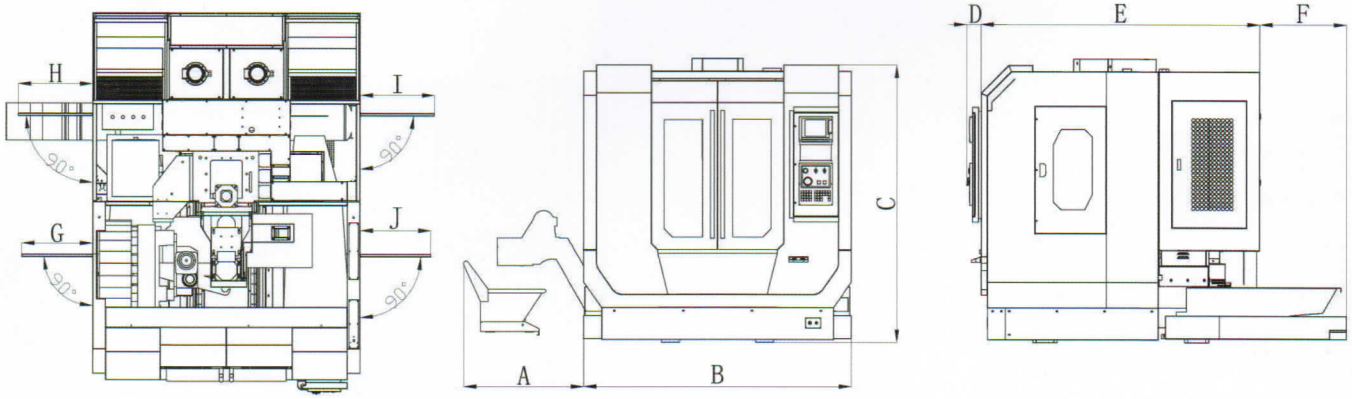


VL-6i.8i.10i.12i

A full set of strict quality inspection

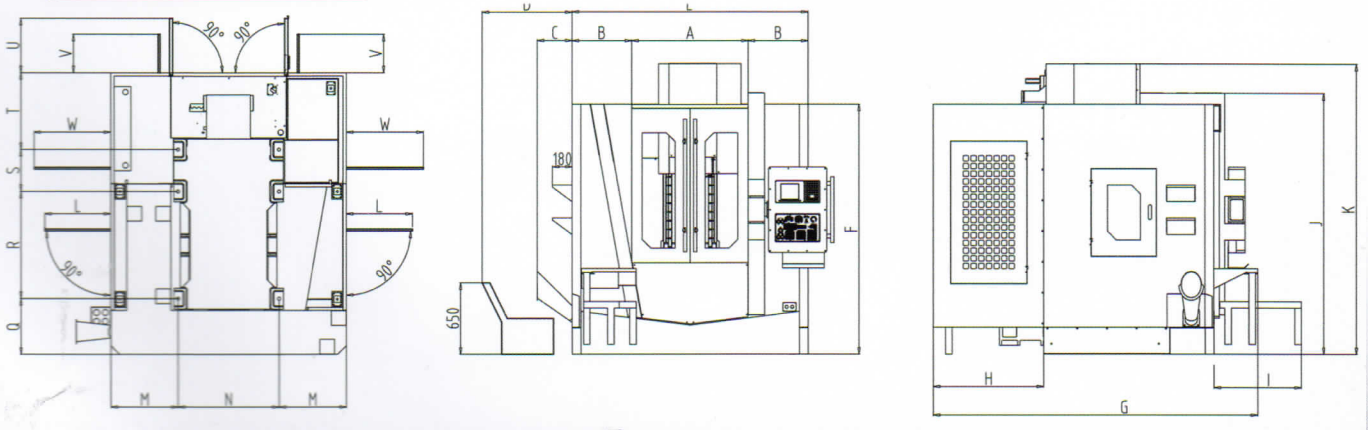


VL-6i



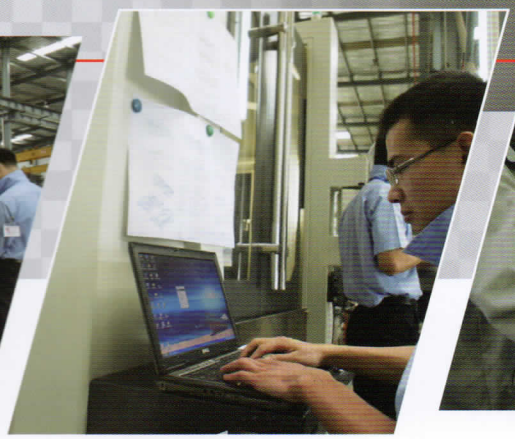
Models	Unit	A	B	C	D	E	F	G	H	I	J
VL-6i	mm	950	2100	2180	120	2190	680	560	590	590	560

VL-8i



Models	Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	W
VL-8i	mm	1061	545	318	818	2151	2275	2959	1010	798	2375	2455	600	615	920	508	975	381	698	494	350	700



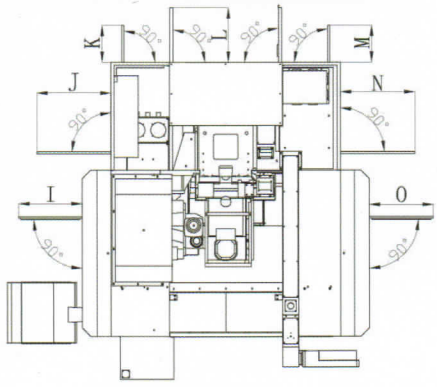


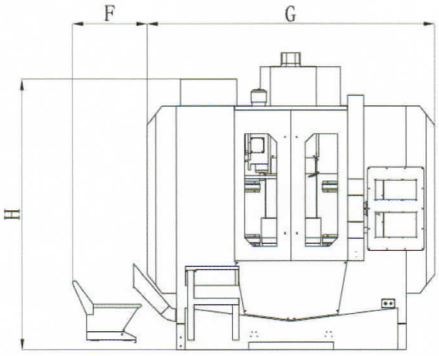


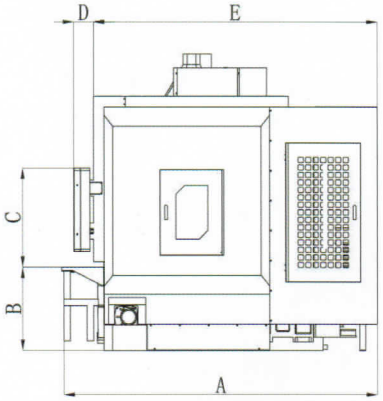
ECOM 東剛精機

MACHINE DIMENSIONS

VL-10i

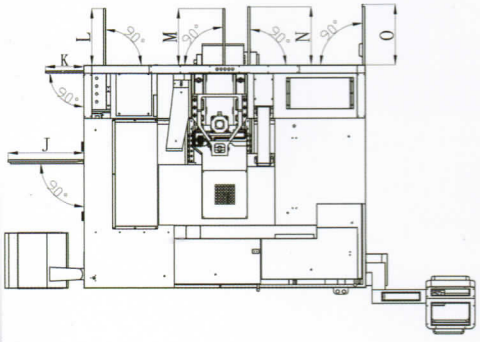


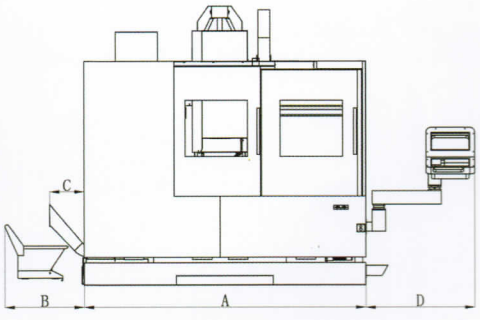


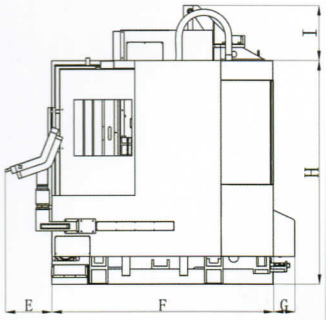


Models	Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
VL-10i	mm	2350	780	930	190	2660	700	2670	2530	600	700	350	510	350	700	600

VL-12i







Models	Unit	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
VL-12i	mm	2900	820	360	1130	480	2290	220	2300	570	780	400	590	590	600	600

VL-6i.8i.10i.12i

SPECIFICATION

Specifications \ Models	VL-6i	VL-8i	VL-10i
Travel			
X - Axis Travel	600mm	800mm	1000mm
Y - Axis Travel	450mm	560mm	560mm
Z - Axis Travel	500 mm	560mm	560mm
Spindle Center To Z - Rail	500mm	650mm	650mm
Spindle Nose To Table	130-630 mm	150-710mm	150-710mm
Table			
Table Size	750mm*420mm	1050mm*550mm	1120mm*550mm
T - Slot (number*width*pitch)	3*14mm*100mm	5*18mm*100mm	5*18mm*100mm
Maximum Table Load	400kg	800kg	800kg
Spindle			
Spindle Taper	BT-40	BT-40	BT-40
Spindle RPM	10000 rpm	8000rpm	8000rpm
Type Of Driving	Belt Type	Belt Type	Belt Type
Feed Rate			
X. Y Axis Rapid Feed Rate		36m/min	
Z Axis Rapid Feed Rate		36m/min	
X. Y. Z Max.Cutting Feed Rate		10m/min	
Automatic tool changer (ATC)			
Arm Type (Tool to Tool)	24T (3sec)	24T (3sec)	24T (3sec)
Motors	**Mitsubishi / Fanuc**	**Mitsubishi / Fanuc**	**Mitsubishi / Fanuc**
Spindle Motor	5.5kw	7.5kw	11kw
X. Y Axis Servo Motor	1.5kw / 1.2kw	2.0kw / 1.8kw	2.0kw / 1.8kw
Z Axis Servo Motor	3.0kw BS	3.0kw BS	3.0kw BS
Machine Accuracy			
Positioning Accuracy (JIS)		+ /- 0.005mm/300mm	
Repeat Poitioning Accuracy (JIS)		+ /- 0.003mm	
Other			
Approximate Weight	4200 kgs	6500 kgs	7000 kgs
Floor Space Measurement	2100*2800*2250mm	2650*2960*2850mm	2850*2960*2850mm

★ ★ SPECIFICATIONS SUBJECT TO CHANGED WITHOUT PRIOR NOTICE. THANKS!

VL-12i
1200mm
650mm
650mm
750mm
120-770mm
1300mm X 650mm
5 X 18mm X 110mm
1200kg
BT-40
8000rpm
Belt Type
24T (3sec)
Mitsubishi / Fanuc
11kw
3.0kw / 3.0kw
3.0kw BS
8000 kgs
3350*2900*3000mm

Standard Accessories



- Arm Type ATC -24T (for VL-8i/10i/12i only)
- Spindle Coolant System
- Screw Type Chip Conveyor (for VL-8i/10i/12i only)
- Flushing Device
- High pressure water & air gun
- Leveling Bolts and Leveling Blocks
- Tool Box
- Air Blast Through Spindle
- Work Lamp
- Alarm Lamp
- Auto Power Off
- Auto Lubrication System
- Rigid Tapping
- RS 232 Interface
- CF Card Interface
- .MPG
- Heat Exchanger For Control Cabinet
- Operation Manuel

Optional Accessories

- Tool Lenght Measurement Tool
- Around Spindle Cutting Coolant Unit
- Cutting Coolant Through Spindle Unit(18Bar 30Bar 50Bar)
- Arm Type ATC (24T / 30T)
- Rotary Table 4th Axis
- Transformer
- CE

Controller Optional

- Mitsubishi M70A Controller
- Fanuc 0i-MD / 0i-MD MATE / 0i-MD α Controller

Spindle Optional

- BT-30 Built-in Spindle: 24000/30000rpm (VL-6i Mitsubishi only)
- BT-40 Direct Drive Spindle: 12000rpm
- BT-40 Direct Drive Spindle: 15000rpm (VL-8i/10i Mitsubishi only)
- BT-40 Built-in Spindle: 20000rpm (VL-8i/10i Mitsubishi only)
- BT-40 Belt type spindle: 8000 /10000rpm
- BT-50 Belt type spindle: 6000 /8000rpm (VL-12i only 8000rpm Mitsubishi only)
- BT-50 Gear type spindle: 6000 /8000rpm (VL-12i only 8000rpm Mitsubishi only)