

A large, stylized green letter 'L' is the central focus of the image. It is set against a dark grey background. The 'L' has a thick, rounded bottom-left corner. The word 'LYMCO' is printed in white, bold, italicized capital letters on the right side of the dark grey background, positioned to the right of the vertical stem of the 'L'.

**LYMCO**

THE EASY CHOICE

# WHY LOOK ELSEWHERE?

We know you wish not having to worry about half the things you worry about today.

We understand that suppliers delivering on-time and within your required specs is essential.

We realize that talking to someone who actually cares about you, let alone understands your language, is really important. And it's even better if he has the answers to your questions.

We see that you want a wide choice of right machines to choose from, all of which have been certified to be reliable and performant.

We get it.



LYMCO is the answer to everything you have been looking for.

LYMCO is almost certainly the CNC machine tool expert that will make your day a whole lot sweeter. With a deep understanding of how to make machines, we are constantly developing ahead of market trends and needs. We design, manufacture and supply within and beyond the specs of our clients; And we make sure that these machines continue to function for years to come.

LYMCO brings you closer to what you have been looking for.

The easy choice.

The LYMCO logo is printed on the left chest of the man's dark polo shirt. It features the word "LYMCO" in a white, sans-serif font with a green outline, preceded by a small icon of three vertical bars of varying heights.

**MULTI-TASKING LIVE TOOLING**

The DV series is designed and built to be highly customizable to accommodate special needs such as larger turning diameter, longer turning stroke, and higher production capacity.



**STANDALONE TOOL CHANGER**

## THE EASY CHOICE

Model	Standard Specification	Unit	DV-3000	DV-3000M
Capacity	Table Diameter	mm	Ø3000	
	Max Turning Diameter	mm	Ø3300	
	Max. Swing	mm	Ø3300	
	Max. Turning Height	mm	2,000	
	Distance between tool holder end and table surface	mm	50 ~ 2050	
	Max. Table Load	kg	22,000	
Spindle	Fanuc Spindle Motor		Fanuc α60/4500HV <sub>i</sub>	
	Spindle Motor	KW	60/75	
	Torque	Nm	68,100	
	Gear rate		H - 27:5, L - 109.8 : 1	
	Spindle speed (low/high)	rpm	2~32 / 33 ~ 100	
CF axis	Fanuc Drive Motor type no.			Fanuc AC servo motor α40/3000 <sub>i</sub>
	C Axis Position Accuracy	mm		±7.5"/360°
	C Axis Repeatability Accuracy	mm		±5"
Live Tolling Spindle	Fanuc spindle Drive Motor	KW		Fanuc α15/7000 <sub>i</sub> , 15.0/18.5
	Cutting Spindle speed (high)	rpm		2500
Stroke	Horizontal travel (X axis)	mm	-150 ~ +2200	
	Vertical travel of ram (Z axis)	mm	1,200	
	Crosse rail vertical travel (W axis)	mm	1,300	
Feedrate	X axis feedrate	m/min	8	
	Z axis feedrate	m/min	10	
	Cutting Feed Rate	M/rev	1~2100	
ATC Magazine	Capacity of ATC magazine	pcs	12	
	Type of Tool Shank		BT50	
	Cutting tool size	mm	□25/□32/□40	
	Turning tool capacity	tool	12	6
	Milling tool capacity	tool	x	6
	Max. tool size	mm	300	
	Max. tool weight	kg	50	
	Tank Capacity	Hydraulic tank	Liter	250
Cutting Liquid tank		Liter	1,200	
Lubricated tank		Liter	20	
Power requirement	Power requirement	KVA	150	165
Machine Size	Floor space	mm	6481 x 8981	
	Max. height	mm	6,597	
	Machine Weight	kg	57,900	58,900

A large industrial vertical turning center (LYMCO RAL) is shown against a dark grey background. The machine features a prominent white cylindrical turret with a grid pattern, mounted on a black base. A tall black vertical column with a green stripe and the 'LYMCO' logo is positioned behind the turret. A horizontal crossrail is visible above the turret. To the right, a control panel with a screen and buttons is mounted on a stand. The machine is surrounded by various cables and components.

**CROSSRAIL MOVABLE**

LYMCO RAL vertical turning center focuses on general turning needs of everyday shops. Designed with octagonal ram and dual position bearing table design: thrust cylindrical and centralized tapered rollers bearing, the RAL vertical lathe can handle deep cuts while enjoy a good clearance for internal boring.

Upon adding the C axis function, the RAL vertical turning center is capable of milling, drilling, and tapping on a workpiece right after turning. The movable cross rail provides flexible high and low profile setup. Optimal radial tooling is available for horizontal jobs.

**DUAL BEARING TABLE**

## THE EASY CHOICE

### SPECIFICATION

Model		UNIT	RAL-12P	RAL-12MP	RAL-16P	RAL-16MP	RAL-20P	RAL-20MP
Capacity	Table diameter	mm	1,250		1,600		2,000	
	Max. swing diameter	mm	1,600		2,000		2,500	
	Max. turning diameter	mm	1,500		1,900		2,400	
	Distance from ram to table	mm	700 ~ 1500		1065 ~ 1865		1075 ~ 1875	
	Max. turning height	mm	1,250		1,600		1,600	
	Max. workpiece weight	kg	6,000		10,000		13,000	
	Ram size	mm	230x240		240x270		240x270	
Spindle	Range of table speed (low/high)	rpm	1 ~ 120 / 1 ~ 300		1 ~ 70 / 1 ~ 250		1 ~ 50 / 1 ~ 200	
	Gear Speed	stpes	2		2		2	
	Max. Table torque	Nm	10,650		24,480		33,770	
Live Tooling Spindle	Max. speed	rpm	-	2-2400	-	50-2250	-	50-2250
	Fanuc spindle motor	kW	-	11/15	-	11/15	-	11/15
	Torque	Nm	-	280	-	280	-	280
ATC	Capacity of ATC magazine	pcs	12	18	12	18	12	18
	Tool Shank		BT-50		BT-50		BT-50	
	Max. Tool size	mm(LxW)	32x32		32x32		32x32	
	Max. Tool weight	kg	50		50		50	
	OD.(ID) Tool shank size	mm	40(ø63)		40(ø63)		40(ø63)	
Stroke	Horizontal travel (X Axis)	mm	-200 ~ +950		-200 ~ +1125		-250~ +1380	
	Vertical travel (Z Axis)	mm	900		1,000		1,000	
	Crosse rail vertical travel (W axis)	mm	800, 5 steps ( 5 positions)		800, 5 steps ( 5 positions)		800, 5 steps ( 5 positions)	
Feed Rate	X-axis Feed Rate	m/min	12		12		12	
	Z-axis Feed Rate	m/min	10		10		10	
	Cutting Feed Rate	mm/rev	0.001~500		0.001~500		0.001~500	
Motor	Feed servo motor (X/Z-Axis)	kW	6		6		6	
Tank capacity	Hydraulic Tank	L	30		55		120	
	Coolant Tank	L	500		500		500	
	Lubrication Tank	L	12		12		12	
Power Source	Power capacity	KVA	50		60		60	
Measurement	Floor space	mm	5900x3800		6500x4600		7800x5100	
	Machine height	mm	5,020	5,360	5,690	5,880	5,740	5,930
	Machine net weight	kg	20,000	20,500	28,000	28,500	42,000	42,500

## High-Precision Boring

Ø200mm quill + 400mm stroke  
To reach deep with high-precision



## ZENTRUM-200Q LBM-200Q

### How To Produce Big Bore with High Precision

LYMCO 200Q horizontal boring mills are designed to handle heavy duty machining tasks in face milling and big bore cutting by with a 200mm rigid quill + 400mm stroke.

### Configure you 200Q Machine

We offer 2 types selection of horizontal boring mills with 200mm quill for differing capabilities.  
ZENTRUM-200Q: 3 axes linearway construction, Centrally mounted spindle.  
LBM-200Q: 3 axes boxway construction, Side mounted spindle.



## THE EASY CHOICE

### SPECIFICATION

Model	ZENTRUM-200Q	LBM-200Q
<b>Travel range</b>		
X-axis (mm)	1500	1500
Y-axis (mm)	1200	1200
Z-axis (mm)	1000	1000
W-axis (mm)	400	400
Rapid traverse X/Y/Z/W (mm/min)	13000/13000/13000/3000	10000/10000/10000/3000
Cutting feed (mm/min)	5000/5000/5000/3000	3000/3000/3000/3000
Distance from spindle nose to table center (mm)	590-1590	500-1500
Distance from spindle center to table surface (mm)	0-1200	-10-1190
<b>Spindle</b>		
Quill diameter (mm)	200	200
Spindle motor (kW)	22/26	22/26
Spindle taper	ISO-50/BT-50/CAT-50	ISO-50/BT-50/CAT-50
Spindle speed (rpm)	2000/3000/4000	2000/3000/4000
Spindle torque (Nm)	1360/optional 665	1360/optional 665
<b>Table</b>		
Table size (mm)	1250 x 1250	1250 x 1250
Max. loading (kg)	4500	4500
T-slot (mm x No.)	22 x 7	22 x 7
indexing increment	0.001	0.001
Rotation speed (rpm)	4	4
Rotation diameter (mm)	1768	1768
<b>Automatic tool changer</b>		
Number of tool pockets	opt. 24/32/40	opt. 24/32/40
Max. tool diameter	ø125mm	ø125mm
If adjacent pockets are empty	ø250mm	ø250mm
Max. tool length	350mm	350mm
Max. tool weight	30kg	30kg
<b>Automatic tool changer</b>		
Machine dimension (mm)	7355 x 4480 x 4000	7355 x 4480 x 4000
Maching weight (kg)	20,000	20,000

# LYMCO

## The Best Process to cut long and complex parts

### STATIONARY WORK TABLE

The MV moving column machining center is designed to machining long and narrow parts, or special machining configuration such as dual spindle dual station setup.

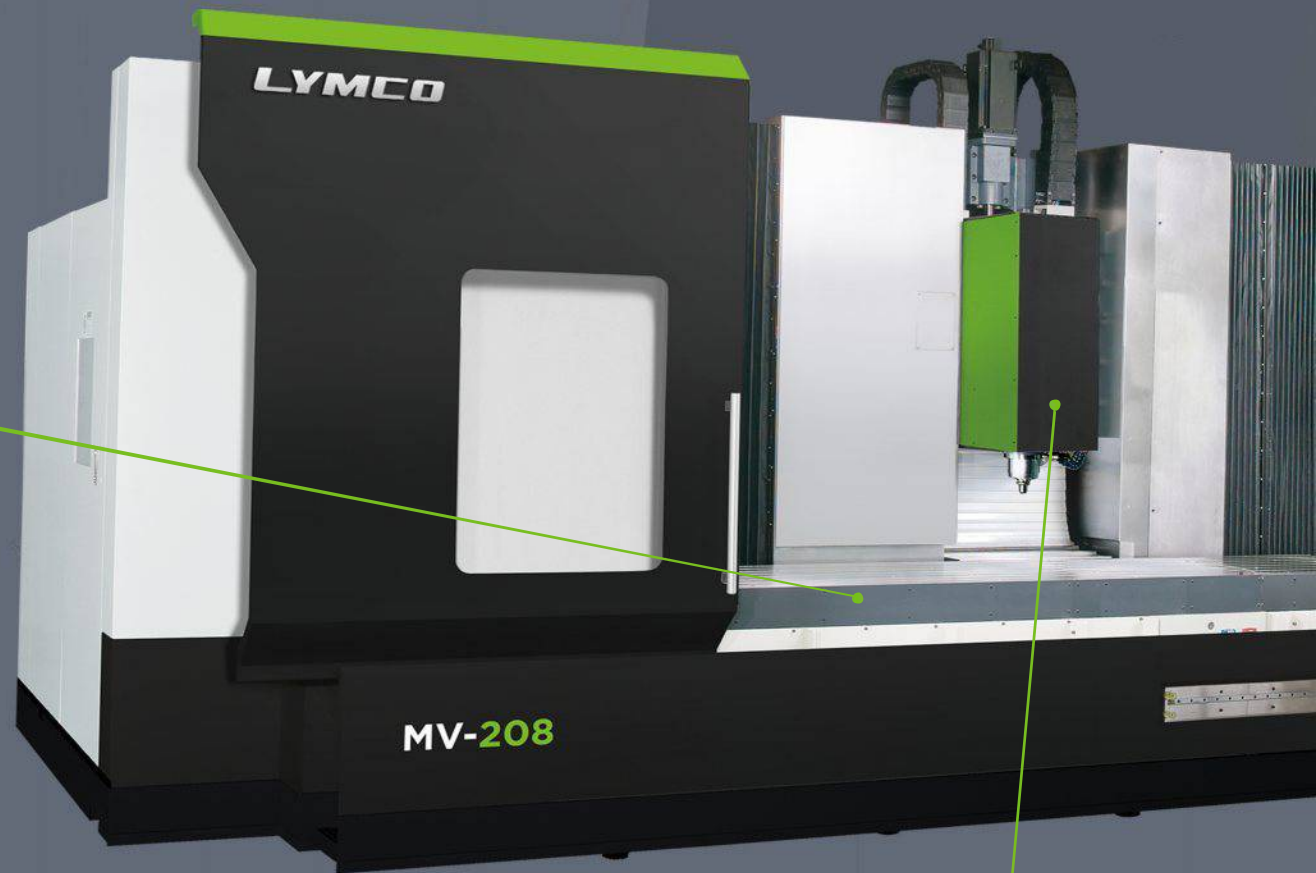
Parts as long as **6** meters, with an entry model to begin at **2** meters, could be fitted on the stationary table. The flexibility of model length is the best in its class.

### VERTICAL SPINDLE

BT50: 6000rpm by gear head

BT50: 8000rpm by direct driven

BBT40/HSK-A63 10000/12000rpm by direct driven



With 3 axis models or the option to combine with a bolt-on rotary table, the CNC moving column machining center offers customizable working areas tailored to specific production systems, ensuring maximum productivity.



# MV

## VERTICAL MOVING COLUMN MACHINES

### LYMCO MV

LYMCO is a pioneer in column moving machines. We began building the machines since 2010. Find the most compatible and accommodating platform in one of our MV column moving machines.

### Find Your Perfect Fit

We offer a wide and diverse selection of 3/4/5 axis column moving machines with differing capabilities. Choose from a diverse selection of model sizes, tailored to meet your unique project requirements.

### Full Range of Sizes

**X** axis : 2000/3000/4000/6000mm

**Y** axis : 600/800mm

**Z** axis : 560/700mm

**A** axis bolt-on rotary table

**B** axis swiveling spindle head

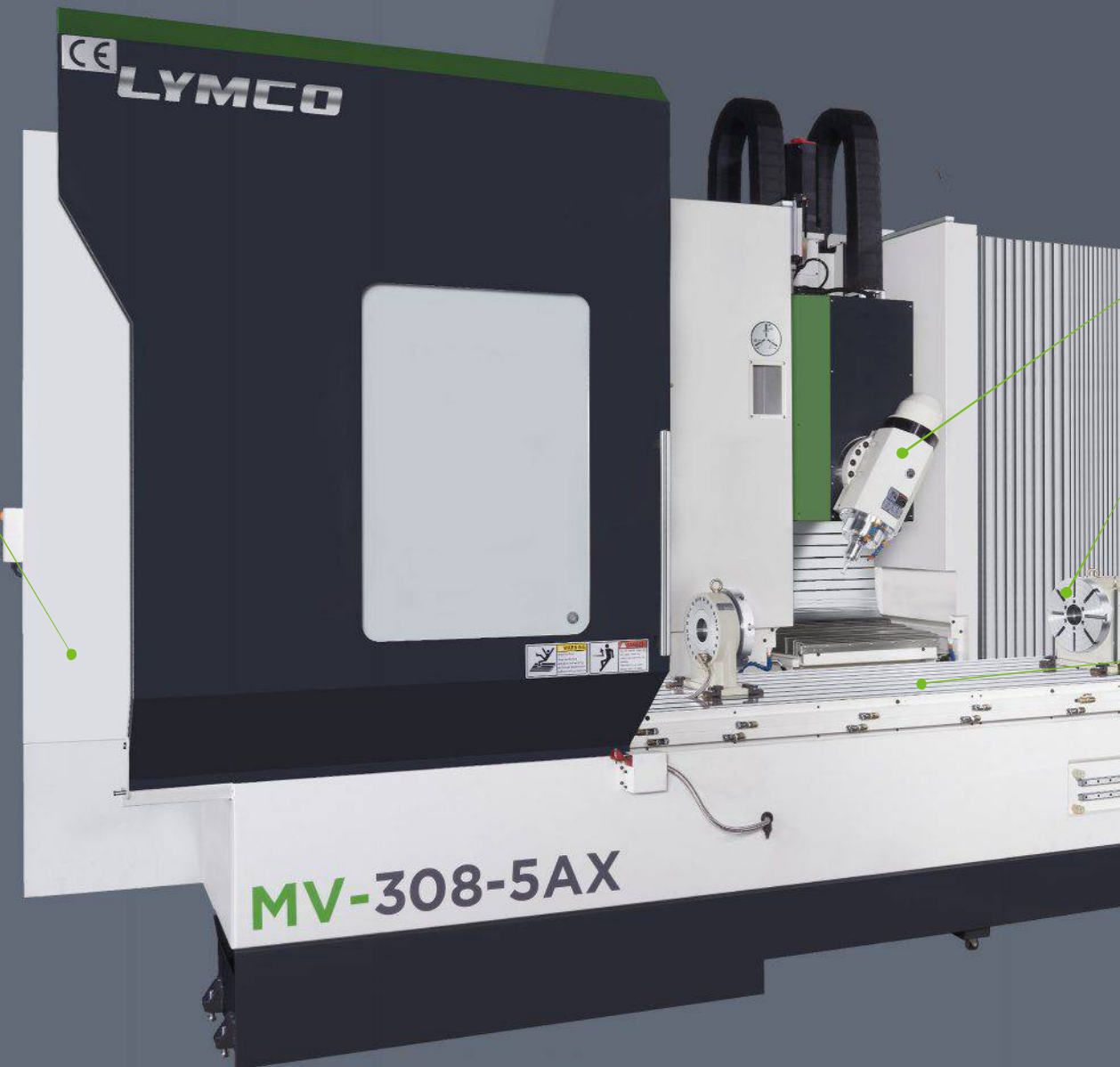
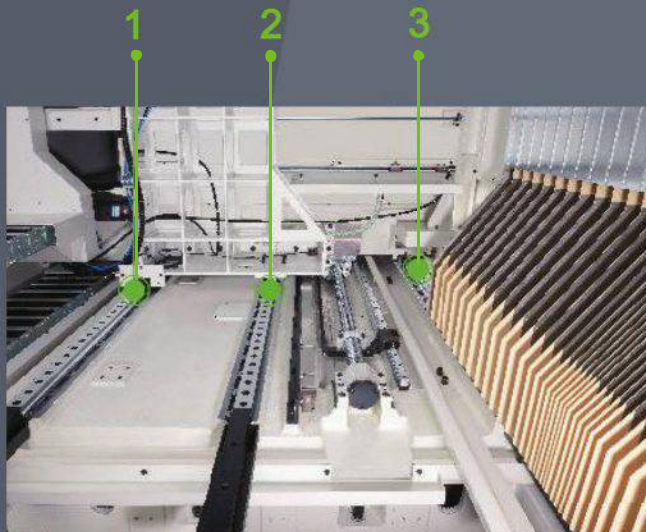
**C** axis embedded rotary table

# LYMCO

## RIGID STRUCTURE

Y axis travel 800mm with X axis span **1500** mm wide and **3** pcs of roller type linear guideway to ensure the excellent machining result.

Machines featuring X axis travel exceeding **3000** mm are equipped with ballscrew supports to prevent bending and vibration during rapid movements.





### **B Axis SWIVELING SPINDLE HEAD**

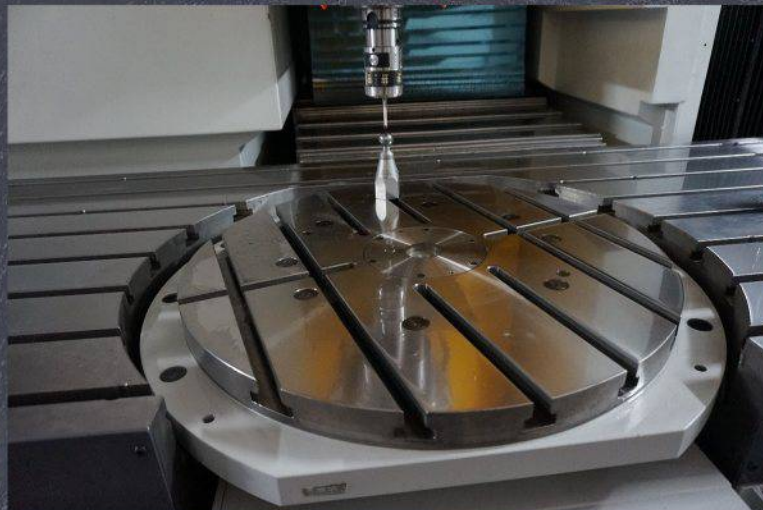
BBT40/HSK-A63 12000/15000rpm by built-in motor  
Swiveling head range: +/-110°  
Indexing accuracy : 0.001°

### **A Axis BOLT-ON ROTARY TABLE**

Owner of MV(5AX) machine could enjoy a boost of productivity when combining the machine with bolt-on rotary table+ chuck, fixture.

### **C Axis EMBEDDED ROTARY TABLE**

Rotary table **630** mm (800mm) —Y axis travel 800mm.  
Rotary table **500** mm —Y axis travel 600mm  
Add turning capacity to the C axis table.



# MV-5AX

5 AXIS

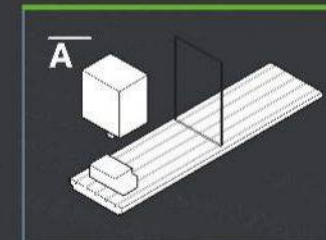
MOVING COLUMN MACHINES

## PRECISION ENGINEERING

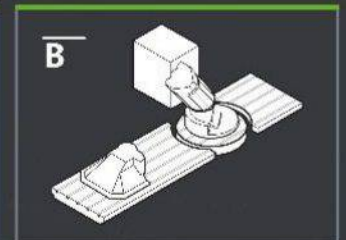
The combination of a moving column and swiveling head + rotary table ensures precise and accurate machining, even for pieces with complex geometries.

## Configure you MV Machine

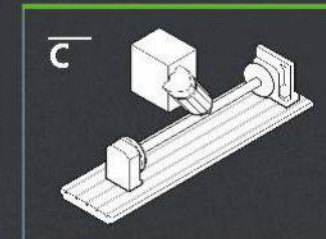
We offer a wide and diverse selection of Column Moving Machines with differing capabilities.



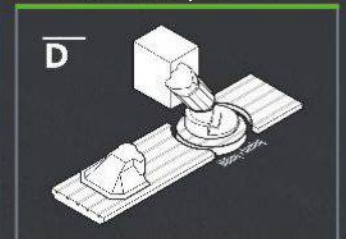
Basic 3 axis function : dual station



Swiveling spindle head + C axis embedded rotary table



Swiveling spindle head + A axis bolt-on rotary table



Milling + turning function

## MV-SPECIFICATION

Model	Unit	MV-206/MV-306/MV-406/MV-606	MV-208/MV-308/MV-408/MV-608
<b>Travel</b>			
X axis	mm	2000/3000/4000/6000	2000/3000/4000/6000
Y axis	mm	600	800
Z axis	mm	560	700
Spindle nose to table surface	mm	180 - 740	160 - 860
Spindle center to column surface	mm	675	915
<b>X/Y/Z Linear Axes</b>			
Rapid traverse	mm/min	24,000	24,000
Cutting feedrate	mm/min	1-12,000	1-12,000
Positioning accuracy	mm	ISO 230-2 0.01/300	ISO 230-2 0.01/300
Repeatability accuracy	mm	±005	±005
<b>Table</b>			
Table size	mm	2500/3650/4800/6500 x 610	2500/3500/4500/6500 x 800
Table loading capacity	kg	2000/3000/4000/6000	2500/3500/4500/6500
T-slot	mm	18 x 5 x 100	18 x 8 x 100
<b>Spindle</b>			
Spindle taper		BT-40/HSK-A63 (BT-50)	BT-40/HSK-A63 (BT-50)
Spindle speed	rpm	10,000 (6000/8000)	10,000 (6000/8000)
Spindle driven		Direct driven (Gear head)	Direct driven (Gear head)
Spindle power output	kW	15 (18.5/22)	15 (18.5/22)
<b>Tool Magazine</b>			
Tool capacity	pcs	24	24
Max. tool dia. x length	mm	Ø77.5 x 300	Ø77.5 x 300
Max. tool weight	kg	7	7
Tool section		Bi-direction	Bi-direction
Tool shank		BT-40/HSK-A63 (BT-50)	BT-40/HSK-A63 (BT-50)
<b>Coolant System</b>			
Coolant tank capacity	liter	300/350/400/500	300/350/400/500
Coolant pump	W	850/1290 (50/60 Hz) * 2	850/1290 (50/60 Hz) * 2
<b>Machine Size</b>			
Height	mm	3,100	3,300
Floor space (WxD)	mm	6200/7200/8200/10200 x 3270	6200/7200/8200/10200 x 4000
Machine weight	kg	14000/18000/22000/30000	18000/24000/30000/42000
<b>Connections</b>			
Power consumption	kVA	45/45/50/55	50/50/55/60

## MV-5AX

Model	Unit	MV-206/306/406/606-5AX	MV-208/308/408/608-5AX
<b>B axis - Swiveling Head</b>			
Swiveling range	degree	±110	±110
Mini indexing	degree	0.001	0.001
Max. speed	rpm	40.0	40.0
<b>C axis - Embedded Rotary Table</b>			
Rotary table diameter	mm	Ø500	Ø630 (800)
Table load capacity	kg	500	700
Mini indexing	degree	0.001	0.001
<b>A axis - Bolt-on Rotary Table</b>			
Rotary table diameter	mm	Ø250/280/320/400	Ø250/280/320/400
Mini indexing	degree	0.001	0.001
<b>MV-5AX Spindle</b>			
Spindle taper		BBT-40/HSK-A63	BBT-40/HSK-A63
Spindle speed	rpm	12,000 (15,000)	12,000 (15,000)
Spindle driven		Built-in	Built-in
Spindle power output	kW	18.5	18.5

### Standard Accessories :

Fully enclosure splash guard	Spindle taper : BT50 driven by gear head (MV)
Chip conveyor with cart	Coolant through spindle
Chip auger	Tool magazine capacity : 30/40 pcs
Coolant equipment	Automatic tool length measurement
Lubrication system	Automatic workpiece measurement
Pneumatic unit	Heidenhain linear scale
Spindle oil cooler	Oil skimmer
Air conditioner for electrical cabinet	
<b>Work lamp</b>	
Rigid tapping	
Auto power-off	
Manual pulse generator	
Spindle air blast	
Wash down and air nozzles	
Air and coolant gun	
Program end & alarm lamp	
CE certificate	
Leveling block and bolts	



# MCV-M11-5AX

## HEAD-TABLE TYPE GENERAL 5-AXIS PART MAKING

MCV-M11-5AX provides a simple solution for small and medium size shops that requires 5-axis capacity. MCV-M11-5AX provides a simple configuration with Swivel head (B axis) and Rotary table (C axis). The machine can be easily setup as 3+1, 3+2, or 4+1 axis based on shop's actual needs. Like all Lymco 5-axis machines, MCV-M11-5AX went through a rigorous testing and inspection cycle to assure the performance when commanded.

### SPECIFICATION

Model	MCV-M11-5AX
X axis (mm)	1,100
Y axis (mm)	650
Z axis (mm)	600
Table size (mm)	1,300x600
Max. table loading (kg)	1,000
Max. spindle speed (rpm)	10,000 (12,000)
Spindle motor (kw)	7.5/11
Rapid feedrate (mm/min)	24,000/24,000/20,000
Cutting feedrate (mm/min)	7,000
Magazine capacity (pcs)	16
Machine weight (kgs)	7,000

<b>A axis</b>	
Max. speed (rpm)	17
Rotary angle	+110° -110°
<b>C axis</b>	
Worktable area (dia.)	-
Load Capacity (kg)	-
Max. Rotation Speed (rpm)	-

### EASY TO INSTALL

Put machine into place with a fork lift; start production immediately

### SETUP

Eliminate multiple setups on different facing and angular drilling jobs

### JOBS

Y axis Moving Column: Allows one setup of jobs to greatly reduce setup time

**GEAR SPINDLE**

Powerful high torque spindle. With up to 6000 rpm speed. Wide range of alternative speed to choose from.

**BOX GUIDEWAY**

Boxways to support the machine for maximum performance. (MCV-boxway: MCV-2510/MCV-3010)

**GEAR SPINDLE****MCV****BOXWAY / LINEARWAY  
VERTICAL MACHINING**

The MCV machine is one of the best choices for general machining. MCV boxway can be configured with a maximum of 3,000mm on X axis travel with 1,000mm in Y cross stroke. It is designed to handle some of the typical jobs performed in general shops that require a bigger travel. The stability from this popular machine is highly applicable to part-making environment. With various accessories to choose from, this machine is also highly applicable to both production and job shop requirement.

**BOX GUIDEWAY**



## THE EASY CHOICE

### LINEARWAY

#### SPECIFICATION

Model	MCV-M5		MCV-M7		MCV-M8		MCV-M10		MCV-M11	
X axis (mm)	550		760		800		1,020		1,100	
Y axis (mm)	400		450		500		500		650	
Z axis (mm)	500		500		500		500		600	
Table loading capacity (kg)	300		400		600		800		1,000	
Table size (mm)	400 x 700		900 x 500		900 x 500		1,200 x 500		1,300 x 600	
Max. spindle speed (rpm)	12,000(15,000)	10,000	12,000(15,000)	10,000	12,000(15,000)	10,000	10,000	12,000(15,000)	10,000	
Spindle drive motor (kw)	5.5/7.5		5.5/7.5		7.5/11		7.5/11		7.5/11	
Spindle taper	BT-40		BT-40		BT-40		BT-40		BT-40	
Rapid on X,Y,Z (mm/min)	36,000/36,000/30,000		36,000/36,000/30,000		36,000/36,000/30,000		36,000/36,000/30,000		36,000/36,000/30,000	
Cutting feedrate (mm/min)	1-12,000	1-8,000	1-12,000	1-8,000	1-12,000	1-8,000	1-8,000	1-12,000	1-8,000	
Machine weight (kgs)	3,200		3,400		4,350		4,350		7,000	

### BOXWAY

#### SPECIFICATION

Model	MCV-86	MCV-116	MCV-127	MCV-147E	MCV-147	MCV-168	MCV-188	MCV-2010	MCV-2510	MCV-3010
X axis (mm)	850	1,100	1,200	1,400	1,400	1,600	1,800	2,000	2,500	3,000
Y axis (mm)	650	650	700	700	700	800	800	1,000	1,000	1,000
Z axis (mm)	600	600	600	600	700	700	700	800	800	800
Table loading capacity (kg)	800	800	1,000	1,200	1,400	2,000	2,200	3,000	3,200	4,000
Table size (mm)	1,050 x 600	1,300 x 600	1,300 x 600	1,450 x 600	1,450 x 680	1,700 x 815	1,900 x 850	2,200 x 1,000	2,700 x 1,000	3,100 x 1,000
Max. spindle speed (rpm)	10,000 / 15,000		10,000	8,000	10,000	6000 (OP. 8000) / 5500				
Spindle drive motor (kw)	7.5 / 11		11 / 15		15 / 18.5	15 / 18.5 (18 / 22.5)		15 / 18.5 (18 / 22.5)		
Spindle taper	BT-40		BT-40 (BT-50)				BT-40 (BT-50)			
Rapid on X,Y,Z (mm/min)	18,000		18,000	18,000		15,000		15,000		
Cutting feedrate (mm/min)	1-5,000		1-5,000	1-5,000		1-5,000		1-5,000		