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Double Column
Machining Center

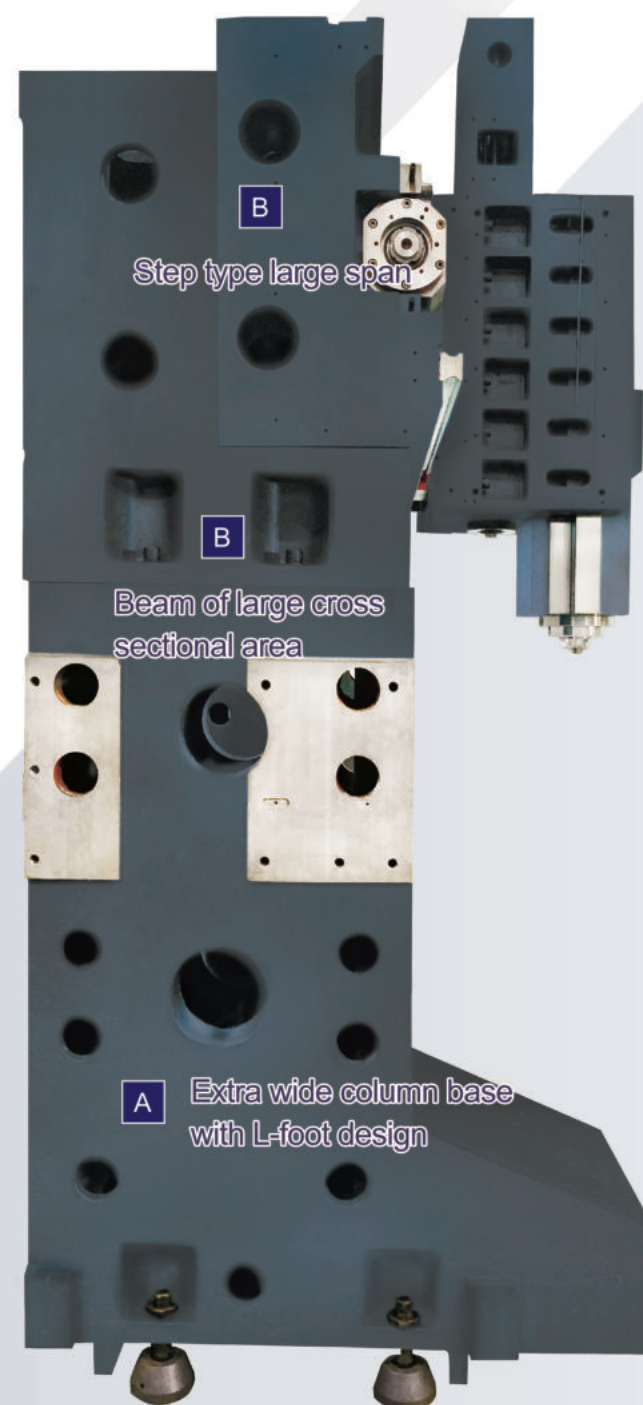
DMCB series

1722 / 1732 / 2132 / 2142

DMCB SERIES

1722 / 1732 / 2132 / 2142

is suitable for various machining fields, such as molding, auto parts, aerospace components.



Step type large span

Beam of large cross sectional area

Extra wide column base with L-foot design

Superior Machine Structure

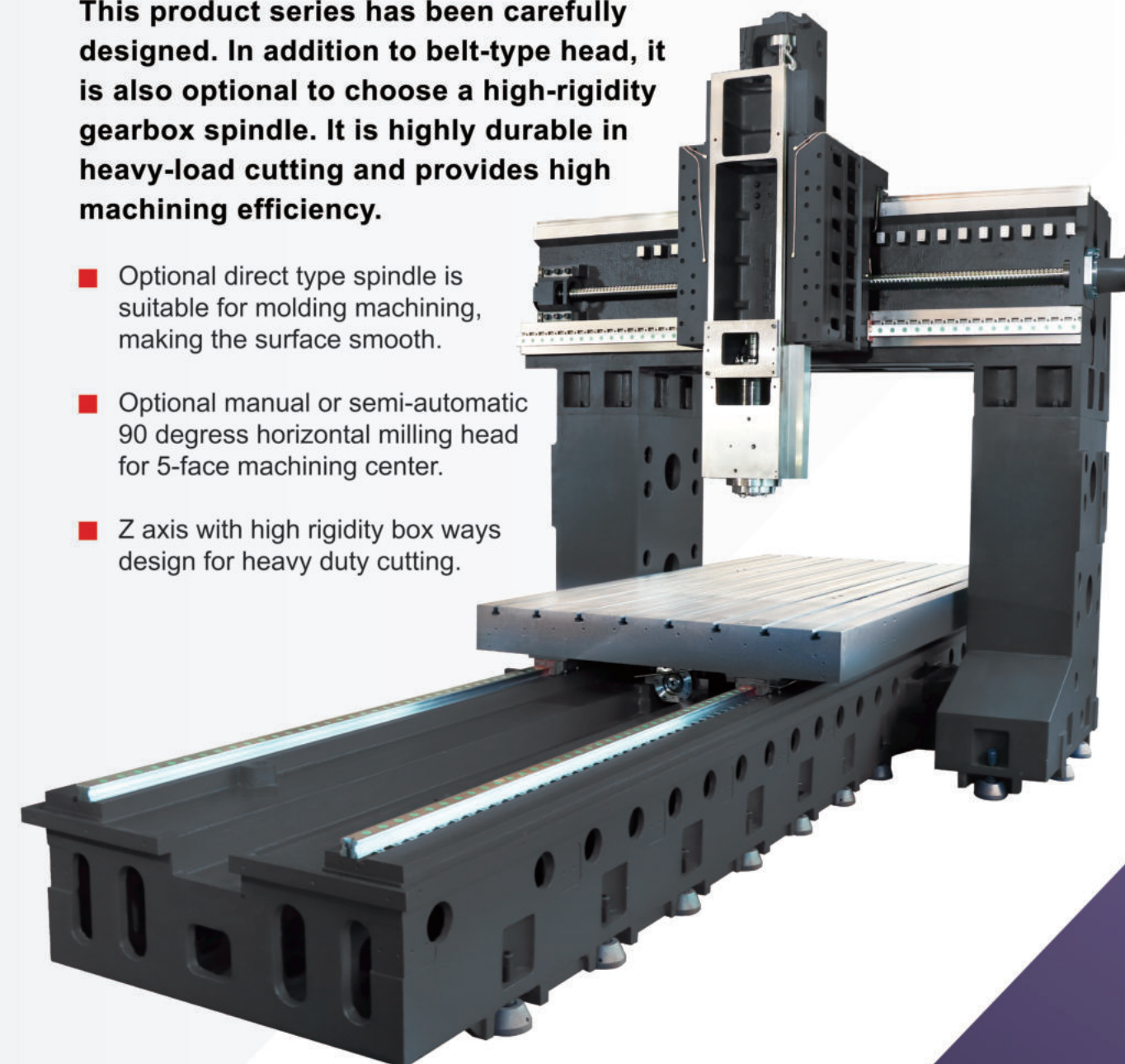
- A** Extra wide column base with L-foot design, prevents the headstock from leaning forward also ensures rigidity and machining stability of the machine.
- B** High rigidity internal ribs structure design Beam of large cross sectional area is step type linear way design. Guide way with large span, small distance between spindle and slider, and small turning torque make the structural rigidity better.
- C** Z axis with wide box ways design and showing excellent rigidity. Z axis employs dual oil cylinder balance system, making sure that ball screw and spindle move smoothly, maintaining high repeatability positioning accuracy.



Excellent Machining Performance

This product series has been carefully designed. In addition to belt-type head, it is also optional to choose a high-rigidity gearbox spindle. It is highly durable in heavy-load cutting and provides high machining efficiency.

- Optional direct type spindle is suitable for molding machining, making the surface smooth.
- Optional manual or semi-automatic 90 degree horizontal milling head for 5-face machining center.
- Z axis with high rigidity box ways design for heavy duty cutting.



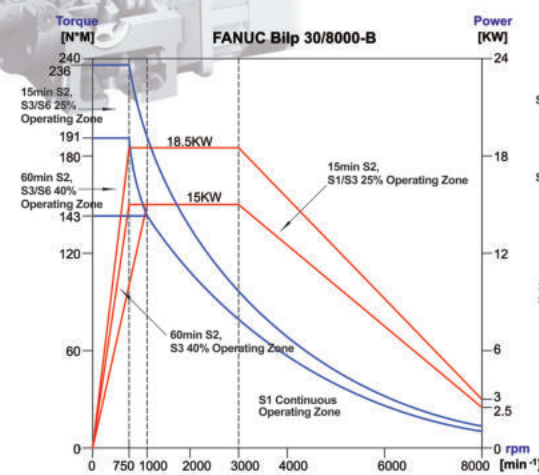
Head Structure

Optional belt-type spindle or direct type spindle meet different machining requirements. The speed range is 6000-10000rpm.

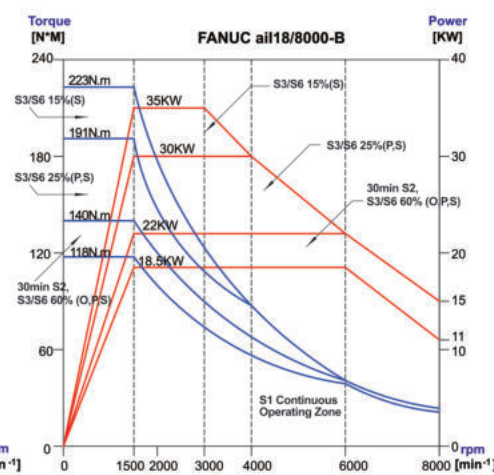
ZF gearhead: Provides high torque at low speed for heavy duty cutting; high power for machining requirement of the workpiece with smooth surface. The lubrication system in the gearbox maintains good operation and keeps gearbox at constant temperature.

Spindle output Diagrams

BT50 Belt type 8000rpm



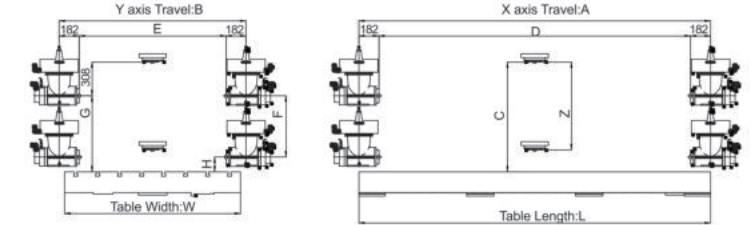
BT50 Belt type 8000rpm



Semi-automatic indexing 90° milling head machining range



Semi-automatic indexing 90° milling head	
Tool clamping	Auto
Head clamping	Manual
Indexing	Auto 5°, 180°
Max. Power	38 kw
Max. Speed	2000rpm



Model	A	B	C	D	E	F	G	Z	W	L	H
DMCB-1722	2200	1700	1000	1840	1340	560	690	800	1600	2200	135
DMCB-1732	3200	1700	1000	2840	1340	560	690	800	1600	3200	135
DMCB-2132	3200	2100	1200	2840	1740	760	890	1000	2000	3200	135
DMCB-2142	4200	2100	1200	3840	1740	760	890	1000	2000	4200	135

Universal milling head



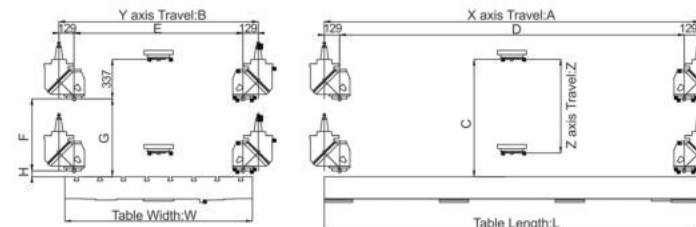
Universal milling head	
Tool clamping	Manual
Head clamping	Manual
Indexing	Manual 1°
Max. Power	38 kw
Max. Speed	1200rpm

Extension manual head



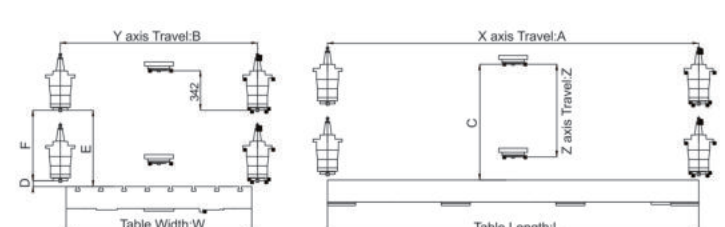
Extension manual head 300&500MM	
Tool clamping	Manual
Head clamping	Manual
Max. Power	38 kw
Max. Speed	2000rpm

Universal milling head (0°) machining range



Model	A	B	C	D	E	F	G	Z	W	L	H
DMCB-1722	2200	1700	1000	1940	1440	610	660	800	1600	2200	50
DMCB-1732	3200	1700	1000	2940	1440	610	660	800	1600	3200	50
DMCB-2132	3200	2100	1200	2940	1840	810	860	1000	2000	3200	50
DMCB-2142	4200	2100	1200	3940	1840	810	860	1000	2000	4200	50

Extension manual head 300MM machining range



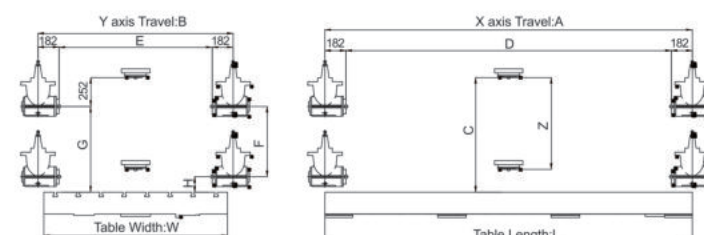
Model	A	B	C	D	E	F	Z	W	L
DMCB-1722	2200	1700	1000	50	660	610	800	1600	2200
DMCB-1732	3200	1700	1000	50	660	610	800	1600	3200
DMCB-2132	3200	2100	1200	50	860	810	1000	2000	3200
DMCB-2142	4200	2100	1200	50	860	810	1000	2000	4200

Optional Attached Milling Head

90° manual angular milling head

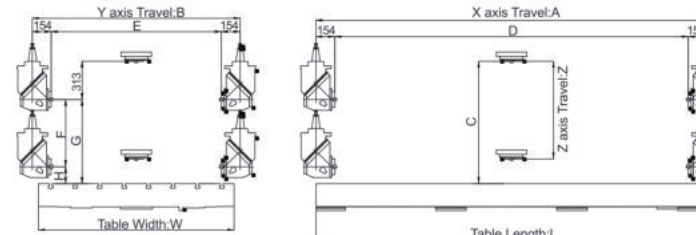


90° manual angular milling head	
Tool clamping	Manual
Head clamping	Manual
Indexing	Manual 1°, 0~360°
Max. Power	38 kw
Max. Speed	2000rpm



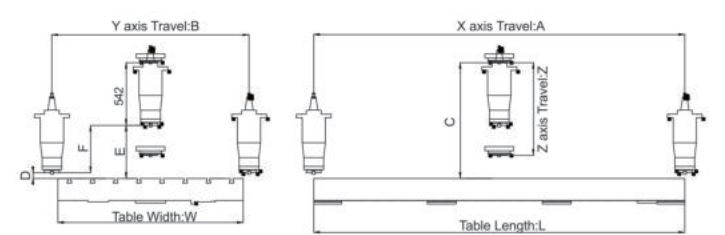
Model	A	B	C	D	E	F	G	Z	W	L	H
DMCB-1722	2200	1700	1000	1840	1340	610	750	800	1600	2200	135
DMCB-1732	3200	1700	1000	2840	1340	610	750	800	1600	3200	135
DMCB-2132	3200	2100	1200	2840	1740	810	950	1000	2000	3200	135
DMCB-2142	4200	2100	1200	3840	1740	810	950	1000	2000	4200	135

Universal milling head (90°) machining range



Model	A	B	C	D	E	F	G	Z	W	L	H
DMCB-1722	2200	1700	1000	1890	1390	550	690	800	1600	2200	138
DMCB-1732	3200	1700	1000	2890	1390	550	690	800	1600	3200	138
DMCB-2132	3200	2100	1200	2890	1790	750	890	1000	2000	3200	138
DMCB-2142	4200	2100	1200	3890	1790	750	890	1000	2000	4200	138

Extension manual head 500MM machining range



Model	A	B	C	D	E	F	Z	W	L
DMCB-1722	2200	1700	1000	50	460	410	800	1600	2200
DMCB-1732	3200	1700	1000	50	460	410	800	1600	3200
DMCB-2132	3200	2100	1200	50	660	610	1000	2000	3200
DMCB-2142	4200	2100	1200	50	660	610	1000	2000	4200

DMCB Specifications



Models	DMCB-1722		DMCB-1732		DMCB-2132		DMCB-2142	
Travel								
X - Axis Travel	2200mm		3200mm		3200mm		4200mm	
Y - Axis Travel	1700mm		1700mm		2100mm		2100mm	
Z - Axis Travel	800mm		800mm		1000mm		1000mm	
Distance between column	1700mm		1700mm		2100mm		2100mm	
Spindle Nose To Table	200-1000mm		200~1000mm		200~1200mm		200~1200mm	
Table								
Table Size	1400mmx2200mm		1400mmx3200mm		1800mmx3200mm		1800mmx4200mm	
T - Slot	22mmX200mmX8T (22mmx120mm each side for one)		22mmX200mmX8T (22mmx120mm each side for one)		22mmX200mmX10T (22mmx120mm each side for one)		22mmX200mmX10T (22mmx120mm each side for one)	
Maximum Table Load	8000 kg		10000 kg		12000 kg		15000 kg	
Spindle								
Spindle taper-D mm	BT50-190		BT50-190		BT50-190		BT50-190	
Type Of Driving	Belt Type		Belt Type		Belt Type		Belt Type	
Spindle speed	6000 rpm		6000 rpm		6000 rpm		6000 rpm	
Feed Rate								
Rapid Feed Rate (X.Y.Z)	X:20 Y:20 Z:15 (m/min)		X:20 Y:20 Z:15 (m/min)		X:20 Y:20 Z:15 (m/min)		X:20 Y:20 Z:15 (m/min)	
Cutting feedrate	7000(mm/min)		7000(mm/min)		7000(mm/min)		7000(mm/min)	
Type Of Driving								
X Axis Type Of Driving	Belt decelerate (1 : 2)		Belt decelerate (1 : 2)		Belt decelerate (1 : 2)		Belt decelerate (1 : 2)	
Y Axis Type Of Driving	Direct type drive		Direct type drive		Direct type drive		Direct type drive	
Z Axis Type Of Driving	Direct type drive		Direct type drive		Direct type drive		Direct type drive	
Automatic tool changer								
Max.tool length	350mm		350mm		350mm		350mm	
Max.tool weight	15kg		15kg		15kg		15kg	
Max.tool dia.-(Full tools)	Ø110mm		Ø110mm		Ø110mm		Ø110mm	
Max.tool dia.-(W/O Adjacent tool)	Ø200mm		Ø200mm		Ø200mm		Ø200mm	
Motors	OiMF-β	OiMF-α	OiMF-β	OiMF-α	OiMF-β	OiMF-α	OiMF-β	OiMF-α
Spindle Motor (Rated/Max)	15/18.5kw(143Nm)	18.5/22kw(118Nm)	15/18.5kw(143Nm)	18.5/22kw(118Nm)	15/18.5kw(143Nm)	18.5/22kw(118Nm)	15/18.5kw(143Nm)	18.5/22kw(118Nm)
X Axis Servo Motor	3KW(36Nm)	7KW(30Nm)	3KW(36Nm)	7KW(30Nm)	3KW(36Nm)	7KW(30Nm)	3KW(36Nm)	7KW(30Nm)
Y Axis Servo Motor	3KW(36Nm)	7KW(30Nm)	3KW(36Nm)	7KW(30Nm)	3KW(36Nm)	7KW(30Nm)	3KW(36Nm)	7KW(30Nm)
Z Axis Servo Motor	3KW(36Nm) BS	7KW(30Nm)BS	3KW(36Nm)BS	7KW(30Nm)BS	3KW(36Nm)BS	7KW(30Nm)BS	3KW(36Nm)BS	7KW(30Nm)BS
Cutting fluid Capacity(motor)	300L(1000W)		300L(1000W)		300L(1000W)		300L(1000W)	
Hydraulic tank Capacity(motor)	160L(7.5kW)		160L(7.5kW)		160L(7.5kW)		160L(7.5kW)	
Machine Accuracy								
Positioning Accuracy (JIS)	±0.005/300 ; ±0.015/Full travel		±0.005/300 ; ±0.015/Full travel		±0.005/300 ; ±0.015/Full travel		±0.005/300 ; ±0.015/Full travel	
Repeat Poitioning Accuracy (JIS)	±0.003mm		±0.003mm		±0.003mm		±0.003mm	
Others								
Pneumatic supply	≥ 6.5Kg/cm ²		≥ 6.5Kg/cm ²		≥ 6.5Kg/cm ²		≥ 6.5Kg/cm ²	
Floor Space Measurement	6400mmX4400mmX4000mm		8400X4400X4000mm		8400X5000X4800mm		10400X5000X4800mm	
Machine weight (approximate)	22000KG		28000KG		32000KG		38000KG	

Standard Features
Fanuc Oi-MF Controller 10.4" LCD
BT50 Belt-type 6,000rpm
Leveling screws with blocks
Tool box
Air blast through spindle
Work lamp
Unclamping pedal
Three color light
Auto power off
Auto lubrication system
Rigid tapping
RS232 interface
CF card interface
MPG
Spindle coolant system
Heat exchanger for control cabinet
Pneumatic System(not included pneumatic source and tube)
High pressure water & air gun
Chain type chip conveyor
Screw type chip conveyor
System operation and procedures manual
Machine operation manual
Optional Features
Fanuc Oi-MF(1) Alpha Controller 10.4" LCD
Fanuc Oi-MF(1)beta Controller 10.4" LCD
BT50 Belt+ZF Gear Head 6,000rpm
BT50 Direct type 8,000rpm
90° angular milling head (Manual) / (Semi-automatic)
BT-50 Arm type ATC (24/30T)
BT-50 Chain type ATC (40/60T)
Column raised: 200mm / 400mm
Tool length measurement system
Coolant through spindle (20Bar/30Bar/50Bar)
Disk type oil-water speartor
Auto door
X/Y/Z Optical scale
Workpiece measurement system
Full splash guard
CE standard
AICC2 (Preview blocks max. 200)
Data Server memory capacity 1G
Oil-mist recovery equipment
Oil-mist Coolant System
Oil Hole Holder Function
Air conditioner

•SPECIFICATIONS SUBJECT TO CHANGED WITHOUT PRIOR NOTICE. THANKS!

DMCB-VH SERIES

VH series VH2132 / 2142

ECOM Customized “5-face machining center” could be satisfied Customer’s Multi-processing requirement.



Save Z-axis travel loss and save time

ECOM pioneered vertical/horizontal milling head, also known as 5-faced milling head. Its, compact structure is superior to the common external head, greatly saving z-axis travel loss, save exchange time of milling head, and improving production efficiency rate and working quality.

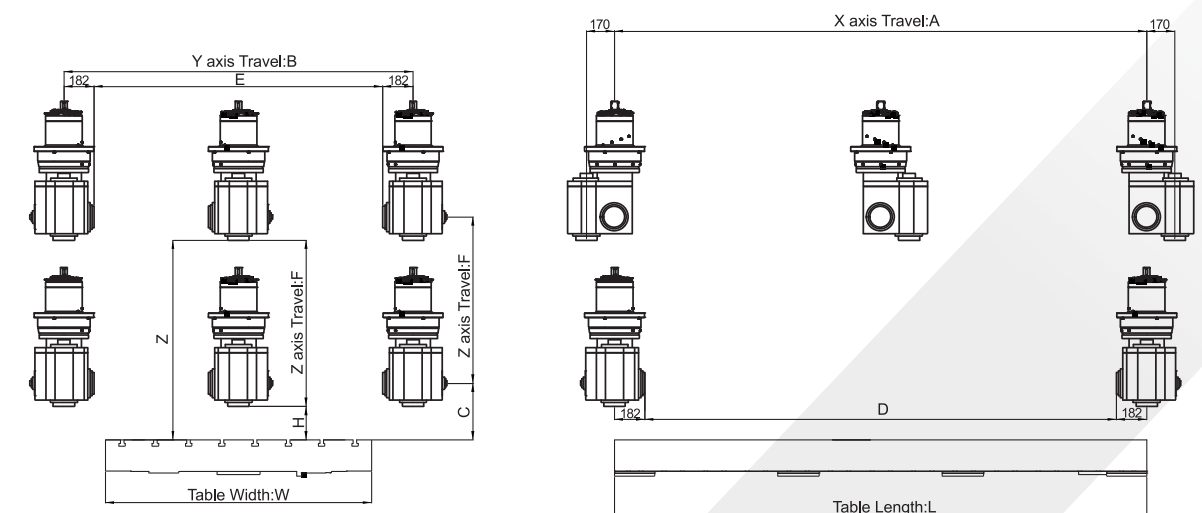
VH series
VH2132 / 2142

Head Structure



Specifications	5-face milling head	
	Vertical	Horizontal
Spindle Taper	BT50	BT50
Max. Power	30KW	30KW
Max. Speed	2500rpm	2500rpm
Indexing	Non	5°

5-Face Milling Head Machine Range



Unit : mm

Model	A	B	C	D	E	F	Z	W	L	H
DMCB-VH2132	3200	2100	340	2840	1740	1000	1200	2000	3200	200
DMCB-VH2142	4200	2100	340	3840	1740	1000	1200	2000	4200	200

DMCB-VH Series Specifications

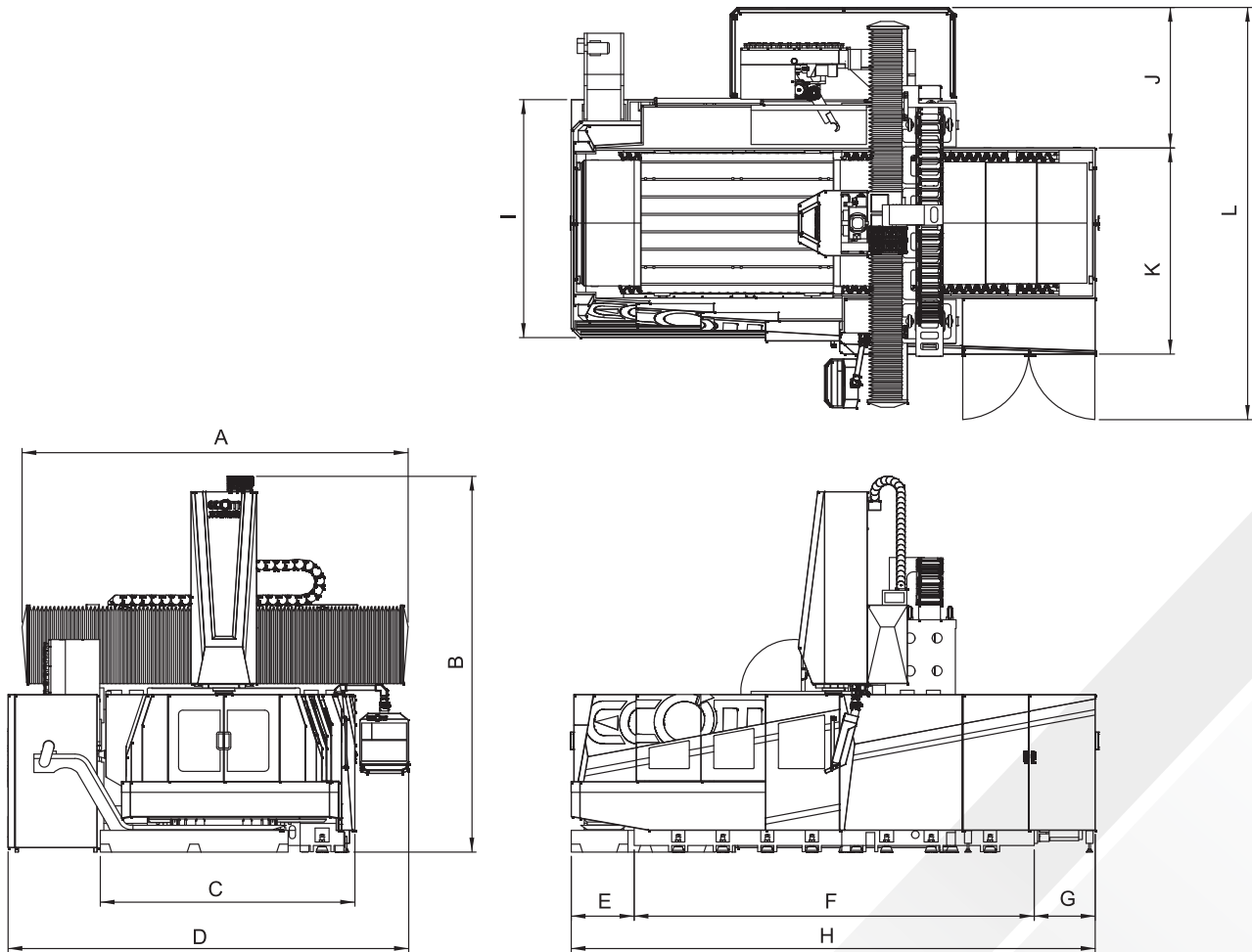


Models	DMCB-VH2132	DMCB-VH2142
Travel		
X - Axis Travel	3200mm	4200mm
Y - Axis Travel	2100mm	2100mm
Z - Axis Travel	1000mm	1000mm
Distance between column	2100mm	2100mm
Working Area	2100X3200X1200mm	2100X4200X1200mm
Spindle Nose To Table	200~1200mm	200~1200mm
Table		
Table Size	1800mmx3200mm	1800mmx4200mm
T-Slot	22mmx200mmx8T (22mmx120mm each side for one)	22mmx200mmx8T (22mmx120mm each side for one)
Maximum Table Load	12000 kg	15000 kg
Spindle		
Spindle taper	BT50	BT50
Type of driving	Direct drive Vertical/Horizontal	Direct drive Vertical/Horizontal
Spindle speed	2500 rpm	2500 rpm
Feed Rate		
Rapid feef rate (X.Y.Z)	X:20 Y:20 Z:15 (m/min)	X:20 Y:20 Z:15 (m/min)
Cutting feedrate	7000(mm/min)	7000(mm/min)
Type Of Driving		
X Axis Type Of Driving	Belt decelerate (1 : 2)	Belt decelerate (1 : 2)
Y Axis Type Of Driving	Direct type drive	Direct type drive
Z Axis Type Of Driving	Direct type drive	Direct type drive
Automatic tool changer		
Max.tool length	350mm	350mm
Max.tool weight	15kg	15kg
Max.tool dia (Full tools)	Ø110mm	Ø110mm
Max.tool dia (W/O Adjacent tool)	Ø200mm	Ø200mm
Motors		
Spindle Motor (Rated/Max)	15/18.5kw(143N.m)	15/18.5kw(143N.m)
X Axis Servo Motor	3KW(36N.m)	3KW(36N.m)
Y Axis Servo Motor	3KW(36N.m)	3KW(36N.m)
Z Axis Servo Motor	3KW BS(36N.m)	3KW BS(36N.m)
Cutting fluid Capacity (motor)	300L(1000W)	300L(1000W)
Hydraulic tank Capacity (motor)	160L(7.5kW)	160L(7.5kW)
Machine Accuracy		
Positioning Accuracy (JIS)	±0.005/300 : ±0.015/Full travel	±0.005/300 : ±0.015/Full travel
Repeat Poitioning Accuracy (JIS)	±0.003mm	±0.003mm
Others		
Pneumatic supply	≥ 6.5Kg/cm ²	≥ 6.5Kg/cm ²
Floor Space Measurement	8400X5000X4800mm	10400X5000X4800mm
Machine weight (approximate)	32000kg	38000kg

Standard Features
Fanuc Oi-MF Controller 10.4" LCD
Vertical/Horizontal Mill head 2,500rpm
Leveling screws with blocks
Tool box
Air blast through spindle
Work lamp
Unclamping pedal
Three color light
Auto power off
Auto lubrication system
Rigid tapping
RS232 interface
CF card interface
MPG
Spindle coolant system
Heat exchanger for control cabinet
Pneumatic System (not included pneumatic source and tube)
High pressure water & air gun
Chain type chip conveyor
Screw type chip conveyor
System operation and procedures manual
Machine operation manual

Optional Features
BT-50 Arm type ATC (24/30T)
BT-50 Chain type ATC (40T/60)
Disk type oil-water speartor
Auto door
X/Y/Z Optical scale
Tool length measurement system
Workpiece measurement system
Full splash guard
CE standard
AICC2 (Preview blocks max. 200)
Data Server memory capacity 1G
Oil-mist Mist recovery equipment
Oil-mist Coolant System
Oil Hole Holder Function
Air conditioner

Machine Dimensions



Unit : mm

Model	A	B	C	D	E	F	G	H	I	J	K	L
DMCB-1722	4450	4350	2950	4600	750	4580	700	6030	2750	1690	2400	4850
DMCB-1732	4450	4350	2950	4600	750	6580	700	8030	2750	1690	2400	4850
DMCB-2132	4850	5000	3350	5000	800	6580	750	8130	3150	2090	2800	5500
DMCB-2142	4850	5000	3350	5000	800	8580	750	10130	3150	2090	2800	5500

Unit : mm

Model	A	B	C	D	E	F	G	H	I	J	K	L
DMCB-VH2132	4850	5450	3350	5000	800	6580	750	8130	3150	2090	2800	5500
DMCB-VH2142	4850	5450	3350	5000	800	8580	750	10130	3150	2090	2800	5500