

## TRAVELING COLUMN VERTICAL MACHINING CENTER



MCV-720 Vertical Maching Center



MCV-1450 Vertical Maching Center



MCH-630 Horizontal Maching Center



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BRAND NEW DESIGN
POWERFUL SPECIFICATIONS.



## TRAVELING COLUMN VERTICAL MACHINING CENTER



# Maximize Productivity and Profits with Dah Lih DMV-800

- The traveling column structure and fixed table design ensures the machine travel is not affected-regardless of workpiece weight variation. This assures consistent accuracy at all times.
- The major casting parts are designed and analyzed by advanced "Finite Element Analysis" for optimum structural rigidity and accuracy.
- Linear guide ways on 3 axes meet requirements for both high rigidity and high speed feeding.
- The 32 tool capacity magazine is isolated from the machining area which prevents tool contamination from chips or coolant.
- Swing type APC permits fast workpiece change.

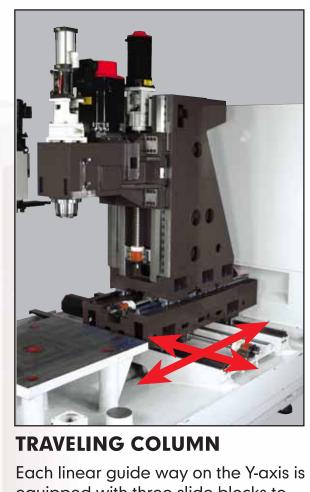
**DMV-800** 

## Quality Features Guarantee Faster, More Accurate Machining.

- Major machine parts are manufactured from rigid cast iron for maximum structural stability.
- Double-wall box type structure provides added rigidity while reducing thermal strain to a minimum.

 Linear guide ways on the three axes feature high accuracy and high rigidity.

- The tool magazine is isolated from the machining area to prevent contamination from chips or coolant.
- Traveling column structure ensures smoothness and efficiency of machining.



Each linear guide way on the Y-axis i equipped with three slide blocks to ensure the highest rigidity.



## **FINITE ELEMENT ANALYSIS**

To ensure the best structural rigidity design and machine service life, the major casting parts are analyzed by "Finite Element Analysis".

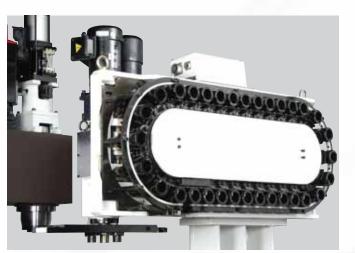


## Designed and Manufactured to Optimize Your Machining Efficiency.



### **SWING TYPE APC**

The swing type APC is hydraulically operated and combined with clutch coupling for precise positioning. It features quicker pallet changing for high efficiency. The loading capacity on the single side of the pallet is 600 kgs making this machine ideal for flexible machining.



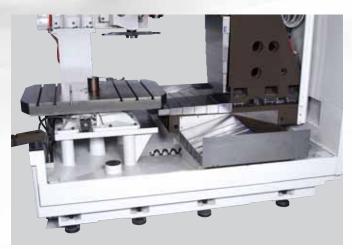
### CHAIN TYPE TOOL MAGAZINE

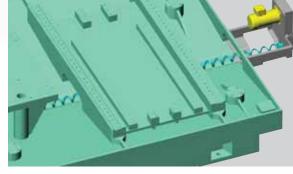
The magazine rotation is driven by a cylindrical cam. Bi-directional random tool selection provides highly efficient tool changing. The tool magazine is separately mounted to prevent contamination from chips or coolant.





Coolant through ball screws on the three axes effectively prevent thermal growth while ensuring highly accurate machining.





### **CENTER MOUNTED CHIP AUGER**

The chip auger screw is well arranged at the center of the machine base, swarf eliminate heat build up from chips.

# User - Friendly and Efficient Operation Design.



**RIGID HEADSTOCK** The headstock is of a box type construction for

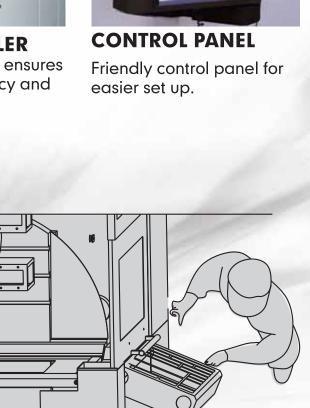
outstanding cutting

capability.



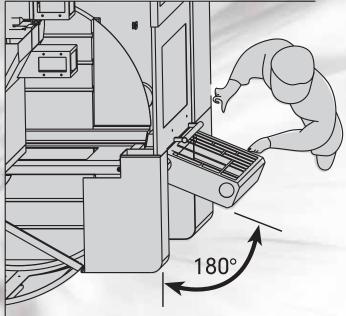
**SPINDLE COOLER** The spindle cooler ensures machining accuracy and efficiency.





**SWING TYPE CONTROL PANEL** 

The user friendly control panel swings 180° degrees for easier set up.



**CONVEYOR** (OPTIONAL) Removes chips automatically saving time and efforts.

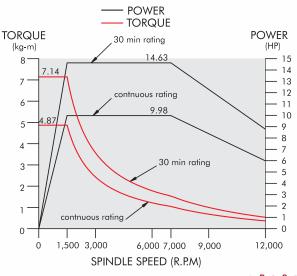
**SCREW TYPE CHIP** 





The optional direct drive 12,000 rpm spindle features excellent rigidity and precision (optional)

## **SPINDLE POWER / TORQUE** DIAGRAM(12,000 RPM)



## **SPECIFICATIONS:**

MODEL	DMV-800
TABLE	
T-Slots (width x number x distance)	18 x 3 x 150 mm
Max. table load (single side)	600 kgw
Height from table surface to floor	880 mm
TRAVEL	
X axis	800 mm
Y axis	560 mm
Z axis	560 mm
Distance between spindle to table surface	150 ~ 710 mm
FEED	
Feed rapid traverse: X asis	30 m/min
Feed rapid traverse: Y asis	30 m/min
Feed rapid traverse: Z asis	24 m/min
Cutting feed	1 ~ 10000 mm/min
Minimum input increment	0.001 mm
SPINDLE	
Spindle motor (30 min. rating/continuous rating)	11 KW / 7.5 KW
Spindle taper	#40
Spindle speed	80 ~ 8000 rpm
ATC SYSTEM	
Tool storage capacity	32
Tool shank	BT40
Max. tool weight	8 kgw
Max. tool length	300 mm
Tool selection	Random
OTHERS	
Power requirement	$220V \pm 10\%$
	50 / 60Hz ± 2%
	60 KVA
Air pressure	6 kg / cm2
Coolant tank	400 ℓ
Net weight	12500 kgw
Floor space	2700 x 4300 mm

Specifications are subject to change without prior notice.

## STANDARD ACCESSORIES

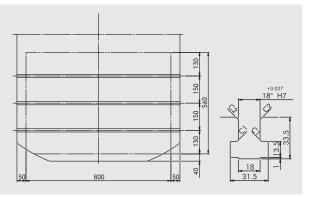
- Full Guard
- Automatic Pallet Changer
- Swing Type Control Panel
- Coolant Wash
- Screw Type Chip Conveyor
- Spindle Cooler
- Heat Exchanger
- Removable Manual Pulse Generator
- Coolant Around Spindle
- RS-232 Interface
- Automatic Power Off
- Call Light
- Automatic Lubrication Equipment
- Work Light
- Tool Kit
- Spare Fuses
- Rigid Tapping

## SPECIAL ACCESSORIES

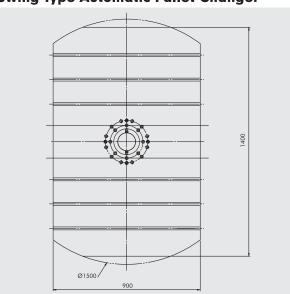
- 10,000 / 12,000 / 15,000 rpm Optional Speed
- Flat Type Chip Conveyor and Chip Wagon
- Coolant Through Spindle With Filter
- Coolant Through Tool
- 4th Axis Connector
- Rotary Table With 4th Axis Control
- Automatic Tool Length Measuring Device (Renishaw TS-27)
- Automatic Centering Device (Renishaw MP-10)

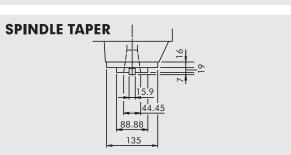
## **DIMENSION DIAGRAM:**

### **Pallet Size**

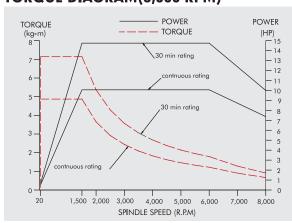


### **Swing Type Automatic Pallet Changer**





## SPINDLE POWER / TORQUE DIAGRAM(8,000 RPM)



## **MACHINE DIMENSIONS:**

