

# Hi-V450M



## Vertical Machining Center

- Low heat generation, low noise, low vibration main spindle structure with installation of synchronous build-in motor
- The best high speed, high precision feed drive system within the same class (direct connection structure with special high accuracy coupling)
- Adoption of oilless self lubricating method L/M guide and ball screw
- Minimized heat deformation through standard adoption of high volume main spindle cooling device(5,400Kcal/60Hz)
- Application of pantograph mechanism (Y axis) slide cover with no noise during feed.

Hi-V450M			
Table Size (length x width)		mm [in]	850 x 500 [33.5x19.7]
Table Load		kgf [lbs]	300 [661]
Travel	X	mm [in]	600 [23.6]
	Y		450 [17.7]
	Z		450 [17.7]
Spindle Taper		mm [in]	HSK-A63
Spindle Speed	STD	rpm	24,000
Spindle Power	Main	kw [hp]	33/25 [44.3/33.5]
Rapid Traverse	X, Y axis	m/min [ipm]	50 [1,969]
	Z axis		40 [1,575]
Tool Storage Capacity	STD	EA	24
	OPT		

Design and Specifications are subject to change without prior notice.

**HYUNDAI-KIA MACHINE  
AMERICA CORP.**

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# Hi-V450M

## Specification

ITEM			Hi-V450M	
<b>TABLE</b>	Size (length x width)		mm [in]	850 x 500 [33.5x19.7]
	Max. load on table		kgf [lbs]	300 [661]
	Table type			T-slot
<b>TRAVEL</b>	Table longitudinal	X	mm [in]	600 [23.6]
	Table cross	Y		450 [17.7]
	Spindle head verticle	Z		450 [17.7]
	Tilting	A	degree	-
	Rotating	C		-
	Distance from column to spindle center			370 [14.6]
	Distance from table surface to spindle nose			160 ~ 610 [6.3~24]
<b>SPINDLE</b>	Taper			HSK-A63
	Speed	STD	rpm	24,000
		OPT		40,000
	Power	STD	kw [hp]	33/25 [44.3/33.5]
		OPT		26/18 [34.9/24.1]
	Torque	STD	kgf-m [ft-lbs]	9.8 [70.9]
OPT		1.68 [12.2]		
Spindle Drive		STD	Built-in	
<b>FEED</b>	Rapid	X,Y axis	m/min [ipm]	50 [1,969]
		Z axis		40 [1,575]
	Tilting	A	rpm	-
	Rotating	C		-
Cutting feed rate			m/min [ipm]	40 [1,575]
<b>ATC</b>	Type			twin arm
	Tool storage capacity	STD	EA	24
		OPT		
	Max. tool diameter		mm [in]	100 [3.9]
	Max. tool diameter (without adjacent tool)			140 [5.5]
	Max. tool length			300 [11.8]
	Max. tool weight		kgf [lbs]	8 [17.6]
	Tool selection type			Fixed address
Tool change time	tool to tool chip to chip	sec.	2.6	
			5.5	
<b>MOTOR</b>	Spindle	Main	kw [hp]	33/25 [44.3/33.5]
	Feed	X / Y		8.5/8.5 [11.4/11.4]
		Z / B		8.5 [11.4]
Coolant				
<b>APC</b>	Pallet change type			
	Pallet change time		sec.	
<b>Coolant through spingle (Option)</b>				30BAR
<b>Rigid tapping</b>				STD
<b>Electric capacity</b>			kVA	56.5
<b>Floor space</b>			mm [in]	2,100 x 2,950 [82.7x116.1]
<b>Slide way</b>				LM guide
<b>Machine weight</b>			kgf [lbs]	8,500 [18,739]
<b>Controller</b>			STD	SIEMENS 840D
			OPT	

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