

# **TRUMP** Travel Column Machining Center

Ideally suited for processing very long parts and can also be used as a multi-stations center

## **Rigidity, Powerful, Accuracy, Fixed table**

The moving-column machining centers of the KMV series are suitable for processing very long parts and can also be used as a multi-stations center or reciprocal operation center with shorter workpieces. The always fully supported table is designed for extremely heavy workpieces, the KMV series offers worktable lengths of 4, 5, 6 and 8 meters, Allows users' to select an application. Other than flexible selection of work table length, the machines can also be equipped with multiple work stations and 4th or 5th axis to enhance production efficiency, making them ideal for producing long workpieces and large parts such as aluminum bars, rails, construction equipment, and aerospace components and so on.



### **Outstanding Features:**

- Powerful 12/16kW, BT40/10,000rpm spindle
- Fixed table/travelling column design
- 24-pocket Arm type ATC (40 tools Opt.)
- Highly rigid and dynamic structure provide precision accuracy
- Rapid Feed: 30 m/min in X, 15m/min in Y, Z
- 24V/70 W Halogen Work light,
- 3 bar coolant pressure with flow rate of 20 liter/min
- Marveling operator pendant
- Screw type chip conveyor for swarf removal
- Hand pendant with MPG and controls
- Automatic Lubricated w/Low Lube Fault
- Laser calibrated & Ball bar analysis
- instruction/operation manual + part's list CDR

## **KMV-4000/5000/6000/8000 CNC Traveling Column Machining Center designed for Long narrow/Heavy Workpieces Saves Money, Time & Space**



### **Centre partition for dual load operation [option]**

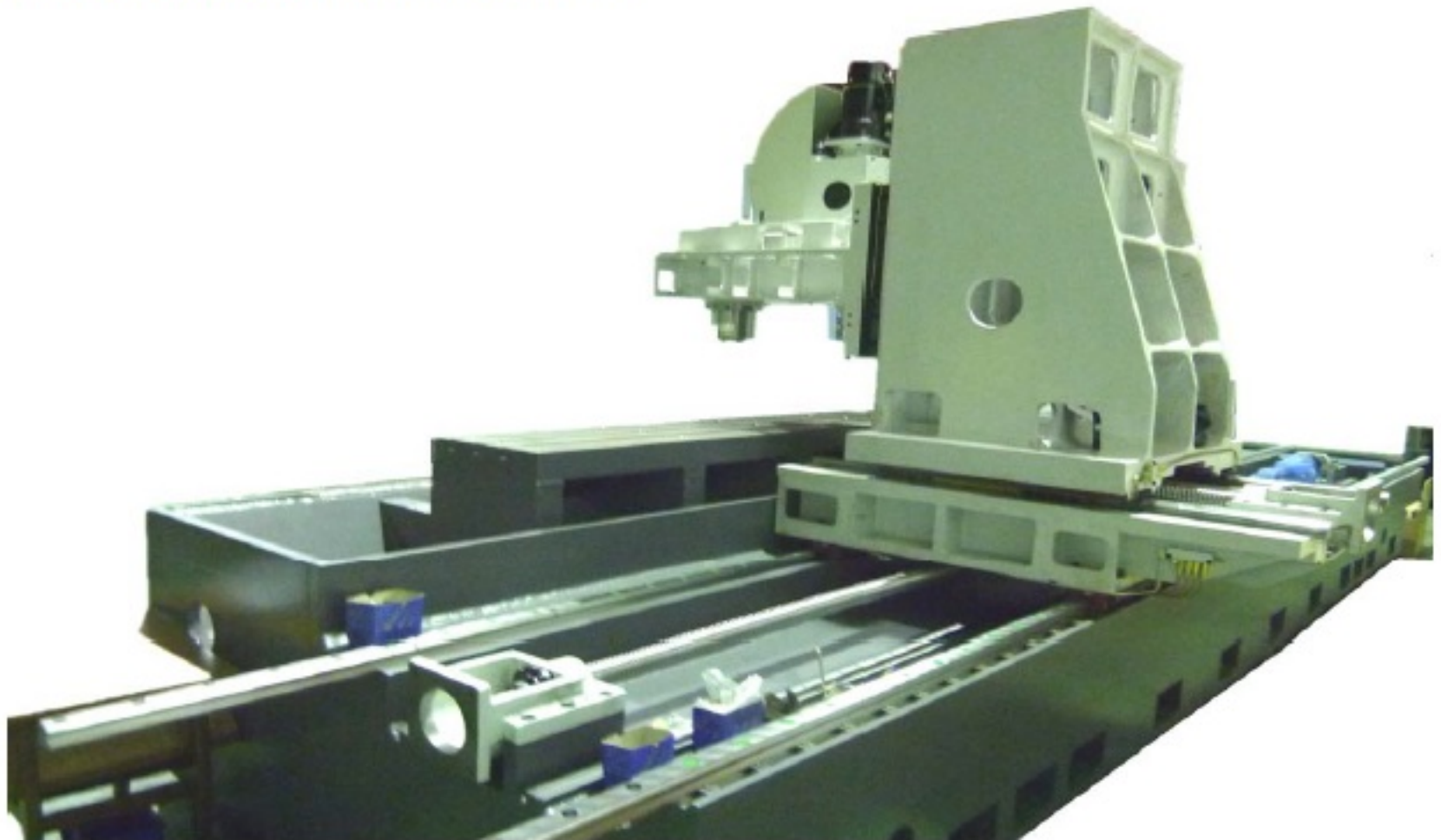
The machines can also be equipped with a central guard to allow them to be used as a pendulum non-stop manufacturing system. That eliminates idle time caused by loading and unloading, therefore maximizing the use of the machine whether for the production of medium-large size batches or small lots of various pieces.

# High Precision for Large and Heavy Weights

## KMV Traveling column machining center

Atrump new KMV VMC's was designed to machine either long narrow workpieces or to have the work table sectioned into a variety of safe work zones for multiple set-ups.

- Hi-rigidity construction design, X, Y, Z axis use precision linear guide which can enforce the cutting capacity, and shorten the cutting time



Application for long narrow and heavy duty workpieces machining, it is suitable for Aluminum, iron casting, steel Material machining. . . .

- Linear And Circular Interpolation On The X,Y and Z Axes
- High production efficiency, one of KMV-4000 to be equal 6 of VMC-600 machining center, which can be reduced expenses of labor cost and ideally suited for job shop requirements for small machine footprints to save floor space

### **KMV-4000 / KMV-5000 Features:**

- X- Axis is drive by C3 ballscrew.
- Y- Z axes are drives by C3 ballscrews
- 12/16 KW w/belt drive, BT#40/8,000 rpm
- 24-pockets Swing double arm Type ATC

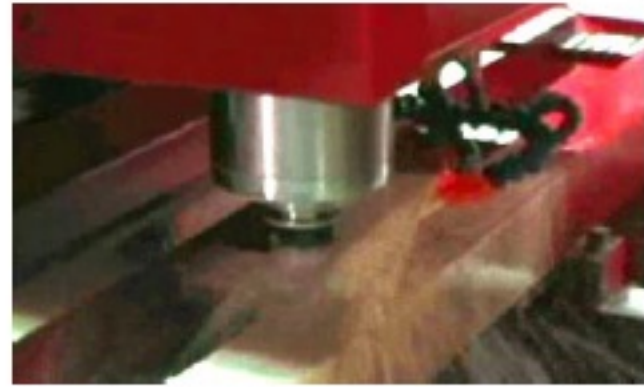
### **KMV-6000 / KMV-8000 Features:**

- X- Axis is drive by Rack Gearbox
- Y- Z axes are drives by C3 ballscrews
- 12/16 KW w/belt drive, BT#40/8000 rpm
- 24-pockets Swing double arm Type ATC

## Application:



Material: Aluminum, Tooling:  $\varnothing$  6mm end mill  
Spindle speed: 6000 rpm, Feedrate: 500 mm/min



Facing cutter dia.  $\varnothing$ 75 mm , steel S45C



Tooling:  $\varnothing$ 18 mm 2 flute facing cutter  
Material: S45C , Spindle speed: 1500 rpm,  
Feed rate: 500 mm/min,



$\varnothing$ 20 mm Drilling 90 mm depth of hole



Full enclosure work space as an option

## KMV Series Technical Data

Spec.	Model	KMV- 4000 KMV- 4000XP	KMV- 5000 KMV- 5000XP	KMV- 6000 KMV- 6000XP	KMV- 8000 KMV- 8000XP
<b>TRAVEL</b>					
Longitudinal travel (X-axis)		4000 mm	5000 mm	6000 mm	8000 mm
Cross travel (Y-axis)			450 mm (Std),	600 mm (XP series)	
Vertical travel (Z-axis)			500 mm (Std),	550 mm (XP series)	
Spindle nose to table top		120 – 620 mm (4.7"-23.3") _ Std.,		120 - 670 mm (for XP series)	
<b>TABLE</b>					
Table size		4000 x 400 (Std) 4000 x 550 (XP)	5000 x 400 (Std) 5000 x 550 (XP)	6000 x 400 (Std) 6000 x 550 (XP)	7000 x 400 (Std) 7000 x 550 (XP)
T-slots (width x No.x patch)		3 x 18 x 100 (Std),		5 x 18 x 100 (XP series)	
Max. Table loading capacity		3,000 Kg	3,500 Kg	4,000 Kg	4,500 Kg
<b>SPINDLE</b>					
Spindle Motor		12/16 KW			
Spindle speed range		8,000 rpm (Std) / 12,000rpm or 18,000rpm (Option)			
Spindle Taper (standard)		BT# 40(STD.), CT#40 or DIN-69871A SK40 (Opt.)			
<b>FEED</b>					
Feed Motor torque (X-Y-Z)		16 / 16 / 27 Nm (3.0/3.0/4.85 KW)			
Rapid traverse (X-axis)		10 m/min		30 m/min	
Rapid traverse (Y-Z axes)		10 m/min		15 m/min	
Cutting federate (X-Y-Z)		1 – 6,000 mm/min			
Ball screw diameter		X-Y: 50 mm Z: 40 mm		X- Axis drive by Rack Gear Y: 50 mm, Z: 40 mm	
Guide ways		X-Y-Z: M-45 LINEAR		X-Y-Z: M-45 LINEAR	
<b>ACCURACY</b>					
Positioning		JISB6338 ±0.010/300 , VDI 3441 P0.025			
Positioning repeatability		<0.010 mm (<0.00004")			
<b>AUTOMATIC TOOL CHANGER (Disc Arm Type)</b>					
No. of Tools		24 tools (Standard) ,		40 tools (Option)	
Pull stud		MAS 403-P40T (45°) or PS-CT40 (45°), or DIN 69872 B (45°)			
Max. Tool diameter x length		Ø 80 mm x 300 mm			
Max. Tool weight		7 Kg			
Tool change time		4 sec (tool to tool)			
<b>GENERAL</b>					
Power required		32 KVA			
Air required		6 kg/cm (85 psi)			
Machine weight (Approx)		16,000 Kg	17,500 kg	19,000 Kg	22,000 kg

\* Specifications are subject to change without notice

## Standard accessories

- Siemens 802D sl pro control
- 24 tool side-mount Arm type tool changer
- Rigid tapping.
- Chip Augers
- Coolant system
- Semi enclosed splash guard
- work lamp + Pilot lamp
- Remote MPG
- Tool kits and toolbox
- Guide way cover on X/Y/Z
- Spindle air blast + Cutting air blast
- Auto power off system
- Leveling blocks
- Heat exchanger for electric cabinet

## Optional accessories

- Spindle oil cooler
- Chip conveyor with cart
- High-powered spindle motor
- Coolant through spindle (C.T.S)
- Linear scale (X-axis)
- 4th/5th axis interface
- Hydraulic interface
- Rotary tables
- 40 tool magazine
- High purser coolant pump (5 bar)
- Tool length & radius measurement
- Workpiece measurement
- Table shower system
- Siemens 840d sl control



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