



KENT INDUSTRIAL CO., LTD.



VERTICAL CNC MACHINING CENTER





COMPANY PROFILE



Technology

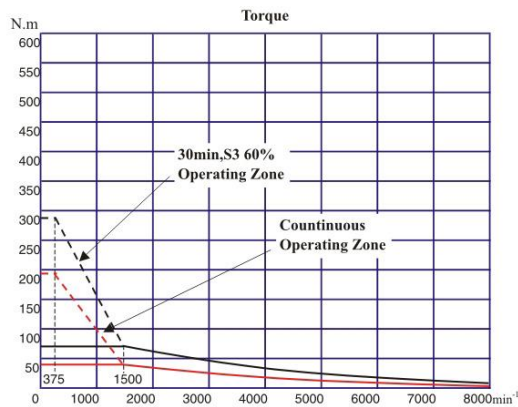
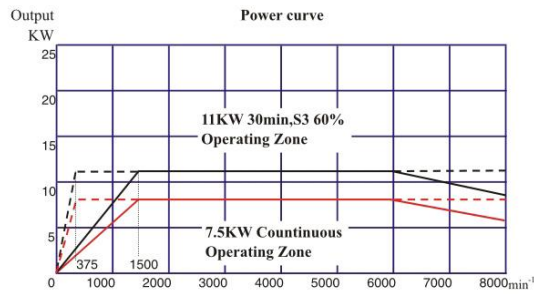
■
Creativity

■
Reliability



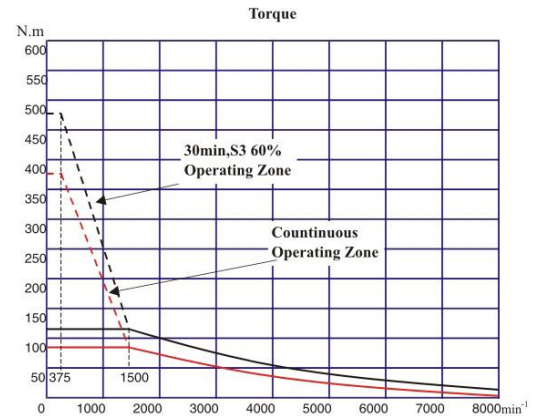
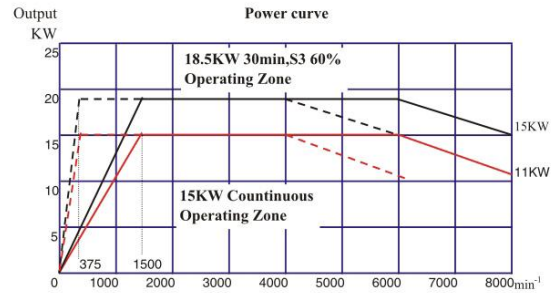
HORSEPOWER & TORQUE CHART

■ KMV-8VC/11VC/13YL/16HS Type:α8/8000i



— Motor-Gearbox assembly with $i=1.00$
 - - - Motor-Gearbox assembly with $i=4.00$

■ KMV-16 Type:α15/7000i



STANDARD ACCESSORIES

1. FANUC 0i-MF
(8.4" Color-Monitor, Manual Guide 0i)
2. BT40-8000rpm(KMV-16 #50-4500rpm)
3. Air blower
4. Fully enclosed splash guard
5. Convection heat exchange electrics box
6. Separate hand wheels (MPG)
7. RS-232 interface
8. Rigid tapping
9. Quartz work lamp
10. Process cycle pilot light
11. Coolant system
12. Transformer
13. Screw type chip conveyer
14. Oil Chiller for 3 axes and spindle
15. Tools and tool box
16. Adjustable base leveling pads
17. Operation manual and electrical diagrams

OPTIONS

1. Z.F. dual section gear box
2. #40 10000, 12000 rpm spindle
3. #50 4500, 6000 rpm spindle
4. CTS (Coolant through spindle) 6 bar, 20 bar.
5. #40, arm type tool magazine(24 tools) with ATC
6. #50, arm type tool magazine(24 tools) with ATC
7. Chain type chip conveyor
8. Air through spindle
9. Coolant around spindle
10. Skimmer for floating oil
11. Programmable coolant spray nozzle
12. Chip flush
13. Tool setting probe
14. Optical machine probe
15. M30 power off switch
16. The 4th axis rotary table
17. 3 axes linear scales

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Features

■ Nitro-Balance

The Z axis is balanced with Nitrogen in conjunction with pneumatic. Nitrogen cushioning of the headstock for automatic balancing during vertical motion. Perfectly level and smooth action eradicates vibration. Even in the event of a sudden power failure, the head maintains exact positioning so as to preserve the life of cutting tools and safety of the work piece.



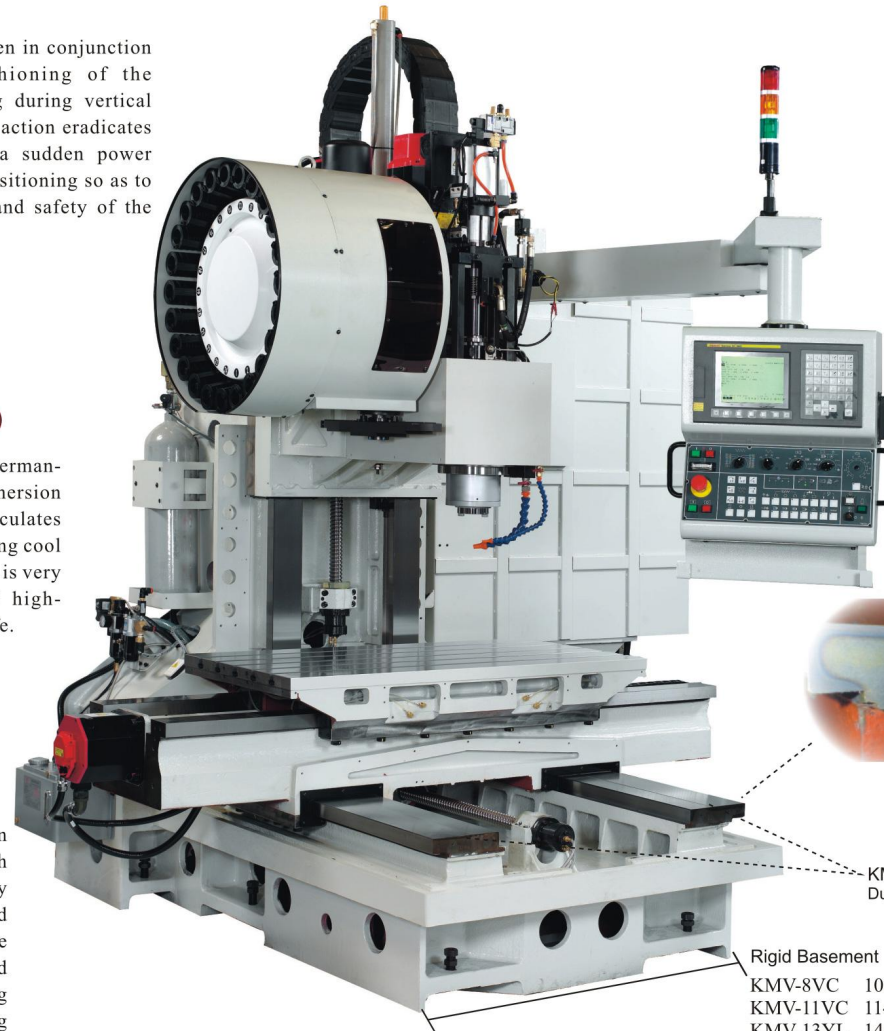
■ Dual Section Z.F. gear box (Optional)

The multi-speed spindle adopts German-built ZF gear box. Fully sealed immersion type lubrication with oil chiller circulates coolant and keeps the machine running cool even at 10,000 rpm. The ZF gear box is very efficient with characteristics of high-torque, low noise and long service life.



■ Heavy Duty Spindle

The spindle runs on high precision angular contact ball bearings which allow for any type of heavy duty cutting without vibration. Tested and adjusted for dynamic balancing, the spindle incorporates a forced circulatory oil chiller, minimizing heat displacement while ensuring long term accuracy and service life.



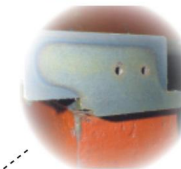
Super Strong Structure

- Both the saddle and base of the machine efficiently disperse heavy loads via "A" type structural design. The structure of the column is cross-rib reinforced. Deformation is minimized during high torque conditions.
- The column, spindle head, saddle and base are of rational design and cast of superior grade iron to guarantee long term service life, rigidity and precision.

Optimum Rigidity Guideways

- With integrated guideways in the base, neither twisting from heat displacement nor precision discrepancies pose an issue. This approach in guide way design that extends the life of the machine while enhancing overall performance. Wide guideways allow for increased contact surface of the slide ways. Minimal mechanical impedance enhances dynamics, making for higher stability, faster positioning and heavier cutting.

- Hardened and precision ground guideways are Turcite coated. Friction is minimal under heavy loads. All surfaces are mid-frequency heat treated to minimum depths of 5-10mm and a hardness of HRC 55±3



KMV-8VC/11VC
Dual Guideways at the Y Axis

Rigid Basement

KMV-8VC	1024mm
KMV-11VC	1144mm
KMV-13YL	1460mm
KMV-16HS	1800mm
KMV-16	1800mm



KMV-13YL/16HS/16
Quadruple Guideway Support
at the Y Axis

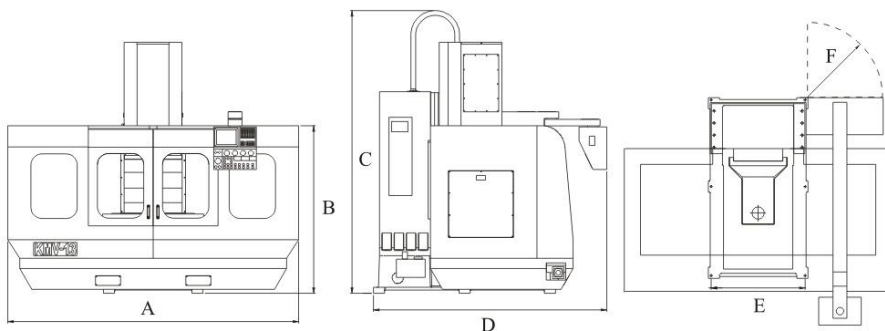


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Specifications

		Unit	KMV-8VC	KMV-11VC	KMV-13YL (BT40)	KMV-13YL (BT50)	KMV-16HS	KMV-16	
TRAVEL	Longitudinal Travel (X)	mm	820	1100	1350	1350	1600	1600	
	Cross Travel (Y)	mm	600	600	675	675	815	815	
	Headstock Travel (Z)	mm	600	600	635	635	815	815	
	Spindle nose to table	mm	92~692	85~685	85~720	103~738	190~1005	220~1035	
	Spindle center to column	mm	610	650	775	775	865	865	
TABLE	Length	mm	960	1220	1450	1450	1700	1700	
	Width	mm	600	600	700	700	810	810	
	T-Slot size	mm	18	18	18	18	22	22	
	T-Slot number		5	5	5	5	5	5	
	T-Slot center distance	mm	100	100	100	100	160	160	
	Max. table load	kg	700	900	1500	1500	2000	2000	
SPINDLE	Spindle taper		BT40	BT40	BT40	BT50	BT40	BT50	
	Spindle speed	rpm	30-8000	30-8000	30-8000	30-4500	30-8000	30-4500	
	Z.F. Gear Box		OPT.	OPT.	OPT.	OPT.	OPT.	OPT.	
MOTORS	Spindle motors	kw	7.5/11	7.5/11	7.5/11	15/18.5	7.5/11	15/18.5	
	Drive motors	X axis	kw	2.5	2.5	2.5	4.5	5.5	5.5
		Y axis	kw	2.5	2.5	2.5	4.5	5.5	5.5
		Z axis	kw	2.5	2.5	2.5	4.5	5.5	5.5
FEEDRATE	Rapid traverse (X / Y / Z)		24/24/18	24/24/18	24/24/24	24/24/24	18/18/18	18/18/18	
	Cutting feedrate	mm /min	1 ~ 10000	1 ~ 10000	1 ~ 10000	1 ~ 10000	1 ~ 10000	1 ~ 10000	
ATC	Max. tool ϕ x L	mm	ϕ 75 x L250	ϕ 75 x L250	ϕ 75 x L250	ϕ 125 x L250	ϕ 75 x L250	ϕ 125 x L250	
	Max. tool weight	kg	6	6	6	15	6	15	
COOLANT PUMP	Standard		One air & two coolants · 4 bar (STD.)						
	CTS		One air & two coolants · 4 bar + 6 bar / 20 bar (OPT.)						
GENERAL	Machine dimension (L*W*H)	mm	2818x2259x2950	3260x2433x3028	3642x2920x2904	3642x2920x2904	4488x3448x3250	4488x3448x3250	
	Net weight	kg	5500	7000	7500	7500	16150	16150	
	Base space	mm	3000x2500	4000x3000	4000x3000	4000x3000	5000x3500	5000x3500	

Note: Design and specifications are subject to change without prior notice.



	Model				Unit:mm
	8VC	11VC	13YL	16/HS	
A	2500	2990	3325	4170	
B	2010	1955	1910	2170	
C	2870	2980	2905	3460	
D	2260	2621	2920	3450	
E	935	1144	1210	1720	
F	730	568	568	892	

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KMV-8VC Table size : 800*600mm
X/Y/Z : 820*600*600mm



KMV-11VC Table size : 1100*600mm
X/Y/Z : 1100*600*600mm



KMV-13YL Table size : 1350*675mm
X/Y/Z : 1350*675*635mm

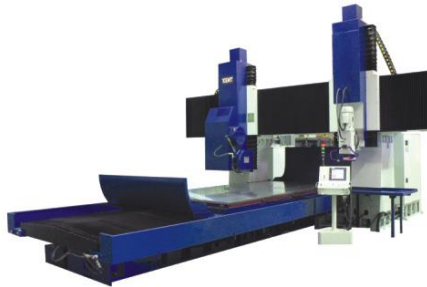


KMV-16 Table size : 1600*815mm
KMV-16HS X/Y/Z : 1600*815*815mm

OTHER PRODUCTS



KMV-32P
Double Column Machining Center



KGP-2042
Double Column Surface Grinder



KGS-63WM1
Precision Surface Grinder



Head office (Taiwan)
Area : 1,700m²



Dou Liu Factory (Taiwan)
Area : 16,700m²



Zhejiang Radiance Machinery Co., Ltd.
Area : 33,000m²



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