



**NIDEC MACHINE TOOL CORPORATION**

[www.nidec.com/en/nidec-machinetool/](http://www.nidec.com/en/nidec-machinetool/)

**OKK**  
OKK CORPORATION

[www.okk.co.jp](http://www.okk.co.jp)

VERTICAL MACHINING CENTER

# VM/R SERIES



Machine model	Axis travel (X×Y×Z)(mm)	Table work surface area (mm)	Spindle speed (min <sup>-1</sup> )	Spindle taper	Magazine capacity (tools)	Floor space (W×D×H)(mm)
VM43R II	630×430×460	800×420	25~8000	BT40 Dual-contact	20	1980×2710×2623
			25~8000	BT50 Dual-contact		2090×2710×2713
VM53R II	1050×530×510	1050×560	25~8000	BT40 Dual-contact	30	2825×2985×2752
			25~8000	BT50 Dual-contact		2825×2985×2815
VM76R II	1540×760×660	1550×760	100~14000	BT40 Dual-contact	30	3980×3700×3130 (MITSUBISHI) 3300 (FANUC)
			25~8000	BT50 Dual-contact		3980×3700×3185 (MITSUBISHI) 3300 (FANUC)
VM660R	1300×660×660	1400×660	25~4500	BT50	30	3870×3655×3215
VM940R	2060×940×820	2300×940	25~4500	BT50	40	5600×5220×3810 (MITSUBISHI) 3920 (FANUC)

HYPER MACHINING CENTER

# VP SERIES



Machine model	Axis travel (X×Y×Z)(mm)	Table work surface area (mm)	Spindle speed (min <sup>-1</sup> )	Spindle taper	Magazine capacity (tools)	Floor space (W×D×H)(mm)
VP400	600×410×460	900×410	100~12000	BT40	20	2016×2690×2864
VP600	1120×610×460	1300×610	100~12000	BT40	20	2516×3100×2984
VP1200	1600×1300×460	1600×1300	100~12000	BT40	40	5800×4067×2800
VP1200-30L	3050×1300×460	3000×1300	100~12000	BT40	40	9440×4864×2900
VP1800	2200×1800×460	2200×1800	100~12000	BT40	40	7450×4622×2800 ※1
VP2200	3050×2200×460	3000×2200	100~12000	BT40	40	9040×5237×2900 ※1
VP3100	3500×3100×560	3600×2750	100~12000	BT40	40	10997×6203×3415 ※1

※1 Includes door opening dimensions.

VERTICAL MACHINING CENTER

# VB53α

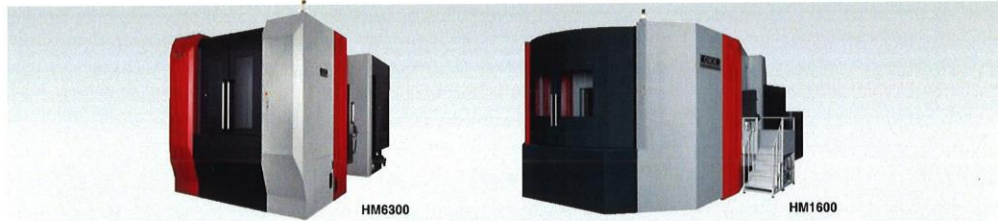


Machine model	Axis travel (X×Y×Z)(mm)	Table work surface area (mm)	Spindle speed (min <sup>-1</sup> )	Spindle taper	Magazine capacity (tools)	Floor space (W×D×H)(mm)
VB53α	1050×530×510	1260×600	100~20000	BT40 Dual-contact	30	2885×3050×2910



HORIZONTAL MACHINING CENTER

# HM SERIES



Machine model	Axis travel (X×Y×Z)(mm)	Table work surface area (mm)	Spindle speed (min <sup>-1</sup> )	Spindle taper	Magazine capacity (tools)	Floor space (W×D×H)(mm)	
HM400/40	630×620×710	□ 400	35～10000	BT40	40	4105×4880×2844 <sup>※1</sup> <sup>※2</sup>	
HM400/50	630×620×710	□ 400	35～12000	BT50	40	4343×4880×2970 <sup>※1</sup> <sup>※2</sup>	
HM500S/40	630×620×710	□ 500	35～10000	BT40	40	4105×4880×2844 <sup>※1</sup> <sup>※2</sup>	
HM500S/50	630×620×710	□ 500	35～12000	BT50	40	4343×4880×2970 <sup>※1</sup> <sup>※2</sup>	
HM5100	800×750×880	□ 500	35～12000	BT50	60	4980×5380×4115 <sup>※1</sup> <sup>※2</sup>	
HM6000S	800×750×880	□ 630	35～12000	BT50	60	4980×5380×4115 <sup>※1</sup> <sup>※2</sup>	
HM6300	1050×900×1030	□ 630	35～12000	BT50	60	5250×5825×4115 <sup>※1</sup> <sup>※2</sup>	
HM8000S	1050×900×1030	□ 800	35～12000	BT50	60	5250×5825×4115 <sup>※1</sup> <sup>※2</sup>	
HM800	1400×1100×1050	□ 800	35～12000	BT50	60	5147×6785×4335 <sup>※1</sup> <sup>※2</sup>	
HM1000S	1400×1100×1000	□1000	35～12000	BT50	60	5147×6785×4335 <sup>※1</sup> <sup>※2</sup>	
HM1000	1700×1400×1400	□1000	35～12000	BT50	60	5950×8195×4610 <sup>※1</sup> <sup>※2</sup>	
HM1250S	1700×1400×1240	□1250	35～12000	BT50	60	5950×8195×4610 <sup>※1</sup> <sup>※2</sup>	
HM1600	12000-min <sup>-1</sup> MS spindle	2400×1650×1750	1600×1250	35～12000	BT50	60	7485×10770×4370 <sup>※1</sup> <sup>※2</sup>
	8000-min <sup>-1</sup> gear spindle	2400×1650×1750	1600×1250	20～ 8000	BT50	60	7485×10770×4370 <sup>※1</sup> <sup>※2</sup>

<sup>※1</sup> Includes door opening dimensions.  
<sup>※2</sup> Opt.For the Lift-up type chip conveyor specification

HORIZONTAL MACHINING CENTER

# PM SERIES      HPM40 SERIES



Machine model	Axis travel (X×Y×Z)(mm)	Table work surface area (mm)	Spindle speed (min <sup>-1</sup> )	Spindle taper	Magazine capacity (tools)	Floor space (W×D×H)(mm)
PM400III	500×500×500	φ 400	100~14000	BT40	20	1900×3900×2620
PM500	650×600×600	φ 500	35~6000	BT50	30	3655×3895×3050
HPM40 TYPE A	600×600×500	φ 400	100~12000	BT40	24	2450×5000×2750
HPM40 TYPE B	600×500×500	φ 400	100~12000	BT40	24	1750×5495×2980

## General Purpose Machines

### Double column type, 5-face Milling Machines

#### MVR-Cx series



MVR30Cx

Item	Model	MVR25Cx	MVR30Cx
Table	Working area		
	Width (mm in)	1,500 59.1	2,000 78.7
	Length (mm in)	3,000 118.1 (opt.4,000 157.5)	4,000 157.5 (opt.5,000 196.9)
Loading capacity	(ton lb)	15 33,000	20 44,000
	Throat clearance between columns (mm in)	2,050 80.7	2,550 100.4
Spindle	Distance from spindle end to table surface (mm in)	1,650 65.0	
	Ram Size (mm in)	□350 13.8	
	Diameter of Vertical spindle tip (mm in)	φ220 φ8.6	
	Spindle speed (min <sup>-1</sup> )	20 ~ 4,000 (opt.20 ~ 6,000)	
Tool storage capacity (ATC)	Spindle motor output (kW/HP)	22/30 30/40 : Cont. Low/High	
		50 (opt.80)	
Machine weight (kg/Working area mm in)		34,670/3,000 76,700/118.1	41,690/4,000 92,000/157.5

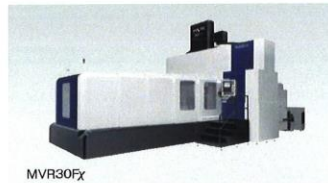
#### MVR-Hx series



MVR30Hx

Item	Model	MVR25Hx	MVR30Hx	MVR35Hx	MVR40Hx	MVR45Hx
Table	Working area					
	Width (mm in)	1,500 59.1	2,000 78.7	2,500 98.4	3,000 118.1	3,500 137.8
	Length (mm in)	3,000 118.1 ~ 8,000 315.0 (Opt.)	3,000 118.1 ~ 10,000 393.7 (Opt.)	4,000 157.5 ~ 10,000 393.7 (Opt.)	4,000 157.5 ~ 10,000 393.7 (Opt.)	6,000 236.2 ~ 10,000 393.7 (Opt.)
Loading capacity	(ton/m lb/in)	125.0 27,500/118.1 ~ 200.0 44,000/157.5 (Opt.)	200.0 44,000/157.5 ~ 307.6 68,000/243.7 (Opt.)	254.0 56,100/157.5 ~ 307.6 68,000/243.7 (Opt.)	350.0 77,000/236.2 ~ 257.6 56,100/157.5 (Opt.)	500.0 110,000/315.0 ~ 257.6 56,100/157.5 (Opt.)
	Throat clearance between columns (mm in)	2,050 80.7	2,550 100.4	3,250 128.0	3,750 147.6	4,250 167.3
Distance from spindle end to table surface (mm in)		1,650 65.0 (opt. 2,010 79.1)	1,850 72.8 (opt. 2,150 84.6)	2,150 84.6	2,150 84.6	2,150 84.6
	Size (mm in)	□350 13.8				
Ram	Spindle speed (min <sup>-1</sup> )	20 ~ 8,000 (opt. 17 ~ 6,000, 11 ~ 4,000, 40 ~ 12,000)				
	Spindle motor output (kW/HP)	Cont. 22/30 30/40; Low/High (opt. 18.5/26 24/33; Low/High, 22/30 30/40; Cont./30min, 22/30 30/40; Cont./30min)				
Tool storage capacity (ATC)		60 (opt. 80, 100, 120, 180)				
	Machine weight (kg/Working area mm in)	35,890/3,000 78,100/118.1	38,390/3,000 85,000/118.1	53,340/4,000 118,000/157.5	67,340/4,000 148,400/157.5	104,740/5,000 230,800/236.2

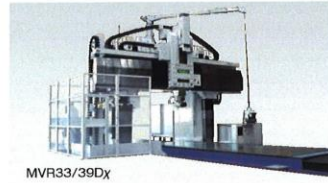
#### MVR-Fx series: Large Precision Machine



MVR30Fx

Item	Model	MVR30Fx	MVR35Fx
Table	Working area		
	Width (mm in)	2,000 78.7	2,500 98.4
	Length (mm in)	3,000 118.1 (opt. 4,000 157.5, 5,000 196.9)	4,000 157.5 (opt. 5,000 196.9)
Loading capacity	(ton lb)	20 44,000	25 55,100 (opt. 30 66,200)
	Throat clearance between columns (mm in)	2,550 100.4	3,050 120.1
Distance from spindle end to table surface (mm in)		1,850 65.0 (opt. 2,000 78.7)	
	Size (mm in)	420 16.5 sq.	
Ram	Spindle speed (min <sup>-1</sup> )	20,000	
	Spindle motor output (kW/HP)	22/18.5 30/25 (Cont./30 min)	
Tool storage capacity (ATC)		40 (opt. 60, 80, 100)	
	Machine weight (kg/Working area mm in)	55,400 122,200/3,000 118.1	64,300 141,800/4,000 157.5

#### MVR-Dx series: High efficiency Large Machine



MVR33/39Dx

Item	Model	MVR28/34Dx	MVR33/39Dx	MVR38/44Dx	MVR43/49Dx	MVR48/54Dx
Table	Working area					
	Width (mm in)	2,000 78.7	2,500 98.4	3,000 118.1	3,500 137.8	4,000 157.5
	Length (mm in)	4,000 157.5 (opt. 5,000 196.9, 6,000 236.2, 8,000 315.0)	4,000 157.5 (opt. 5,000 196.9, 6,000 236.2, 8,000 315.0)	5,000 196.9 (opt. 6,000 236.2, 8,000 315.0)	5,000 196.9 (opt. 6,000 236.2, 8,000 315.0)	5,000 196.9 (opt. 6,000 236.2, 8,000 315.0)
Loading capacity	(ton/m lb/in)	25/4.0 98.4/157.5 (opt. 30/5.0 118.1/236.2, 35/6.0 141.8/315.0)	35/6.0 141.8/315.0 (opt. 40/7.0 177.8/393.7, 45/8.0 200.0/446.8)	35/6.0 141.8/315.0 (opt. 40/7.0 177.8/393.7, 45/8.0 200.0/446.8)	35/6.0 141.8/315.0 (opt. 40/7.0 177.8/393.7, 45/8.0 200.0/446.8)	35/6.0 141.8/315.0 (opt. 40/7.0 177.8/393.7, 45/8.0 200.0/446.8)
	Throat clearance between columns (mm in)	2,850 112.2	3,350 131.9	3,850 151.6	4,350 171.3	4,850 190.9
Distance from spindle end to table surface (mm in)		2,050 80.7	3,050 120.1	3,050 120.1	3,050 120.1	3,050 120.1
	Size (mm in)	(opt. 2,550 100.4, 3,050 120.1)	(opt. 3,550 140.0, 4,050 159.4)	(opt. 3,550 140.0, 4,050 159.4)	(opt. 3,550 140.0, 4,050 159.4)	(opt. 3,550 140.0, 4,050 159.4)
Ram	Spindle speed (min <sup>-1</sup> )	7 ~ 4,000				
	Spindle motor output (kW/HP)	37/45 50/60 (opt. 45/55 60/70 Cont./30 min)				
Tool storage capacity (ATC)		60 (opt. 80, 100, 120, 160, 200, 240)				
	Machine weight (kg/Working area mm in)	107,000/4,000 236,000/157.5	110,000/4,000 242,000/157.5	118,000/5,000 260,000/236.2	121,000/5,000 265,000/236.2	126,000/5,000 279,000/236.2