

»»»» **BMV 50**



Your Productivity Partner

Series: BMV50 | BMV50 TC24 | BMV50 TC30



BMV 50

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BFW
Bharat Fritz Werner

Vertical Machining Center

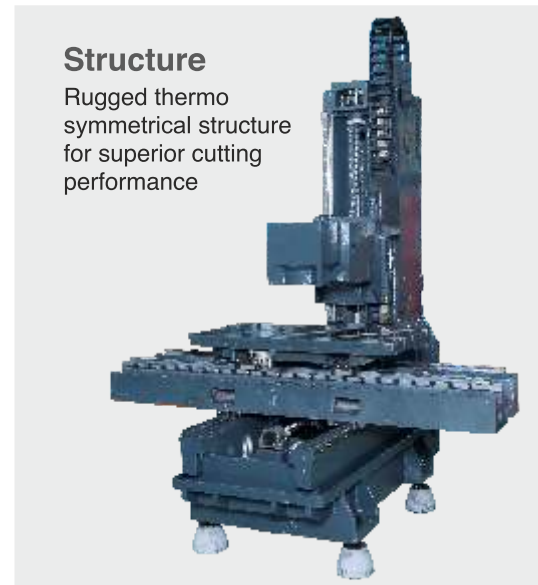
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Vertical machining centre BMV 50 promises unrevealed quality, precision and productivity. These machines are of C-Frame construction with rigid base, robust spindle, and high precision feed mechanism with our state-of-the-art technologies. Heavy-duty machining combined with superior accuracies is the hallmark of these machines.

BMV 50 series catering to the requirements of machining small to medium size applications for batch production with diverse range of options, we can adapt our machining centers to meet specific application requirements for your competitive manufacturing.

Best-in-class features listed below:

- Compact foot print
- Superior aesthetics
- High metal removal rate
- Easy coolant and chip management
- Powerful spindle with various power & torque options



Spindle Characteristics

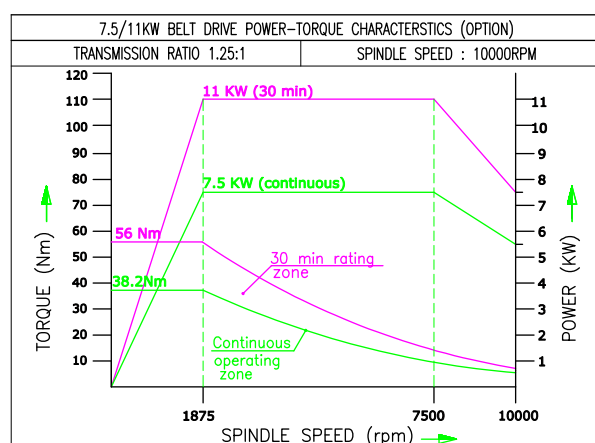
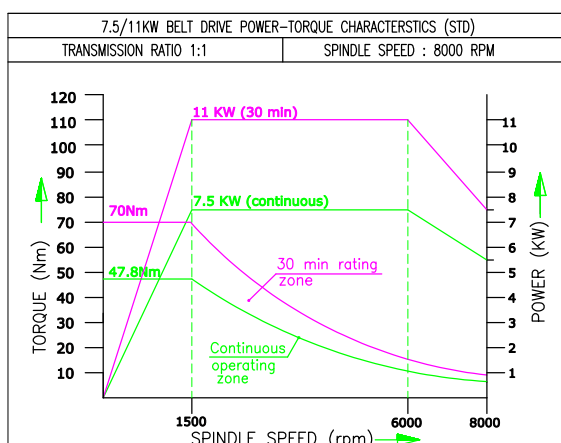
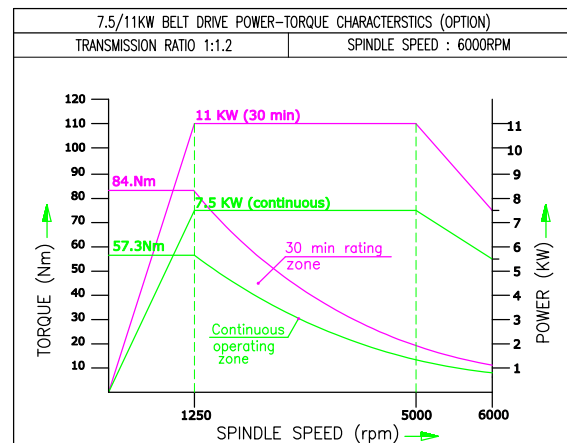
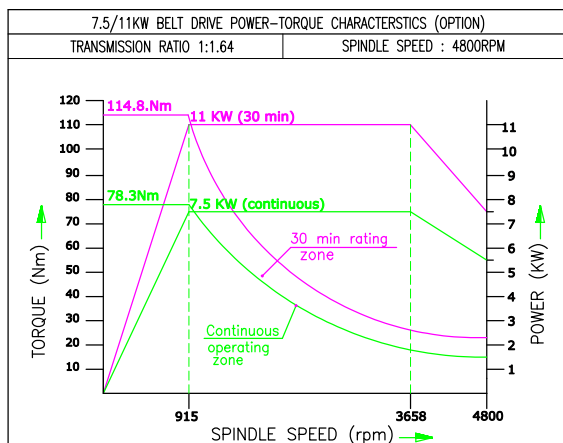
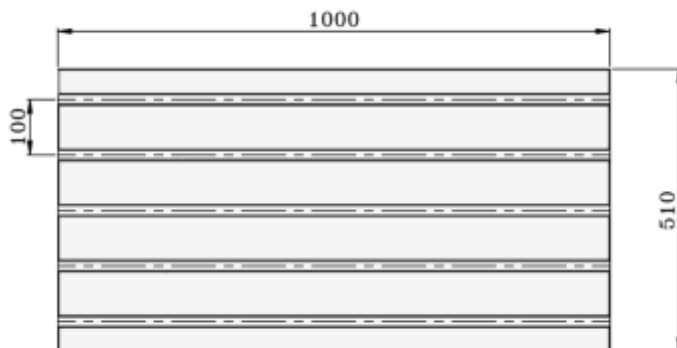
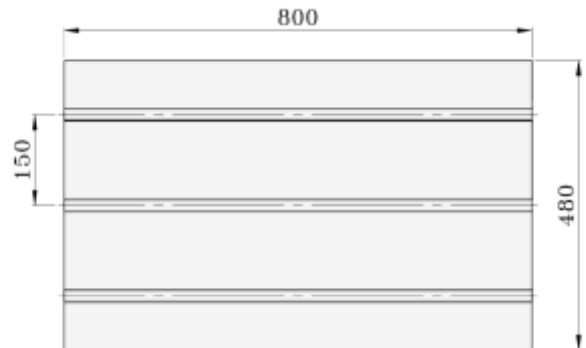


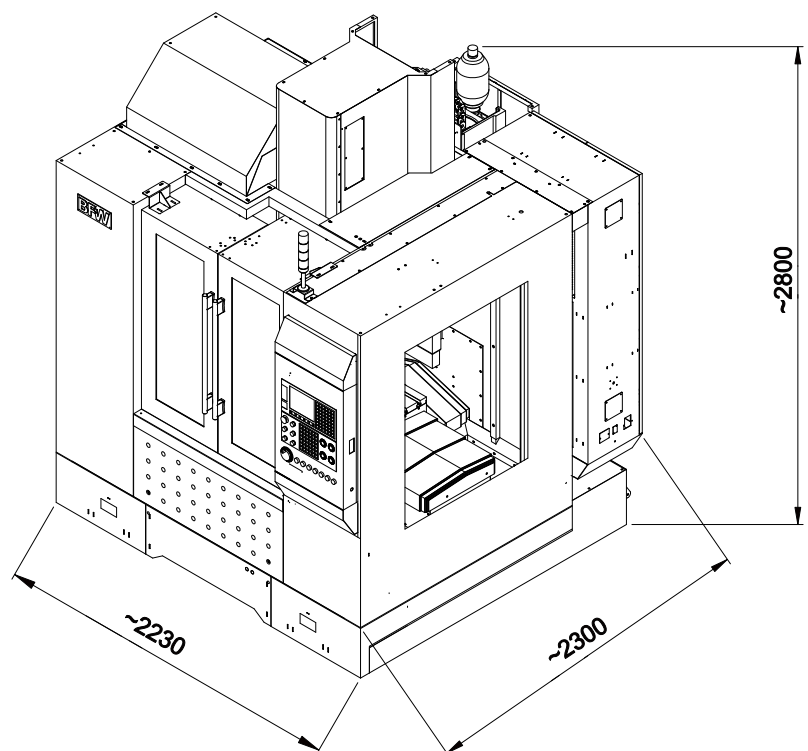
Table Top Details



Pallet Top Details



Machine Dimensions



Applications



Many more ...

CNC Features & Functions

CNC FUNCTIONS	FANUC Oi MF +	Siemens 828D PPU24X	Mitsubishi M80A
Display	10.4 Inch colour LCD	10.4 Inch colour TFT	10.4 Inch colour LCD
Maximum feed axes	5(7)	5	8
Number of simultaneously controllable axis	4	4	4
Minimum input increment	0.001 mm, 0.001 deg	0.001 mm, 0.001 deg	0.001 mm, 0.001 deg
Spindle speed function	5-digit S code	5-digit S code	5-digit S code
Spindle speed override	50 % - 120 % (in steps of 10 %)		
Feed override	200 % (in steps of 10 %) 0-120 % in Siemens		
Feed rate command	4-digit F code	4-digit F code	4-digit F code
Inch- mm conversion	S	S	S
Part program storage length	2 MB	3 MB (5 MB with PPU 26X)	500 KB
Number of part programs	400 (1000)	750	1000
Number of sub-program call levels	10	11	10
Number of tool off sets	400	160	400
Program number/ sequence number search	S	S	S
Number of look-ahead function blocks	200 with AICC-II (400 with spl hardware)	150 (300 with PPU 26X) (450 with *PPU28X)	1350
Single block, Exact stop, Dry run	S	S	S
DNC operations	Pen drive / PCMCIA/ Embedded Ethernet	Ethernet/ CF/Pendrive	Pen drive / SD
Run hour and part count	S	S	S
Help function	S	S	S
Graphic display	S	S	S
Nurbs	NA	S	NA
Embedded ethernet, Front USB interface	S	S	S
Fast ethernet/ data server	O	S	NA
Machining condition selection system	S	S	S
Remote diagnosis	O	O	NA
High speed skip or probe function	S	S	S
Dynamic graphic display	S	O	NA
CNC FEATURES			
Linear interpolation	S	S	S
Circular interpolation	S	S	S
Helical interpolation	S	S	S
Absolute/ incremental programming	S	S	S
Tool radius compensation	S	S	S
Canned cycles for drilling and milling	S	S	S
Work piece co-ordinate system	54 (300) pairs	51 pairs	54 pairs
Background editing	S	Any time edit	S
Backlash compensation	S	S	S
Pitch error compensation	S	S	S
Bi-directional pitch error compensation	O	O	S
Polar co-ordinate, Scaling, mirroring	S	S	S
History of operator alarms and messages	S	S	S
Look-ahead function	S	S	S
Custom macro B/ parameter programming	S	S	S
Simple tool life management	S	S	S
Multi language display	S	S	S
Program restart/ block search in CF card	S	S	S
Program edit in CF card, Nano interpolation	S	S	S
Manual pulse generator	S	S	S
Automatic data backup	S	in CF card	S
Cylindrical interpolation	O	O	S
Spline interpolation	O	O	S
Cutter compensation	S	S	S
4 th axis	O	O	O
4 th & 5 th axis	O	Not possible with PPU 24x (possible with PPU 26x)	O

S: standard, O: optional, NA: not available

Technical Specifications

Specifications	Unit	BMV50	BMV50 TC24	BMV50 TC30
Capacity:				
Table longitudinal travel (X-axis)	mm	800	800	800
Table cross travel (Y - axis)	mm	510	510	510
Head stock travel (Z - axis)	mm	510	510	510
Spindle nose face to table top	mm	100 - 610	100 - 610	100 - 610
Increased daylight area with column height block (optional)	mm	300 - 810	300 - 810	300 - 810
Distance from floor to table	mm	950	950	950
Spindle center - column front distance		540	540	540
Table:				
Table size	mm	1000 x 510	1000 x 510	1000 x 510
T - slot (No./ size/ pitch)	mm	5/18/100	5/18/100	5/18/100
Maximum load on table standard	kg	600	600	600
Spindle & Axes:				
Taper		BT-40	BT-40	BT-40
Speed standard	rpm	8000	8000	8000
Speed optional - I	rpm	10000	10000	10000
Spindle Power - Standard:				
Fanuc/ Mitsubishi, Cont./ 30 min. rating	kW	7.5/ 11	7.5/ 11	7.5/ 11
Siemens, Cont./ S6-40% rating	kW	9/13.5	9/13.5	9/13.5
Rapid traverse - X/Y/Z - standard	m/ min	40	40	40
Feed rate	mm/ min	1-10,000	1-10,000	1-10,000
Guide ways	Type	LM	LM	LM
Accuracy (As Per ISO 230-2):				
Positioning	mm	0.012	0.012	0.012
Repeatability	mm	0.010	0.010	0.010
Automatic Tool Changer:				
Tool change system		NA	Twin Arm	Twin Arm
Tool storage capacity - Standard (optional)	Nos.	NA	24	30
Pull stud - MAS 403		P40T-1	P40T-1	P40T-1
Maximum tool dia with all pockets full	mm	NA	75	75
Maximum tool dia adjacent pockets empty	mm	NA	140	140
Maximum tool length	mm	NA	250	250
Maximum tool weight	kgs	NA	8	7
Tool to tool time	sec	NA	2.5	2.5
Automatic Pallet Changer (Optional):				
Type of APC			Ball screw	Ball screw
Number of pallets	Nos.	NA	2	2
Pallet size	mm x mm	NA	800 x 480	800 x 480
Maximum safe load per pallet	kgs	NA	350	350
Installation Data:				
Floor space (L x B)		2230 x 2300	2230 x 2300	2230 x 2300
Machine height (H)	mm	2800	2800	2800
Basic machine weight	kgs	4500	4750	4850
Total connected load (basic standard machine)	kVA	25	28	28

NA - Not Available

Note: Floor space, weight & connected load indicated is subject to change based upon the accessories ordered along with machine.

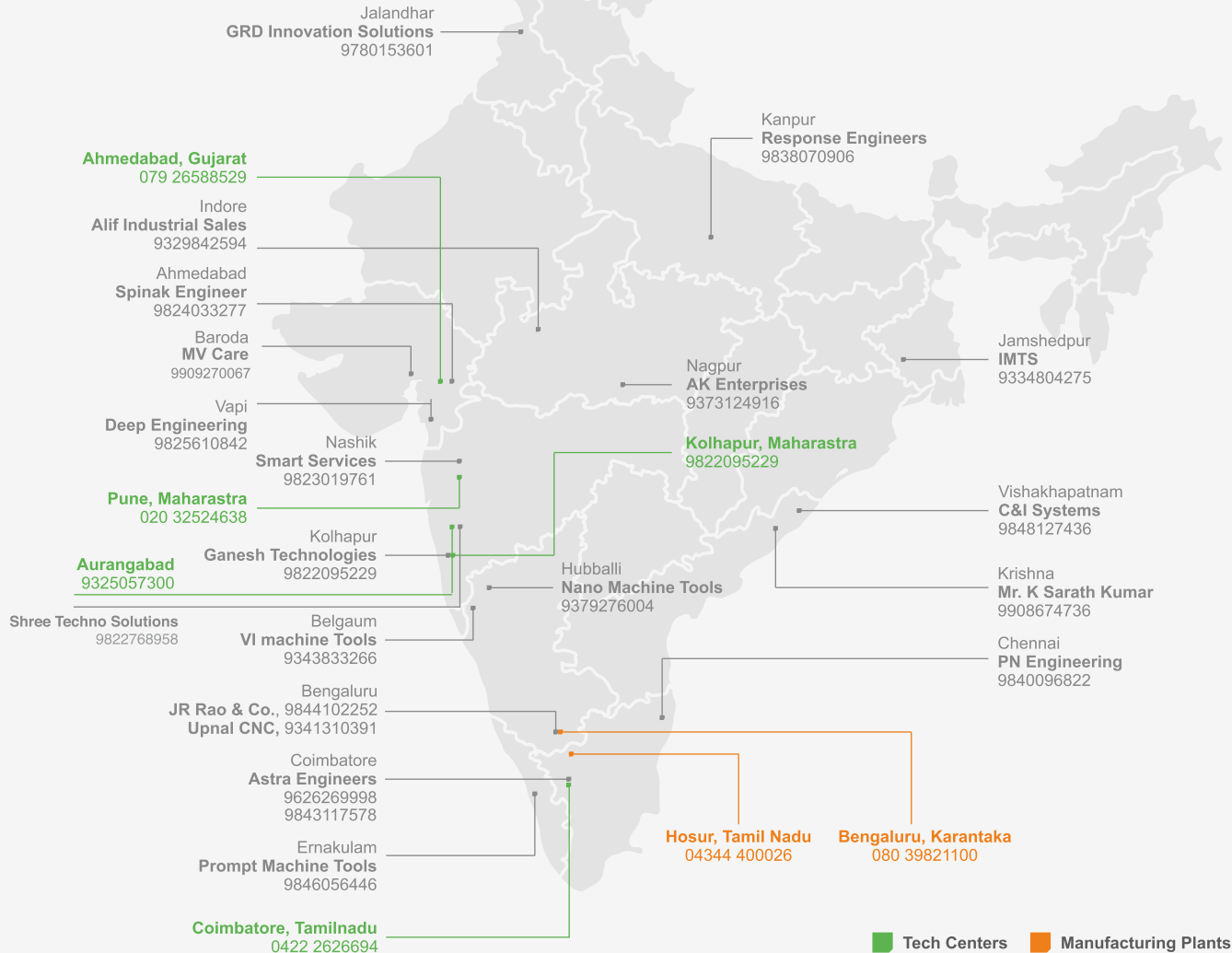
Standard Features

- AC servo drives
- AC variable speed spindle motor
- Hardened and ground ball screws
- Feedback through absolute encoder
- Automatic tool clamping-unclamping
- Centralized automatic lubrication
- Spindle taper air blow
- Telescopic covers with wipers
- Full machine guard
- USB interface (Ethernet)
- Levelling pads
- Maintenance tool kit
- Electronic counter balance
- Air gun, 3 Tier lamp, Air nozzle
- Ring coolant around spindle
- Rigid tapping
- AC for electrical cabinet
- Manual pulse generator
- Front chip disposal

Optional Features

- Rear chip disposal
- Chip conveyor in lieu of coolant tank with chip tray
- 2/ 3 axis with linear glass scale feedback
- 16/ 25/ 40 bar coolant through spindle
- Provision for 4th and 5th axis rotary table
- 4th axis rotary table
- Voltage stabilizer
- Ultra isolation transformer
- Increased day light area through column raiser block
- Spindle mounted probe
- Table mounted probe
- Hard part probing
- Edge finder
- Automatic front door
- Higher spindle RPM with chiller unit
- 30 Tools automatic tool changer

Network



International Network

- Bangladesh • Bahrain • China • France • Germany • Iran • Kuwait • Netherlands • Oman • Poland
- Qatar • Russia • Saudi Arabia • Sri Lanka • South Africa • Thailand • Turkey • UAE



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