

Machine  
**WINNER**  
台灣威諾斯漢機床

**Taiwan factory**

**TAIWAN WINNERSTECH MACHINERY CO., LTD.**

37, Lane. 282 North 6th, Sec. 4, Changping Rd.,  
Daya Dist., Taichung City 42850, Taiwan.  
TEL : +886-4-2565-2092(3) • FAX : +886-4-2565-2391  
E-mail: info@winnerstech.com.tw  
www.winnerstech.com.tw

**China factory**

**NANJING WINNER TECHNOLOGIES CO., LTD.**

No.1-2, Fengyuan Road, Guabu Town, Luhe District, Nanjing  
TEL : +86-025-57633338 Fax : +86-025-57632338  
www.winner.tw.cn



WORLD CLASS **VMC**  
Ultimate Machining Capability !

Dealer

[www.winnerstech.com.tw](http://www.winnerstech.com.tw)

# High Speed VMC

VMC 850/1000/1100

Achieve High Level of Accuracy & Rigidity



### A/E SERIES

- A - 3 axes linear guideways
- E - X & Y Linear ; Z boxways

**12000/15000rpm Spindle Speed**  
Accomplish and Designed for High - Speed Performance.



### Gear-drive spindle

The geared-head spindle performs increased high torque for heavy duty cutting. All the gear parts are contained in oil box with well-sealed system, to guarantee all parts being lubricated well and make the noise down to low-level.



### Direct-drive spindle

The most advanced spindle design is an innovative 10,000~12,000rpm, in-line direct-drive spindle that is coupled directly to the motor. This provides super-smooth operation for excellent surface finishes, and reduces operating heat for greater thermal stability.



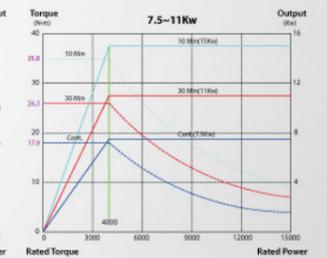
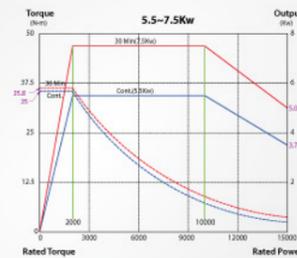
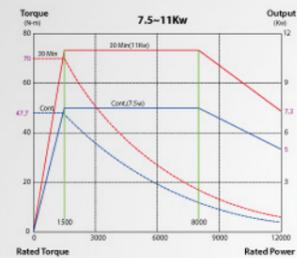
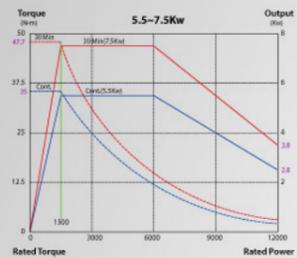
### Cartridge type spindle

The spindle use pre-loaded angular-contact bearings throughout, to enhance radial stability, enabling heavy cuts in steel. The belt type spindle allows heavier cutting and create a better part finish. This spindle is prepared to easily add the CTS option.

### Spindel Motor Torque Mitsubishi

12000 RPM

15000 RPM



# Tough Accurate Versatile

## VMC 1400/1801/1901



### Anti-Flex, Reinforced Base & Column Castings

- Wide base & box-shaped column provide the super rigidity for heavy duty cutting or for high speed cutting.
- The column is a large span design with an inverted "Y" shape construction and with cross ribs for outstanding rigidity and stability.
- Super strong castings feature anti-flex, vibration-absorbing ribs that transfer vibrations away from the cutting area.

### 4-linear guideways on Y-axis

- The heavy-duty linear guide way is applied in X, Y axes and Z-axis are precision boxway type which shall be free from loads deformation.
- High speed feed-rate and repeatability accuracy are guaranteed.

### Double Chip Auger

- Simple and efficient chip removal designed to adopt chip augers on both side of machine. High volume coolant washes the chips from the work area into the augers that move the chips in the disposal container.



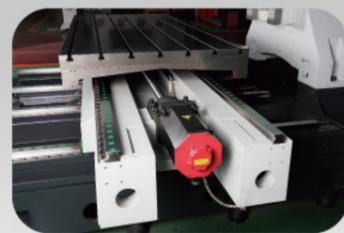
### X-axis adopted with 6-blocks

6 blocks for X-axis roller linear guides to ensure support rigidity, X-axis has no hanging problem.



### Enforced double-nutted ballscrew

Double-anchored ballscrew with ever extra broadened bearing nut than any others, enhance high cutting rigidity and accuracy while high cutting rapid feed.



### Directly coupled servo motor

Superior servo motor connected directly to the ballscrews with rigid shaft couplings.



### Swivel control panel

Control panel is available for up-and down rotation by  $\pm 15$  degrees for easier operating.



### Z-axis box ways

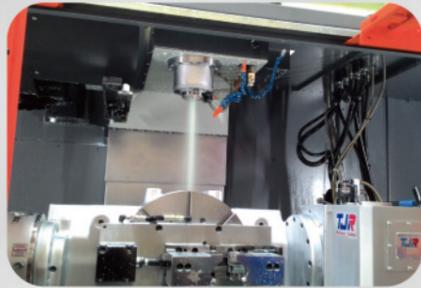
Box way design on Z axis reinforces stability while machining.



### 4-linear guideways on Y-axis

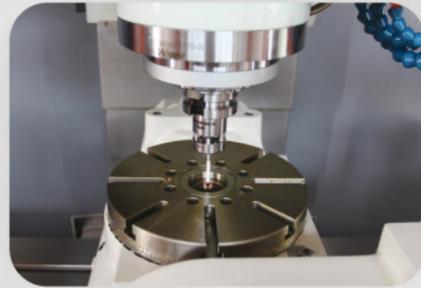
The heavy-duty linear guide way is applied in X, Y axes.

# Options



### Coolant through spindle(cts)

The optional Coolant Through Spindle (CTS) help to increase the higher cutting speed, chips removable for deep-hole drill and fine finishing of pocketing mill.



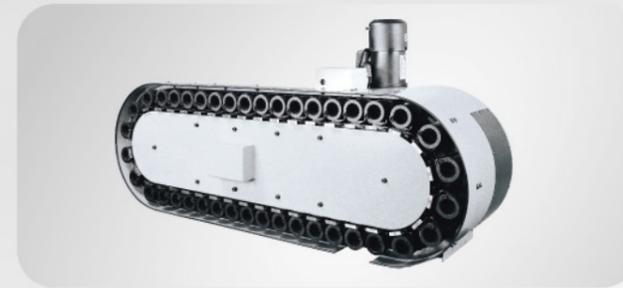
### Workpiece Measurement

The advance part probing system acts parts inspection and primary-piece measurement, the data quickly advanced the necessary adjustment and coordinate compensation for high quality processing.



### Tool measurement

Simplified tool measurement either for tool length or tool outer diameter can be activated with initial M codes for breakage detective and also auto compensation.



### Chain type atc-30t

The loading capacity is 30 tools. BT-50 tool shank can be options.



### Chain type chip conveyor

Chain type chip conveyor provides the most efficient chip removal jobs and best chip-free coolant effect to massive productions.



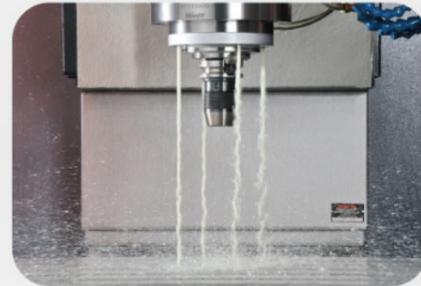
### 4th/ 5th axis rotary table

4th / 5th axis rotary table available for multi-sides machining. The reduced set-up brings higher productivity and absolute parts accuracy.



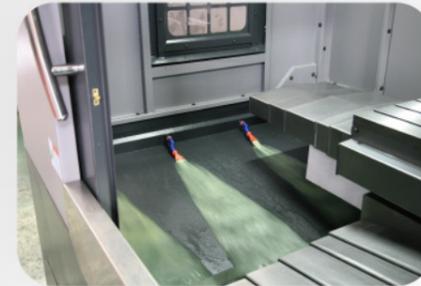
### Linear scales

Linear scales are required when absolute positioning accuracy is necessary, in order to ensure exact axis positioning under fluctuation temperatures. Linear scales can achieve high positioning accuracy.



### Coolants jets Around spindle

While high speed machining, the equipment can help to eliminate the chips stuck inside of workpiece, hence the accuracy and tool life can be kept longer.



### Coolant flushing device

The optional side-flushing device can help efficient removal of chips.



### Spindle oil cooler

Spindle oil cooler can be good helps to keep normal temperature when spindle high speed & long time running.



### Electrical cabinet

High quality of wiring panels complied with CE standard.

## Major Markets

# Connect with High-Value Manufacturing Markets



Automotive



Medicals



Aerospace



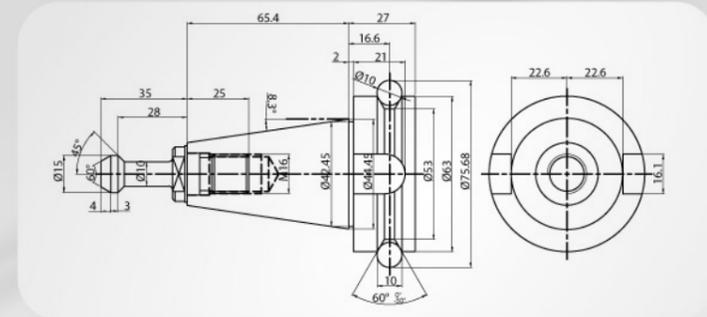
Energy resources



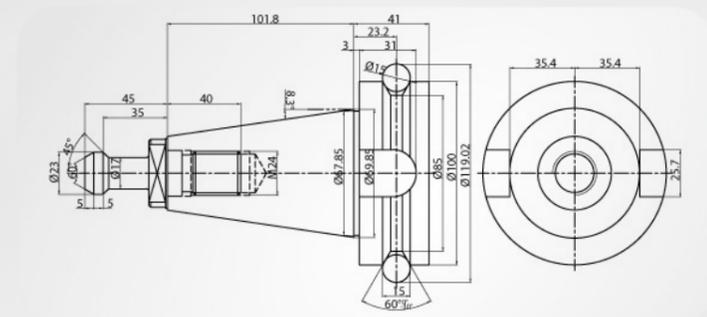
Electronics

# Spindle Tool Diagram

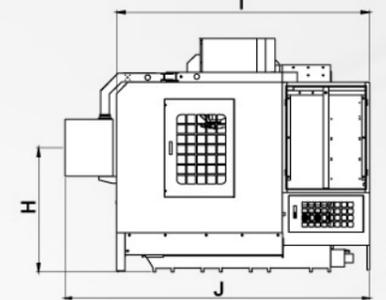
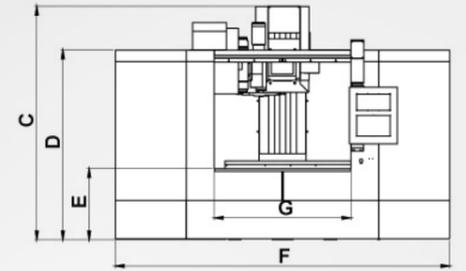
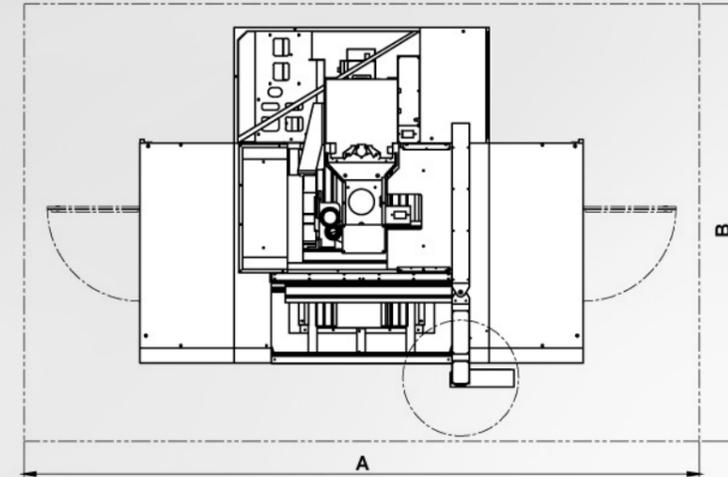
BT-40 Standard



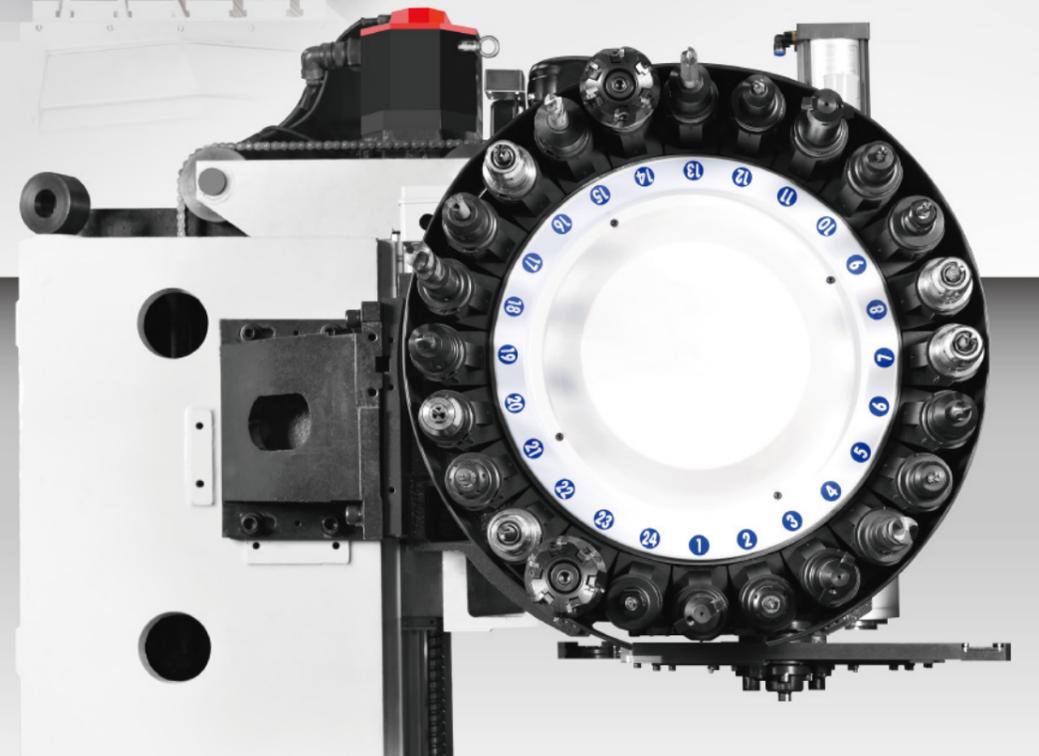
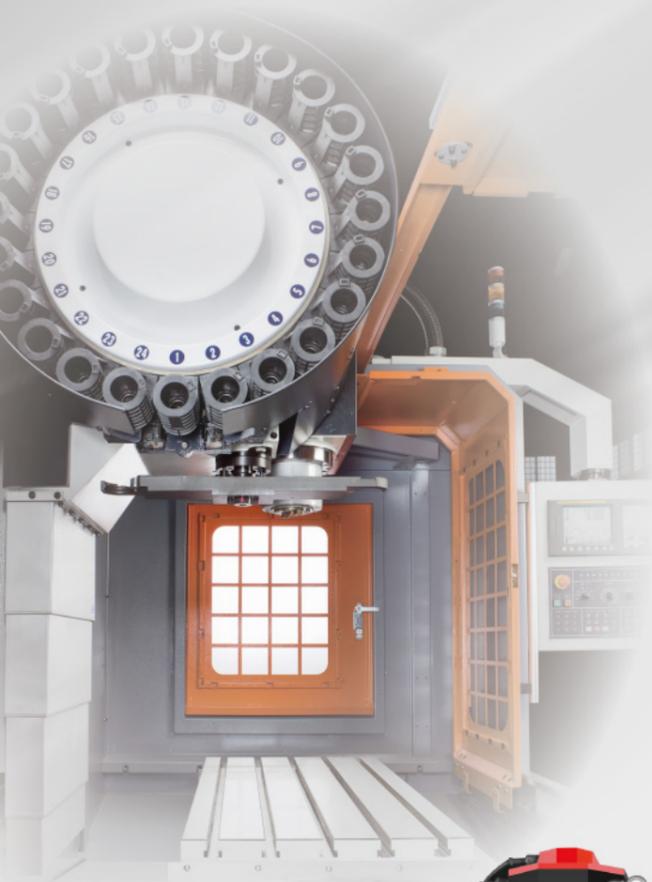
BT-50 Standard



# Model Dimensions



Model	A	B	C	D	E	F	G	H	I	J
VMC-A650	4258	4064	2519	2159	861	2200	1040	1481	2327	2540
VMC-A750	4258	4064	2519	2159	861	2200	1040	1481	2327	2540
VMC-A/E850	5118	3982	2658	2145	866	3060	1370	1500	2405	2851
VMC-A/E1000	5118	3982	2658	2145	866	3060	1370	1500	2405	2851
VMC-A/E1100	4960	4660	2695	2226	866	3100	1560	1475	2998	3627
VMC-A1200	5826	3928	2670	2169	811	3824	1560	1420	2898	3487
VMC-E1300	5826	3928	2670	2169	811	3824	1560	1420	2898	3487
VMC-E1400	5826	3928	2670	2169	811	3824	1560	1420	2898	3487
VMC-E1801	7575	5155	3310	2761	960	5090	2400	1850	3378	4350
VMC-E1901	7575	5155	3310	2761	960	5090	2400	1850	3378	4350
VMC-E2101	7575	5155	3310	2761	960	5090	2400	1850	3378	4350



# Specification

Specification		UNIT	A650	A750	A/E850	A/E1000	A/E1100	VMC-E1300	VMC-E1400	VMC-E1801	VMC-E1901	VMC-E2101
Work Table	Working table size (LxW)	mm	700x410	800x460	1000x560	1150x560	1150x560	1500x710	1500x710	1970x1000	2050x1000	2250x1000
	T-slots	mm	18x3x125	18x3x125	18x5x100	18x5x100	18x5x100	18x7x100	18x7x100	18x7x150	18x7x150	18x7x150
	Max. table load	kgs	500	500	600	600	800	1000-1200	1000-1200	3000	3000	3000
Travel	X axis travel	mm	650	750	850	1000	1000	1300	1400	1800	1900	2100
	Y axis travel	mm	410	460	560	600	600	650	700	900	900	1000
	Z axis travel	mm	510	540	560	600	600	650	650	800	800	800
	Spindle nose to table surface	mm	140-650	120-660	120-680	120-720	120-720	120-670	120-670	200-1000	200-1000	200-1000
Spindle	Transmission		Belt-Drive					Belt-Drive				
	Spindle taper		BT-40	BT-40	BT-40	BT-40	BT40	BT40	BT40	BT-50	BT-50	BT-50
	Spindle speed	rpm	10000	10000	8000	8000	8000	8000	8000	6000	6000	6000
	Spindle motor	kw	5.5/7.5	5.5/7.5	7.5/11	7.5/11	7.5/11	11/15	11/15	15/18.5	15/18.5	15/18.5
Feed	X-Y-Z motor (Fanuc)	kw	1.8/1.8/3	1.8/1.8/3	3/3/3	3/3/3	3/3/3	3/4/4	3/4/4	7/7/7	7/7/7	7/7/7
	X-Y-Z motor (Mitsubishi)	kw	1.5/1.5/3	2.2/2.2/3	3/3/3	3/3/3	3/3/3	3.5/3.5/3.5	3.5/3.5/3.5	7/7/7	7/7/7	7/7/7
	X-Y-Z rapid travel	M/min.	36/36/30	36/36/30	36/36/30	36/36/30	36/36/30	20/20/20	20/20/20	15/15/15	15/15/15	15/15/12
	X-Y-Z cutting feed rate	M/min.	10	10	10	10	10	10	10	8	8	8
ATC System	ATC type		Arm Type					Arm Type				
	Magazine capacity	pcs	24	24	24	24	24	24	24	24	24	24
	Max. tool diameter	φ(mm)	80	80	100	100	100	100	100	125	125	125
	Max. tool length	mm	200	200	300	300	300	300	300	300	300	300
	Max. tool weight	kgs	7	7	8	8	8	10	10	15	15	15
Rail Type		A series - 3 - axes linearways					E series - Z boxways & X - Y linearways / Y - 4 guideways (for 1300/1400 and larger models)					
Dimension & Others	Power consumption	KVA	15	15	15	15	20	20	20	25	25	25
	Air pressure required	kg/cm <sup>2</sup>	6-8	6-8	6-8	6-8	6-8	6-8	6-8	6-8	6-8	6-8
	Floor occupation (LxWxH)	cm	220x255x255	220x255x255	310x290x270	310x290x270	310x365x270	385x350x270	385x350x270	510x435x335	510x435x335	510x435x335
	Machine weights	kgs	4200	4300	6800	7000	7200	8500	8900	18500	18500	20000

All specifications & design are subject to change without prior notice.

## STANDARD ACCESSORIES

- 1 3-axes auto lubrication system
- 2 Rigid tapping
- 3 Cooling device
- 4 Full enclosed guard
- 5 Spindle air blast
- 6 Standard RS-232 transmission interface
- 7 Heat exchanger
- 8 Work lamp
- 9 Alarm indicator
- 10 Tool kits with foot pad screws
- 11 Telescopic cover on 3-axes
- 12 Operation manual
- 13 Maintenance manual

## OPTIONAL ACCESSORIES

- 1 Fanuc / Mitsubishi controller
- 2 Chip conveyor
- 3 4th & 5th axis rotary table
- 4 Spindle speed 10000rpm/12000rpm(BT-40)
- 5 3-axes linear scales
- 6 Spindle cooling system
- 7 Auto tool length measurement
- 8 Work-piece measurement
- 9 Disc oil/coolant separator
- 10 Coolant through spindle(CTS)
- 11 Spindle splash surround (for arm type only)
- 12 Electric cabinet air conditioner
- 13 Automatic voltage stabilizer
- 14 Transformer