

**Product name: Small CNC Machine center**

**Model: VMC400 Series**



## Features

- (1). High performance 3 or 5 axis CNC center machine controller.
- (2). The standard spec includes electronic hand wheel.
- (3). Selection of high -quality casting materials, more compact.
- (4). 8-12 tools ATC.ISO20 spindle type, 24000rpm spindle speed.
- (5). USB/U dis/RS232COM etc. many kinds of communication mode, to help users achieve different data transmission and software upgrades easily.
- (6). Frequency conversion water cooling motor, low noise, high speed and good durability.
- (7). Perfect self-diagnosis function, internal and external status real-time display, alarm immediately when abnormal.
- (8). Macro variable, macro definition programming, realizing a variety of logical relations. Support macro program with parameters, convenient to the user programming.
- (9). DXF+G code template function, converting DXF automatically to G code for processing.
- (10). Graphic simulation function: show the graphics of the processing program and the tool path of the actual operation, tool path simulation processing without controlling the operation of the machine, to exam if the preparation process is correct.
- (11). Multi interface selection: support multi language interface display, automatic fault alarm. Processing information display, processing time, the number.
- (12). Parameter tabular: Input / output address number setting, only need to fill in the corresponding value in the configuration table.
- (13). Applicable industry: technology development, advertising design, art, technical

college Education & Training CNC and DIY enthusiasts.

**Specification (Technical parameter)**

|                        |                                    |                   |             |                |
|------------------------|------------------------------------|-------------------|-------------|----------------|
| Processing range       | X axis stroke X                    |                   | mm          | 400            |
|                        | Y axis stroke Y                    |                   | mm          | 210            |
|                        | Z axis stroke Z                    |                   | mm          | 300            |
|                        | Max. drilling/milling capacity     |                   | mm          | 13             |
|                        | milling capacity cutter head(max.) |                   | mm          | 13             |
|                        | Max. end milling capacity          |                   | mm          | 50             |
|                        | Spindle to table                   |                   | mm          | 70-390         |
|                        | spindle to column                  |                   | mm          | 240            |
| Worktable              | Worktable                          |                   | mm          | 840*210        |
|                        | Max loading capacity               |                   | kg          | 50             |
|                        | T-slot (width*slot number*spacing) |                   | mm          | 3-14-63        |
| Spindle                | Main axis speed                    | Unpowered spindle | rpm         | 0-3500         |
|                        | Spindle power                      | Unpowered spindle | W           | 1100           |
|                        | Spindle taper                      | Unpowered spindle | /           | ISO20          |
| Feed drive             | X, Y, Z axis rapid traverse speed  | Servo Motor       | mm/min      | 10000          |
|                        | X, Y, Z axis torque                | Servo Motor       | N.m         | 7.17           |
|                        | guide rail                         | Ball screw        | mm          | Ball screw     |
| Tool library           | Tool library capacity              |                   | pcs         | 12             |
|                        | Tool library form                  |                   | /           | Bamboo hat     |
| Positioning accuracy   |                                    |                   | mm          | ±0.015         |
| Repeated positioning   |                                    |                   | mm          | ±0.01          |
| Handwheel              |                                    |                   | Yes/No      | yes            |
| Cooling system         |                                    |                   | Yes/No      | Cooling water  |
| Lubrication            |                                    |                   | Manual/Auto | Auto           |
| CNC system             |                                    |                   | Optional    | KND            |
| Air pressure           |                                    |                   | pa          | 0.55-0.6Mpa    |
| Machine power source   |                                    |                   | V/Hz        | 220/54         |
| Machine weight         |                                    |                   | kg          | 1500           |
| Product size/dimension |                                    |                   | mm          | 1360x1100x1950 |

Standard accessories

| No. | Tools                                 | Spec.       | Qty. |
|-----|---------------------------------------|-------------|------|
| 1.  | Collet chuck                          | ISO20-ER20  | 1    |
| 2.  | ER20 collect set                      | φ 3. 175    | 1    |
| 3.  |                                       | φ 5         | 1    |
| 4.  |                                       | φ 6         | 1    |
| 5.  |                                       | φ 8         | 1    |
| 6.  |                                       | φ 9         | 1    |
| 7.  |                                       | φ 10        | 1    |
| 8.  |                                       | φ 12        | 1    |
| 9.  |                                       | φ 13        | 1    |
| 10. | Spanner wrench                        | ISO20-ER20  | 1    |
| 11. | Quick vice                            | Q19D75      | 1    |
| 12. | Hex head bolt                         | M10*30*2.5  | 2    |
| 13. | Flat Washer                           | φ10*30      | 2    |
| 14. | T-slot Nut                            | M10         | 2    |
| 15. | Hex Wrench set (6-piece)              | S=2.5       | 1    |
| 16. |                                       | S=3         | 1    |
| 17. |                                       | S=4         | 1    |
| 18. |                                       | S=5         | 1    |
| 19. |                                       | S=6         | 1    |
| 20. | Open End Wrench Set (4-piece)         | S=8/10      | 1    |
| 21. |                                       | S=12/14     | 1    |
| 22. |                                       | S=14/17     | 1    |
| 23. | Phillips Screwdriver                  | φ75*5       | 1    |
| 24. | Flathead Screwdriver                  | φ75*5       | 1    |
| 25. | Oil bottle                            | 100ml       | 1    |
| 26. | Socket wrench                         | S=8         | 1    |
| 27. |                                       | S=10        | 1    |
| 28. | Twist drill bit                       | Φ3          | 1    |
| 29. | Milling cutter                        | Φ4          | 1    |
| 30. |                                       | Φ6          | 1    |
| 31. | Bakelite Block                        | 50*50*20mm  | 1    |
| 32. | Aluminum Block                        | 50*50*20mm  | 1    |
| 33. | CNC machine center instruction manual | VMC400      | 1    |
| 34. | CNC controller manual                 | KND2000MF2i | 1    |

### Optional Accessories

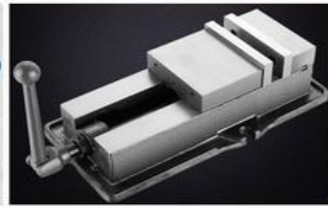
| No. | Tools                                  | Spec.          |
|-----|----------------------------------------|----------------|
| 1   | Mill Chuck Set                         | 8-piece        |
| 2   | Quick Vice                             | 100mmS/N:10036 |
| 3   | Clamping Kit                           | 58-piece       |
| 4   | Carbide end mill Set                   | 6-piece        |
| 5   | Fluts Hss end mill Set                 | 7-piece        |
| 6   | Antimagnetic edge finder               | /              |
| 7   | Indexable carebide end mill            | MT3            |
| 8   | the 4TH axis                           | /              |
| 9   | the 5TH axis                           |                |
| 10  | Z axis tool setter                     | /              |
| 11  | Tailstock for the 5 <sup>th</sup> axis | /              |
| 12  | MT3 Tapping handle and chuck           | 3,4,5,6,8mm    |



Mill chuck set



Clamping kit



Quick vice



Carbide end mill 5 pieces set



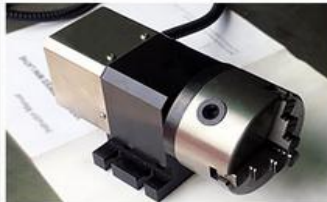
Fluts Hss end mill 4-16mm



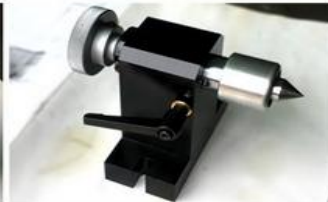
Indexable carbide end mill MT3



Antimagnetic edge finder



The 4th axis



Tailstock for the 4th axis



Z axis tool setter



MT3 Tapping handle and chuck(3,4,5,6,8mm)