

Standard machine specifications

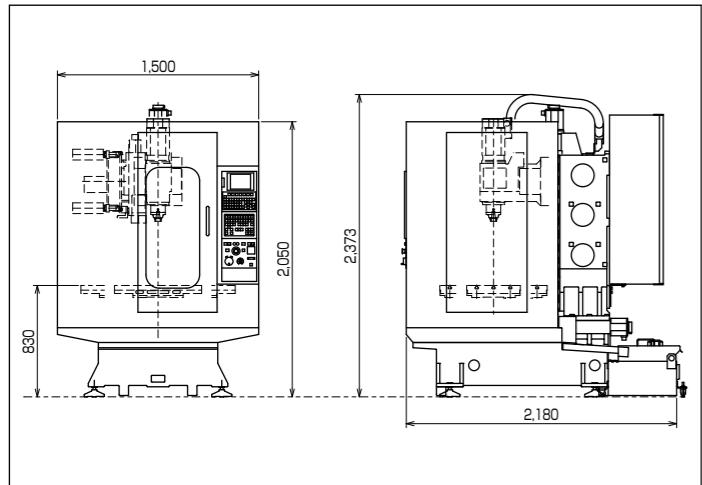
| Item | VA3 |
|--|---|
| Spindle | ID taper 7/24 taper No. 30 |
| Spindle speed | 200 to 20,000 min ⁻¹ |
| Motor output (10 min. 25%ED/Cont.) Note1 | 9.0/3.7 kW |
| Table | Table size 650 x 400 mm |
| | Table height 830 mm |
| T-slot size | 14H8 x 3 P = 125 mm |
| | Distance between spindle face and table face 150 to 500 mm |
| Maximum weight on table | 250 kg (uniformed load) |
| Stroke | X-axis stroke 500 mm |
| | Y-axis stroke 400 mm |
| | Z-axis stroke 350 mm |
| Feed rate | Rapid traverse rate (X, Y, Z axis) 48 m/min |
| | Cutting feed rate 1 to 30,000 mm/min |
| ATC | Tool shank JIS B 6339-1998 BT30 |
| | Pull stud MAS4003-1982 P30T-1 |
| Tool changing method | Double arm |
| Tool selection | Random in nearest direction |
| Tool storage capacity Note2 | 20 tools (Max. mountable tool number: 21 tools) |
| Maximum tool size (φ x L) Note2 | φ60 x 250 mm |
| Maximum tool weight Note3 | 3.0 kg |
| Coolant | Tank capacity 130 L |
| | Pump discharge volume 60 L/min |
| | Motor 0.18 kW |
| Power requirement | 21 KVA |
| Machine size (Width x Depth x Height) | 1,500 x 2,180 x 2,373 mm |
| Machine weight | 2,600 kg |

Note1: Spindle motor output varies according to the spindle speed.

Note2: If the tool size is larger than φ60, adjacent tool post cannot be used. Tool storage capacity is restricted.

Note3: Maximum tool weight depends on the position of the center of gravity. Stated value is a reference value.

Appearance



Standard NC specifications

| 項目 | VA3 |
|---|--|
| Control unit | NC unit FANUC Oi-MD |
| | Axis name X, Y, Z |
| | Least input increment 0.001 mm |
| | Position detector Absolute pulse coder |
| Feed function | Rapid traverse override FO, 25, 50, 100% |
| | Feed per minute mm/min |
| | Federate override 0 to 200% |
| Programming | Optional block skip 1 |
| | Workpiece coordinate system G54 to G59 |
| Miscellaneous function/ Spindle function | Canned cycle for drilling Standard |
| | Auxiliary function M3 digits |
| | Spindle function S5 digits |
| Tool function/ Tool offset function | Tool function T2 digits |
| | Tool offset pairs 400 |
| | Tool length compensation Standard |
| | Cutter and tool nose radius compensation Standard |
| Edition | Part program storage size 512 Kbyte |
| | Registered programs 400 |
| | Multi-language display Standard |
| Setting/Display | Self-diagnosis function Standard |
| | Alarm display Standard |
| | Alarm history display Standard |
| Input/output interface | Memory card, RS232C, USB Standard |
| Others | Display unit 8.4" color LCD |

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The specifications of this catalogue are subject to change without prior notice.



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TSUGAMI

HIGH SPEED VERTICAL MACHINING CENTER

VA3



High speed and high accuracy vertical machining center
Wide tooling zone corresponding various applications.



Realizing high speed and high accuracy

Wide tooling zone



Wide tooling zone



The spindle is separated from the ATC arm and the tool magazine. Regardless of the magazine interference, tooling zone is fully usable.



The tool can be inserted directly into the spindle or removed from the spindle manually from the front of the machine.



High speed

- 20,000 min⁻¹ max. spindle speed
- High rapid traverse speed of X, Y and Z axes with 48 m/min
- High speed ATC is realized by simultaneous tool changing with swiveling arm.
- Tool changing time (Cut to Cut) : 1.6 sec. at tool weight 1.5 kg or less



Wide tooling zone Long stroke

- X-axis stroke: 500 mm
- Y-axis stroke: 400 mm
- Z-axis stroke: 350 mm

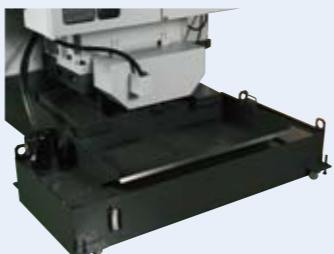
ATC, Tool magazine

- The main spindle is separated from the ATC arm and the tool magazine, only the main spindle moves vertically.
- 20 tools can be stored in the tool magazine as standard. (Maximum mountable tool numbers: 21 tools)

Standard

Coolant tank 130 L (Standard)

Large capacity (130 L) coolant tank is provided as standard to correspond to the wide variety of tooling.



LED illumination light (Standard)

Eco-friendly LED internal illumination light is provided as standard.



Option

CNC rotary table 1 axis (Option)

By mounting the CNC rotary table, contour control processing of 4-axis simultaneous control is possible.



Signal indicator (Option)

The machine status are indicated by the 3 colors of lamps.



Coolant flow on bed (Option)

Improving chip disposal capability in case of large-volume cutting.

