

VTM Series



| | | VTM-65 | VTM-100 | VTM-200 | |
|-----------------------|--------------------------------------|-------------------|---|--|--|
| CAPACITY | ITEM | UNIT | ø650 (ø25.59) | ø1,000 (ø39.27) | ø2,000 (ø78.74) |
| | Max machining diameter | mm (in.) | ø750 (ø29.53) | ø1,000 (ø39.37) | ø2,400 (ø94.49) |
| | Max swing diameter | mm (in.) | 635 (25) | 840 (33.07) | 1,200 (47.24) |
| | Max workspace load (including chuck) | kg (lb) | 800 (1,760) [2,000 kg/200 min ⁻¹]* ¹ | 840 (1,760) [2,000 kg/200 min ⁻¹]* ¹ | 7,000 (15,400) [8,500 kg/65 min ⁻¹]* ¹ |
| TRAVELS | X axis | mm (in.) | 500 (19.69) | 650 (25.59) | 1,600 (62.99) |
| | Z axis | mm (in.) | 635 (25) | 840 (33.07) | 1,200 (47.24) |
| | C axis | deg | | 360 degrees | |
| | C axis minimum input increment | deg | | 0.001 | |
| WORK SPINDLE | Spindle speed | min ⁻¹ | OSP: 10 – 1,250 FANUC: 10–550 (low speed) 10–1,250 (high speed) | OSP: 6 – 250 (low speed) 13 – 1,250 (high speed) FANUC: 6 – 416 (low speed) 13 – 1,250 (high speed) | 5 – 84 (low speed) 10 – 200 (high speed) |
| | Spindle speed ranges | | Infinitely variable | | 2 auto ranges (coil switching) |
| | Type of spindle nose | | | JIS A2-11 | ø380 flat |
| | Spindle front bearing ID | mm (in.) | | ø200 (7.87) | ø260 (10.24) |
| | Through-hole diameter | mm (in.) | | ø110 (4.33) | ø160 (6.30) |
| | Diameter / taper | | | ø115 (ø4.53)/ 1/20 | ø164 (ø6.46)/ 2° |
| | Floor to spindle nose | mm (in.) | 1,105 (43.50) | | 1,150 (45.28) |
| Spindle support | | | | | 2-point roller bearing spindle support |
| TURRET (TOOL SPINDLE) | Turret type | | | | ATC single tool |
| | OD tool shank dimensions | mm (in.) | | | □25, □32 (1 x 1, 1-1/4 x1-1/4) |
| | ID tool shank diameter | mm (in.) | | | ø40, ø50 (ø1-1/2, ø2) |
| MILLING TOOL SPINDLE | Maximum spindle speed | min ⁻¹ | | | OSP: 2,000 (low speed) 4,500 (high speed) FANUC: 1,000 (low speed) 4,500 (high speed) |
| | No. of spindle shift steps | | | | 2 auto ranges (coil switching) |
| | Spindle shape | | | | 7/24 taper bore No. 50 BT50 (BIG-PLUS) |
| | Front diameter | mm (in.) | | | ø90(3.54) |
| TOOL CHANGE | Tool shank | | | | BT50 |
| | Pull stud | | | | P50T-2 |
| | Max tools (magazine capacity) | tool | | | 36 |
| | Tool selection | | | | Fixed address type |
| | Max tool diameter | mm (in.) | | | ø170 (ø6.70) [w/o adjacent ø250 (ø69.85); 500 L (19.69) ø300 (11.82); 450 L (17.72)] |
| | Max length (from gauge line) | mm (in.) | | | 500 (19.69) [touch setter gauging length Max 360 (14.18)] |
| Max tool weight | kg | | | 30 (average 20) | |
| FEED AXES | Cutting feedrate | X, Y, Z | mm/rev (ipr) | | 0.001 – 462.000 (0.00004 – 18.19) |
| | Rapid traverse | X-axis | m/min (fpm) | 18 (59.06) | 16 (52.50) |
| | | Y-axis | m/min (fpm) | 20 (65.62) | 16 (52.50) |
| | | C axis | min ⁻¹ | 20 | 10 |
| MOTORS | Workpiece spindle motor | kW (hp) | | | OSP: VAC 30/22 (40/30) (30 min/cont) FANUC: AC 30/22 (40/30) (30 min/cont) |
| | Milling tool motor | kW (hp) | | | OSP: AC 15/11 (20/15) (15 min/cont) FANUC: AC 7.5/5.5 (10/7.4) (30 min/cont) |
| SIZE | Height | mm (in.) | 4,000 (157) | 4,300 (169) | 4,570 (179) |
| | Floor space | mm (in.) | | | |
| | Weight | kg (lb) | 11,000 (24,200)* ² | OSP: 13,700, FANUC: 13,500 ^{2*3} | 27,000 (59,400) ² |
| CNC | | | | | OSP-P200LA, FANUC-311-A |

*1: Maximum workpiece loading mass when spindle speed is limited/spindle speed limit

*2: Machine only; w/o chuck and ATC magazine

*3: OSP:30,140, FANUC:29,700 lb