

Takumi

The Industry Standard

V15

Vertical Machining Centers



High-Rigidity + High-Precision Structure

- Perfect combination of heavy cutting and high stability
- Designed and built for heavy material removal parts production and mold and die industries
- Box ways for rigid and stable cutting
- Pre-tensed ballscrews minimizes thermal growth and improves accuracy
- Direct-coupled motors, increases accuracy and faster start-up
- Swiveling control panel optimizes floor space use
- Spindle chiller maximizes heat dissipation
- Extra-wide door openings, for easier loading and unloading
- Hand-scraped contact areas
- Robust, precision machined castings
- Box-shape bed made of one piece casting
- Integrated washdown and chip management system
- FANUC[®] Oi-MF Series Control
- 60 (X-Axis) x 30 (Y-Axis) x 28.3 (Z-Axis) in travels
- 708 x 708 x 630 in/min (18 x 18 x 16 m/min) rapids
- 4 box ways supporting y-axis
- 24-station swing-arm ATC
- 6,000 RPM 2-speed gear-type spindle
- 50 taper
- Pre-tensed ballscrews for minimal thermal deformation
- 63 x 30 in (1,600 x 760 mm) table, 3,307 lbs (1,500 kg) capacity
- 30,865 lbs (14,000 kg) machine weight

Specifications

	V15
Travel	
X-Axis	60 in / 1,524 mm
Y-Axis	30 in / 762 mm
Z-Axis	28.35 in / 720 mm
Distance from Spindle Nose to Table	5.91 ~ 34.25 in / 150 ~ 870 mm
Distance from Spindle Nose to Z-Axis Guide Ways	32.28 in / 820 mm
Table	
Dimensions	62.99 x 29.92 in / 1,600 x 760 mm
Max. Load	3,330 lbs / 1510.463 kg
T-slot (width x pitch x number)	22 x 150 x 5
Spindle	
Type	Gear
Spindle Speed	6,000 rpm
Spindle Torque Peaks	437.2 ft/lb / 592.76 nm
Motor Power (cont./30 min)	20.1/24.8 HP / 15/18.5 kW
Coolant Thru Spindle	30 bar / 435.11 psi
Spindle Taper	CAT/BT 50
Feed Rate	
Rapid Traverse (X/Y/Z)	708 x 708 x 630 ipm / 18 x 18 x 16 m/min
Cutting Feed Rate	0.04 ~ 196.85 ipm / 1 ~ 5,000 mm/min
Power (X/Y/Z)	5.3/9.4/5.3 hp / 4.0/7.0/4.0 kW
ATC & Magazine	
ATC Type	Swing-Arm
Magazine Capacity	24 tools
Maximum Tool Diameter /next pocket empty	4.33/8.66 in / 110/220 mm
Maximum Tool Length	11.81 in / 300 mm
Maximum Tool Weight	33.07 lbs / 15 kg
Tool Shank	CAT/BT 50
Space & System Requirements	
Pneumatic Pressure	5 CFM @ 85-115 psi / 0.14m ³ /min. @ 6-8 bar
Electrical Power Consumption	35 KVA
Machine Net Weight	30,865 lbs / 14,000 kg
Operating Dimensions	275.59 x 220.47 x 128.19 in / 7,000 x 5,600 x 3,256 mm

Accessories

Standard:

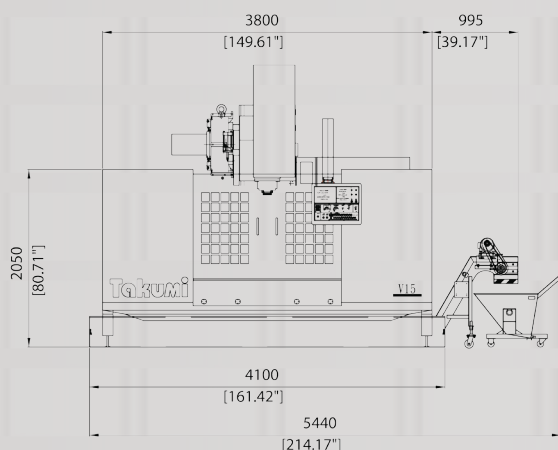
- FANUC® Oi-MF Series Control
- CTS Standard
- 24-tool, CAT, swing-arm ATC
- Wash down gun and air gun
- Coolant wash down system
- Chip conveyor and cart
- Centralized automatic lubrication system
- Manual pulse generator (MPG)
- Ethernet & RS-232C interface
- Heat exchanger
- Toolbox
- Leveling bolts and pads
- Operator manuals
- Programmable airblow machining
- Spindle chiller
- Full enclosure
- Work light

Optional:

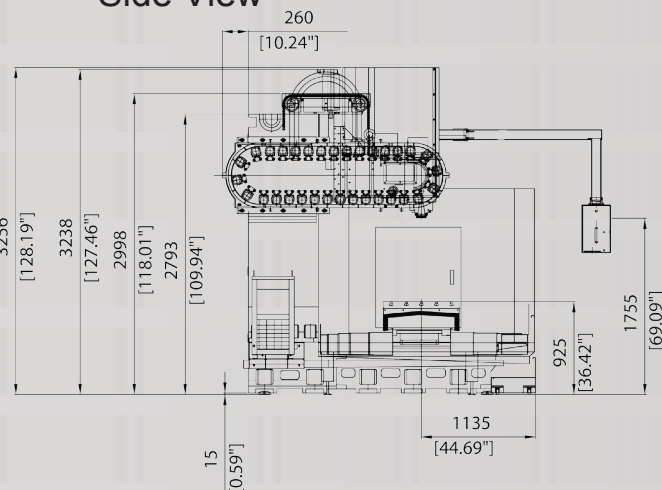
- Coolant through spindle (CTS)
- Oil skimmer
- Oil mist device
- Oil mist collector
- Part probe measurement system
- Tool probe measurement system
- 4th axis rotary table
- CAT3 compliance package
- BT 40
- Air Conditioner

Layout

Front View



Side View



Top View

