

Takumi

The Art of Productivity

VC1052

Vertical
Machining Center



Heavy Duty General Purpose Machine

- › 41.7 x 20.47 x 24 in (1060 x 520 x 610 mm) travels
- › 45.7 x 20.5 in (1,160 x 520 mm) table working surface with 1,433 lbs (650 kg) maximum table capacity
- › Fast 1,417 x 1,417 x 944 in/min (36 x 36 x 24 m/min) rapids
- › 472.4in/min (12 m/min) cutting feed rate
- › 12,000 RPM, CAT 40 spindle
- › Rigorous testing and spindle chiller to ensure thermal stability
- › 24-station swing-arm ATC, random access
- › 1.31 second tool-to-tool ATC time
- › Wide, robust machine base
- › Rugged axis power transmission
- › Roller type linear guides on all three axis
- › Large diameter , preloaded and pretensioned ballscrews with fine pitch for accurate motion control
- › 35 components on the machine are hand-scraped for fit
- › Wide front door openings and side door access
- › Takumi FANUC® H Control
- › AICC II for high feed rates with optimal cutting precision
- › 400 Block look ahead for fast contour milling
- › 56 work offsets for increased flexibility in job set up
- › 400 tool offset library with length and radius wear
- › Set Up Guidance function to decrease set up time
- › Programmable mirror image
- › Compact flash memory card slot and USB port
- › Rigid Tapping (M29)
- › 2 year machine parts warranty
- › 2 year control parts and labor warranty
- › Factory trained local service and 24/7 tech support

Specifications

	VC1052
Travel	
X-Axis	41.73 in / 1,060 mm
Y-Axis	20.47 in / 520 mm
Z-Axis	24.02 in / 610 mm
Distance from Spindle Nose to Table	4.53 ~ 28.54 in / 115 ~ 725 mm
Distance from Spindle Nose to Z-Axis Guide Ways	22.64 in / 575 mm
Table	
Dimensions	45.67 x 20.47 in / 1,160 x 520 mm
Max. Load	1,433 lbs / 650 kg
T-slot (number x width x pitch)	5 x .71" on 3.94" Centers/ 5 x 18mm on 100mm Centers
Spindle	
Type	Belt
Spindle Speed	12,000 rpm
Motor Power (cont./30 min)	10.1/14.8 HP / 7.5/11 kW
Spindle Taper	CAT 40/BT 40
Feed Rate	
Rapid Traverse (X/Y/Z)	1,417 x 1,417 x 944 ipm / 36 x 36 x 24 m/min
Cutting Feed Rate	0.04 ~ 472.44 ipm / 1 ~ 12,000 mm/min
Power (X/Y/Z)	2.4/4.0/3.3 hp / 1.8/3.0/2.5 kW
ATC & Magazine	
ATC Type	Swing-Arm
Magazine Capacity	24 tools
Maximum Tool Diameter (next pocket empty)	3.15/5.91 in / 80/150 mm
Maximum Tool Length	11.8 in / 300 mm
Maximum Tool Weight	15.4 lbs / 7 kg
Tool Shank	CAT40 (BT 40 optional)
Space & System Requirements	
Pneumatic Pressure	5 CFM @ 85-115 psi / 0.14m ³ /min. @ 6-8 bar
Electrical Power Consumption	30 KVA
Machine Net Weight	13,007 lbs / 5,900 kg
Machine Dimension	116.42 x 84.72 x 112.01 in / 2,957 x 2,152 x 3,099 mm
Operating Dimensions (W x L x H)	195.15 x 147.36 x 122.01 in / 4,957 x 3,743 x 3,099 mm

Accessories

Standard:

- › Operator safety door switches
- › Spindle chiller
- › Programmable cutting air blow
- › 100 gallon coolant tank
- › Programmable coolant wash down
- › Programmable chip auger with lift-up exhaust tube and chip cart
- › Wash down gun and air gun
- › Centralized automatic lubrication system
- › Manual pulse generator (MPG)
- › Ethernet & RS-232C interface
- › 4th axis interface cables and connectors
- › Electrical cabinet heat exchanger
- › Toolbox
- › Leveling bolts and pads
- › Operator manuals
- › Full enclosure
- › Work light
- › 3-light indicator lamp

Optional:

- › Coolant through spindle (CTS)
- › Oil skimmer
- › Oil mist device
- › Oil mist collector
- › Coolant filtration
- › 1 Gigabyte Data Server
- › Memory Card editing
- › Part probe measurement system
- › Tool probe measurement system
- › 4th axis rotary table
- › Lift up chip conveyor with cart
- › BT 40 tool holder conversion

Layout

