

H10
Double-Column
Machining Center



# High Speed Machining and Outstanding Surface Finish

- **>** 40.16 x 27.56 x 19.69 in (1,020 x 700 x 500mm) travels
- ▶ 41.3 x 27.6 in (1,050 x 700 mm) table working surface with 1,760 lbs (800 kg) maximum capacity
- ▶ 1,259 inches per minute (32 m/minute) rapids
- ▶ 787 in/minute (20 m/mintue) cutting feed rates
- **▶** 30-station swing-arm ATC, random access
- ▶ 15,000 RPM Big Plus® CAT 40 inline direct-drive spindle
- ➤ World-class performance for die/mold, aerospace, and other high speed applications
- **>** One piece robust base absorbs the inertia of high cutting feeds
- **>** Extra-wide door openings, for easier loading and unloading
- ➤ One piece double column design increases rigidity enabling higher cutting feeds while maintaining part finish
- ▶ 35% increase in Y axis work area over the standard vertical machine design
- ➤ Specially designed head and included spindle chiller ensure thermal stability
- **>** 30 components on the machine are hand scraped for alignment during asembly
- > Roller-type rails on all axes for added rigidity and speed
- ➤ Large diameter, preloaded and pretensioned ballscrews with fine pitch for accurate motion control
- **>** Linear scales on all axes
- ➤ FANUC<sup>©</sup> 31*i*-MB Series Control
- **>** AICC II for high feed rates with optimal cutting precision
- ➤ High speed processor and 600 block look ahead for fast contour milling
- ▶ 1 Gigabyte data server with high speed ethernet connection
- **>** Programmable mirror image
- > Rigid Tapping (M29)
- **)** 2 year machine parts warranty
- > 2 year control parts and labor warranty
- ▶ Factory trained local service and 24/7 tech support

pecifications

	H10
Travel	
X-Axis	40.16 in / 1,020 mm
Y-Axis	27.56 in /700 mm
Z-Axis	19.69 in / 500 mm
Distance from Spindle Nose to Table	7.09 ~ 26.77 in / 180 ~ 680 mm
Distance between Columns	42.5 in / 1,080 mm
Table	
Dimensions	41.3 x 27.6 in / 1,050 x 700 mm
Max. Load	1,760 lbs / 800 kg
T-slot (number x width x pitch)	6 x .71" on 4.92" Centers/ 6 x 18mm on 125mm Centers
Spindle	
Туре	Direct Drive
Spindle Speed	15,000 rpm
Spindle Torque Peak	105.5 ft/lb / 143.04 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	Big Plus <sup>®</sup> CAT 40
Feed Rate	
Rapid Traverse (X/Y/Z)	1,259 x 1,259 x 1,259 ipm / 32 x 32 x 32 m/min
Cutting Feed Rate	0.04 ~ 787 ipm / 1~ 20,000 mm/min
Power (X/Y/Z)	4.5kw/4.5kw/4.5kW
ATC & Magazine	
АТС Туре	Swing-Arm
Magazine Capacity	30 tools
Maximum Tool Diameter (next pocket empty)	2.95/5.85 in / 74.9/148 mm
Maximum Tool Length	11.8 in / 300 mm
Maximum Tool Weight	15.4 lbs / 7 kg
Tool Shank	CAT 40 (BT 40 optional)
Space & System Requirements	
Pneumatic Pressure	5 CFM @ 85-115 psi / 0.14m3 /min. @ 6-8 bar
Electrical Power Consumption	50 KVA
Machine Net Weight	20,020 lbs / 9,100 kg
Operating Dimensions (W x L x H)	177.95 x 168.74 x 120.01 in / 4,520 x 4,286 x 3,050 mm

## **Accessories**

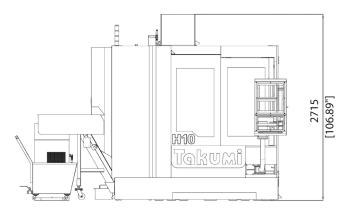
#### Standard:

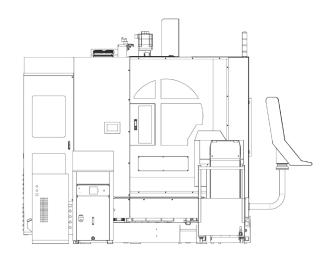
- > Linear Scales
- ▶ 15,000 RPM, Big Plus® CAT 40, inline spindle
- **>** 435 PSI coolant thru the spindle
- **>** Operator safety door switches
- > Spindle chiller
- **>** Programmable cutting airblow
- ▶ 110 gallon coolant tank
- > Programmable coolant washdown
- **>** Centralized automatic lubrication system
- **>** Oil Skimmer
- > Wash-down gun and air gun
- ▶ 1GB Dataserver
- **>** Manual pulse generator (MPG)
- > Ethernet & RS-232C interface
- **>** Electrical cabinet air conditioner
- **>** Toolbox, leveling bolts and pads
- **>** Operator manuals
- > Full enclosure
- > Work-light
- > 3-light indicator lamp

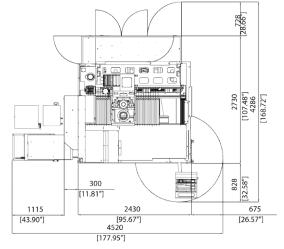
### **Optional:**

- **▶** 20000 rpm HSK A63 integral spindle
- **▶** 24000 rpm HSK A63 IBAG integral spindle
- **>** Oil mist device
- ➤ Oil mist collector
- > Coolant filtration
- **>** Part probe measurement system
- ➤ Tool probe measurement system
- > 4th axis preparation kit
- ▶ 4th axis rotary table
- **>** Lift up chip conveyor with cart
- ▶ 1000 psi coolant thru spindle
- > Cutting air thru spindle
- **▶** 48 additional work offsets
- **>** BBT 40 tool holder conversion

# Layout











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