

Takumi

The Industry Standard

H16

Double-Column Machining Centers



Exceptional Accuracy + Outstanding Surface Finishes

- World-class performance for die/mold, aerospace, and other high speed applications
- Extremely rigid and thermally stable double-column design
- Designed for parts that require outstanding speed and accuracy, and unparalleled surface finish
- Close proximity of spindle to bridge casting reduces overhang
- Ladder design of bridge provides greater support for the head casting
- Swiveling control panel for optimal floor space utilization
- Extra-wide door openings, for easier loading and unloading
- Large windows, for optimal visibility
- Robust, precision machined castings
- Hand-scraped contact areas
- Roller-type rails on all axes for added rigidity
- Integrated washdown and chip management system
- Direct-coupled ballscrews, for increased accuracy
- Absolute encoders for fast start-up
- Inline high-speed spindles
- FANUC® 31i-MB Series Control
- Responsive, trained, factory service and support
- 62.99 (X-Axis) x 51.18 (Y-Axis) x 27.56 (Z-Axis) in (1,600 x 1,300 x 700 mm) travels
- 1,181 inches per minute (30 m/minute) X, Y, and Z rapids
- 787 inches per minute (20 m/minute) X, Y, and Z feed rates
- 30-station swing-arm ATC
- 15,000 RPM inline direct-drive spindle
- 24.8 hp (18.5 kW) spindle
- 40 taper
- Chain-type conveyor standard
- 74.8 x 51.18 in (1,900 x 1,300 mm) table, 13,200 lbs (6,000 kg) capacity
- 52.0 in (1,320 mm) door opening
- Linear scales for repeatability and accuracy
- Weighs a colossal 48,400 lbs (22,000 kg)

Specifications

	H16
Travel	
X-Axis	62.99 in / 1,600 mm
Y-Axis	51.18 in / 1,300 mm
Z-Axis	27.56 in / 700 mm
Distance from Spindle Nose to Table	7.87" – 35.4 in / 199.898~ 899.16 mm
Distance between Columns	59.0 in / 1,500 mm
Table	
Dimensions	74.8 x 51.18 in / 1,900 x 1,300 mm
Max. Load	13,200 lbs / 6,000 kg
T-slot (width x pitch x number)	22 x 160 x 8
Spindle	
Type	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/BBT 40
Feed Rate	
Rapid Traverse (X/Y/Z)	1,181 x 1,181 x 1,181 ipm / 30 x 30 x 30 m/min
Cutting Feed Rate	0.04~787 ipm / 1 ~ 20,000 mm/min
Power (X/Y/Z)	14.0kw/5.5kw/5.5kW
ATC & Magazine	
ATC Type	Swing-Arm
Magazine Capacity	30 tools
Maximum Tool Diameter /next pocket empty	2.95" / 5.9" // 75m/150mm
Maximum Tool Length	11.8 in / 300 mm
Maximum Tool Weight	15.4 lbs / 7 kg
Tool Shank	CAT/BT 40
Space & System Requirements	
Pneumatic Pressure	5 CFM @ 85-115 psi / 0.14m3 /min. @ 6-8 bar
Electrical Power Consumption	75 KVA
Machine Net Weight	48,400 lbs / 22,000 kg
Operating Dimensions	191.45 x 204.92 x 156.69 in / 4,863 x 5,205 x 3,980 mm

Accessories

Standard:

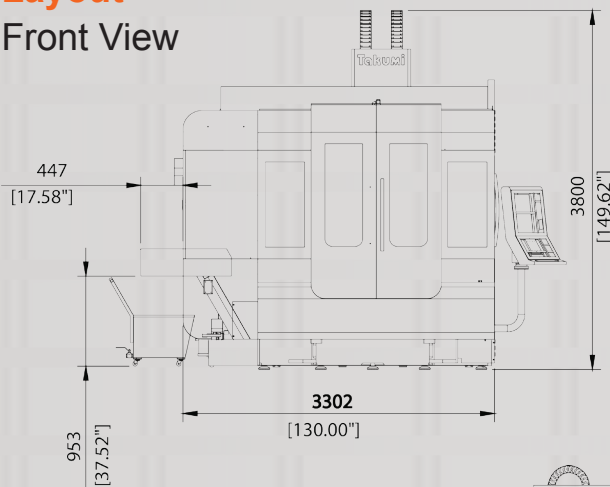
- FANUC® 31i-MB Series Control
- Linear Scales
- 15,000 RPM, CAT/BT40, inline spindle
- Coolant washdown system
- Programmable airflow machining
- Spindle chiller
- Full enclosure
- Coolant through Spindle (CTS) 435.11psi
- Oil Skimmer
- Work-light
- 3-light indicator lamp
- Wash-down gun and air gun
- Chip auger
- Manual pulse generator (MPG)
- 1 GB Dataserver
- Air conditioner
- Toolbox
- Leveling bolts and pads
- Operator manuals

Optional:

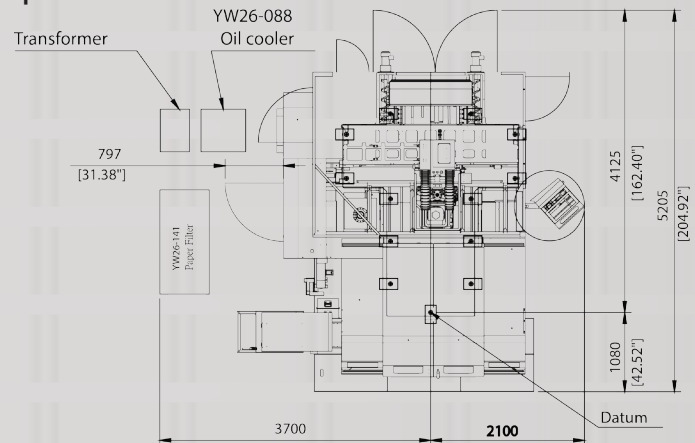
- Oil mist device
- Oil mist collector
- Part probe measurement system
- Tool probe measurement system
- Chip conveyor and cart
- CAT3 compliance package

Layout

Front View



Top View



Side View

