



SKU : 181444

The X.mill T series is the newest generation of our vertical machining centers, with modern high-performance compact CNC controls. Whether equipped with Siemens or Fanuc controls, this series offers an excellent price-performance ratio. Wide range of accessories for easy adaptation to meet your specific requirements. Using state-of-the-art FEM Analysis Software, we were able to achieve the highest machine frame rigidity in this machine class

- Optimized frame design using FEM analysis
- Extra wide Y-shaped column for increased rigidity
- Ø32 mm C3 preloaded ball screws for high accuracy
- Available with Siemens or Fanuc control
- High customization and automation possibilities

TECHNICAL SPECS

WORKING AREA

| | |
|--|-------------------|
| Table dimensions | 35 in x 22 in |
| Table load capacity | 1760 lbs |
| Spindle nose-to-table surface distance | 4 in - 26 in |
| Spindle center-to-stand distance | 20 in |
| Number of T-slots | 5 positions |
| T-slot (width x spacing) | 0.71 in x 3.15 in |

TRAVELS

| | |
|---------------|---------|
| Travel X-axis | 31.5 in |
| Travel Y-axis | 20 in |
| Travel Z-axis | 22 in |

HEADSTOCK

| | |
|-----------------------|------------------------------|
| Spindle speed | 10000 rpm |
| Spindle mount | SK 40 ISO 7388-1 (DIN 69871) |
| Spindle torque (max.) | 39 ft.lb. |

RAPID FEED

| | |
|----------------------------|-------------|
| Rapid feed X-, Y-, Z- axis | 1417 in/min |
|----------------------------|-------------|

FEED

| | |
|--------------------------|-----------------|
| Work feed X / Y / Z axis | 33 fpm x 33 fpm |
|--------------------------|-----------------|

TOOL HEAD

| | |
|----------------------------|--------------|
| Number of tool stations | 20 positions |
| Tool Ø | 100 (130) in |
| Tool weight max. | 18 lbs |
| Tool-change time tool/tool | 10 sec |

ACCURACIES

| | |
|------------------------|---------------|
| Positioning accuracies | ± 0,0002" in |
| Repeatabilities | ± 0,00012" in |

DRIVE CAPACITY

| | |
|-------------------------|-----------------|
| Motor rating main drive | 14.8 Hp |
| Motor rating X-axis | 2.4 Hp |
| Motor rating Y-axis | 2.4 Hp |
| Motor rating Z-axis | 4.02 Hp |
| Total power consumption | 15 kVA - 20 kVA |

CONTROL

| | |
|---------|-------|
| Control | Fanuc |
|---------|-------|

MEASURES AND WEIGHTS

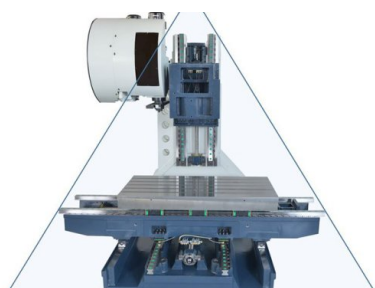
| | |
|--|------------------------|
| Overall dimensions (length x width x height) | 98 in x 87 in x 100 in |
| Weight | 9680 lbs |



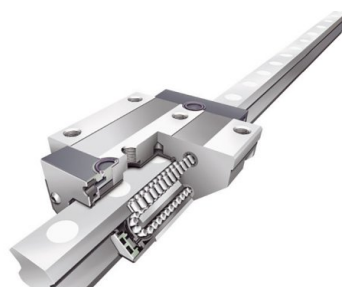
Solid machine table with 5 slots



Cast iron body with large span



Delta column design for excellent cutting stability



High quality roller guides



PRODUCT DETAILS

- The new X.mill series is ideally suited for streamlined and cost effective series production
- The entire series is optionally available with modern compact CNC controls from Siemens or Fanuc and thus offers the right control solution for many companies.

Machine Design

- The X.mill series machine frame was developed using the most advanced FEM analysis software on the market
- The thorough analysis of the entire machine bed construction and wide column base resulted in a design that is optimized for all load conditions
- All axes move on premium, fully enclosed linear guideways and precision ball screws and are driven by dynamic servo-motors

Spindle

- The main spindle is supported by multiple bearings to ensure excellent absorption and dissipation of forces during machining
- The advanced design of our spindles ensure low heat accumulation under load
- Large preloaded bearings ensure radial stability during heavy-duty machining operations
- High-temperature lubricants ensure optimum lubrication at any operating temperature and a long tool life

Tool Changer

- The robust armless 20-station tool changer brings flexibility to everyday production operations
- An optional 30-station tool changer with dual-arm gripper is also available

Handling

- The totally enclosed workspace features a large door and side doors for easy access, safety and cleanliness
- An electronic hand-wheel simplifies machine set-up
- Electrical equipment is divided into separate control cabinets for high and low voltage systems, which results in a significant reduction of heat accumulation and noise
- The automatic central lubrication system ensures proper lubrication of all lube points

CONTROLS & SOFTWARE

Fanuc Oi-MF control

Fanuc Oi MF control

- Easy programming and operation, short learning curve
- User-friendly graphics display for visual verification of parts programs
- Use of existing programs without reprogramming requirements
- High-speed machining and standard nano-interpolation
- Fixed cycles and custom macro B for simplified parts programming
- State-of-the-Art functionality, like jerk limitation, nano smoothing, and AI Contour Control II - compatible with previous version series O and series Oi models A, B, C and D
- Series Oi Model F are the successor models of the Series O and Series Oi, which are the most popular CNC controls worldwide with over 700,000 installations.
- With up to 4 simultaneously controlled axes, the CNC Series Oi provides the best controls for highly demanding machine tools.

STANDARD EQUIPMENT

Fanuc Oi-MF control
Shield-type 20-station tool changer
Screw-type chip conveyor with bucket
Rigid tapping
Autom. Power-Off
Manual coolant spray gun
Coolant system
Spindle air system
Heat exchanger for electric control cabinet
Fully enclosed work space (without top cover)
Electronic hand-wheel
USB port
Automatic central lubrication
Work lamp
3-color signal lamp
Operating tools
Alignment bolts and alignment plates
Prepared for Renishaw TS 27

OPTIONAL EQUIPMENT

- Top cover for X.Mill/Vector 650-1000, SKU : 252819
- Renishaw OMP 40 workpiece measuring, SKU : 252820
- Upgrade Fanuc Oi-MF (package 5 to package 1), SKU : 252888
- Manual guide Oi, SKU : 252889
- Connection for 4th axis (wiring only and axis chart), SKU : 253019
- Coolant flow through spindle, 30 bar, with filter system, SKU : 253369
- Oil skimmer, SKU : 253383
- Chip flush-out system, SKU : 253384
- Renishaw TS27R tool measuring system, SKU : 253386
- Dual-arm gripper with 24 tool stations, BT40, SKU : 253436
- Spindle oil cooler, SKU : 253440
- Renishaw OTS wireless tool setter (OTS), SKU : 253598
- Spindle speed upgrade 10,000 to 12,000 rpm (belt type), SKU : 253609
- Spindle speed upgrade to 12,000 rpm direct drive without CTS, SKU : 253610
- Upgrade ATC from 24 to 30 tools (BT40) for X.Mill T, SKU : 253611
- Upgrade: from worm-gear chip conveyor to chain-drive chip conveyor, SKU : 253612
- Prepared for Renishaw OMP40, SKU : 253613
- Manual tailstock ST-125T for rotary table, SKU : 253617
- Manual tailstock ST-170T for rotary table, SKU : 253618
- Manual tailstock ST-255T for rotary table, SKU : 253620
- Manual chuck, 5", for rotary table, SKU : 253621
- Manual chuck, 6", for rotary table, SKU : 253622
- Manual chuck, 9", for rotary table, SKU : 253624
- Preparation for CTS Setup, SKU : 253626
- Coolant flow through spindle, 290 psi, with filter system, SKU : 253627
- Manual guide i (requires Fanuc Package 1), SKU : 253631
- 4.92" diam. 4th axis (4th axis, servo motor, driver, air brakes)(Fa), SKU : 253639
- 6.69" diam. 4th axis (4th axis, servo motor, driver, air brakes)(Fa), SKU : 253640
- 8.27" diam. 4th axis (4th axis, servo motor, driver, air brakes)(Fa), SKU : 253641

- 9.84" diam. 4th axis (4th axis, servo motor, driver, air brakes)(Fa), SKU : 253642
- Renishaw OMP 60 workpiece measuring system (BT40), SKU : 253681
- Air through spindle for Vector, SKU : 253782
- Spindle upgrade from ST40 to BBT40 for X.Mill/Vector 650-1000, SKU : 253951