

# Vertical Machining Centers X.mill T 700 FA



# **TECHNICAL SPECS**

## WORKING AREA

Table dimensions	900 mm x 450 mm
Table load capacity	600 kg
Spindle nose-to-table surface distance	110 mm - 660 mm
Spindle center-to-stand distance	520 mm
Number of T-slots	5 positions
T-slot (width x spacing)	18 mm x 80 mm

# TRAVELS

Travel X-axis	700 mm
Travel Y-axis	450 mm
Travel Z-axis	550 mm

# HEADSTOCK

Spindle speed	10000 1/min
Spindle mount	SK 40 ISO 7388-1 (DIN 69871)
Spindle torque (max.)	52.5 Nm

## **RAPID FEED**

Rapid feed X-, Y-, Z	- axis	36000 mm/min

#### FEED

Work feed X / Y / Z axis	10 m/min x 10 m/min
Work recurry 172 axis	

# TOOLING

Number of tool stations	20 positions
Tool Ø	100 (130) mm
Tool weight max.	8 kg
Tool-change time tool/tool	10 sec

## ACCURACIES

Positioning accuracies	± 0,005 mm
Repeatabilities	± 0,003 mm

# **DRIVE CAPACITY**

Motor rating main drive	11 kW
Motor rating X-axis	1.8 kW
Motor rating Y-axis	1.8 kW
Motor rating Z-axis	3 kW
Total power consumption	15 kVA - 20 kVA

# CONTROL

Control

# **MEASURES AND WEIGHTS**

Overall dimensions (length x width x height)	2.47 m x 2.2 m x 2.52 m
Weight	4200 kg

Fanuc

# SKU:181441



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 pre-loaded 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 (5) 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 •
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- Fixed cycles and custom macro B for simplified parts programming
- State-of-the-Art functionality, like jerk limitation, nano smoothing, and Al Contour Control ll - compatibile with previous version series 0 and series 0i 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 0i provides the best controls for highly demanding machine tools.

# **STANDARD EQUIPMENT**

Fanuc Oi-MF (5) control Shield-type 20-station tool changer Screw-type chip conveyor with bucket Ridgid 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 Leveling bolts and blocks Preparation for Renishaw TS 27 R