



# Vertical Machining Centers X.mill 600



## SKU : 181450

The X.mill series is the latest generation of our vertical machining centres with modern, powerful CNC control from Siemens. Vertical machining centres such as this series offer outstanding value for money. A wide range of accessories allows you to adapt them to your specific requirements.

- Fast tool change with double-arm gripper
- Siemens 828 control system
- High-quality components and complete equipment
- Designed for multi-shift operation

## TECHNICAL SPECS

### WORKING AREA

Table dimensions	800 mm x 500 mm
Table load capacity	400 kg
Spindle nose-to-table surface distance	120 mm - 620 mm
Spindle center - column	573 mm
Number of T-slots	5 positions
T-slot (width x spacing)	18 mm x 90 mm

### TRAVELS

Travel X-axis	600 mm
Travel Y-axis	500 mm
Travel Z-axis	500 mm

### HEADSTOCK

Spindle speed	10000 1/min
Spindle mount	SK40

### RAPID FEED

Rapid feed X / Y axis	36000 mm/min
Rapid feed Z-axis	24000 mm/min

### FEED

Feed speed X / Y / Z axis (max.)	12000 mm/min
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### TOOLING

Number of tool stations	24 positions
Tool size Ø x L (max.)	75 mm x 150 mm

### ACCURACIES

Positioning accuracy X- / Y-axis	± 0,004 mm
Repeatability X- / Y-axis	± 0,002 mm

### DRIVE CAPACITY

Main drive, continuous load	7.5 kW
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### MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	3 m x 2.25 m x 2.45 m
Weight	4000 kg



## PRODUCT DETAILS

### Design and Construction

- The X-mill has been designed from the ground up to ensure reliable performance in a production environment and consistent results in day-to-day operation
- All axes move on high-quality, fully enclosed linear guides and precision ball screws, ensuring high accuracy and low static friction
- The worktable offers great flexibility for workpieces of various sizes. Travel ranges from 600 mm to 1100 mm are possible along the X-axis
- The workspace is clearly laid out, and access to controls has been optimised to keep set-up and configuration times as short as possible in day-to-day production
- The entire design is engineered to be low-maintenance and easy to service, even under heavy, continuous use ("Daily Worker")

### Main spindle and drives

- The multi-bearing spindle ensures effective absorption and dissipation of the forces generated during machining
- The high-quality, belt-driven spindle unit enables a wide speed range of up to 10,000 rpm
- The SK 40 spindle mount is characterised by its stability and wide range of tools

### Automatic Tool Changer

- The 24-position tool changer increases productivity, flexibility and safety during machining
- Thanks to the vertical design with double-arm gripper, each tool change can be carried out quickly and the discarded tools are stored in a space-saving manner
- The heavy-duty design ensures robustness and allows for high tool weights

### Equipment

- The electronic handwheel makes it easier for the operator to set up the machine
- The electronics are optimally protected in the closed control cabinet, and a powerful heat exchanger takes care of temperature management
- The workspace is completely enclosed and can easily be equipped with an extraction system
- Hand spray guns for coolant and compressed air are available for cleaning workpieces and the work area
- The automatic central lubrication system reliably supplies all lubrication points and facilitates machine maintenance

### Controller

The Siemens 828D control system with Siemens drives is the top specialist for demanding milling operations

## STANDARD EQUIPMENT

Siemens 828D control  
24-fach Werkzeugwechsler mit Doppelarmgreifer  
Kettenspäneförderer mit Spänebehälter  
Geschlossener Arbeitsraum (ohne top cover)  
Automatische Zentralschmierung  
Coolant System  
Manual coolant spray gun  
Air gun  
Heat exchanger for electric control cabinet

Electronic hand-wheel  
Arbeitsleuchte  
3-color signal lamp  
Bedienwerkzeug  
Operating manual

## OPTIONAL EQUIPMENT

- Spindle oil cooler, SKU : 254265
- Siemens Function: Shopmill, SKU : 254269
- Renishaw OMP40-2T Workpiece Scanning Probe, SKU : 253288
- Renishaw OTS Toolsetter, SKU : 254285
- Renishaw SET OMP40-2T measuring probe +OTS Toolsetter (SK 40), SKU : 254026



## KNUTH on YouTube Information to the point

On our YouTube channel you can find videos for nearly all machines from our program. We show the machines from current deliveries and you get an impression of the handling, the processing quality and the machining performance.

**Are you interested in a machine for which you cannot find a current video?  
Please feel free to contact us!**