



- Available with Siemens, Fanuc, or Heidenhain control
- Main motor rating up to 11 kW (Fanuc)
- Rotary swivel table with 200 mm table diameter
- BT 40 Spindle with up to 10.000 rpm



- The new X.mill series with rotary swivel table is the perfect tool for streamlined and cost-effective multi-axis machining
- A 4th and 5th machining axis brings additional competitive advantages due to shorter cycle times, better surface grades and dimensional stability
- The entire series is available with either a Siemens, Fanuc or Heidenhain control, so users can select the optimum control for their needs.

Machine Design

- The X.mill series machine frame was developed using the most advanced FEM analysis software on the market.
- All axes move on premium linear guideways and precision ball screws with rigid covers to protect them from chips and coolant splashes

Rotary Swivel Table

- A 4th and 5th machining axis complete the assembled rotary swivel table that features 200 mm diameter and a large swivel range
- The expansion by one rotary and swivel axis saves the operator steps and opens new possibilities for the cost-effective production of complex parts
- 3+2 axis milling brings the advantage that the application of CAM software and the possible cutting strategies conform to those of 3-axis programming, resulting in simplified programming and significantly reduced training requirements
- The compact design and high rigidity of the moving axes ensure long tool life and excellent surface quality

Spindle

- The advanced design of our spindles ensure low heat accumulation under load
- Large pre-loaded bearings ensure radial stability during heavy-duty machining operations

Tool changer

- The quick tool changer with dual-arm gripper and 24 stations provides plenty of capacity for every-day production operations

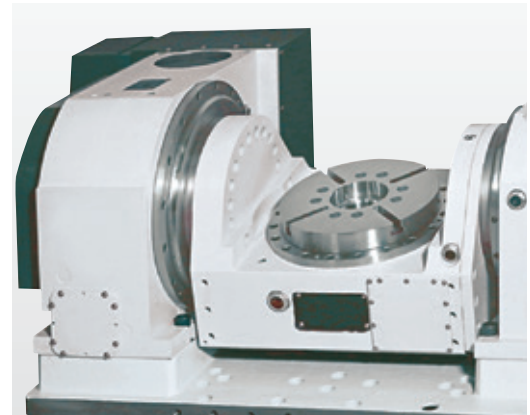
Specifications

X.mill 5X 1000 SI

Working area		
Table dimensions	mm	1.100x550
Table load capacity	kg	800
Center height, vertical	mm	245
Spindle axis-to-table surface distance	mm	150 - 700
Spindle axis-to-table surface distance with rotating swivel table	mm	40 - 640
Spindle center-to-stand distance	mm	520
Number of T-slots	Pieces	5
T-slot (width x spacing)	mm	18x100
Travels		
Travel X-axis	mm	1.000
Travel X-axis with rotating swivel table	mm	210
Travel Y-axis	mm	550
Travel Y-axis with rotating swivel table	mm	550
Travel Z-axis	mm	800
Travel Z-axis with rotating swivel table	mm	600
Headstock		
Spindle speed	1/min	10.000
Spindle mount		BT 40
Torque, constant	Nm	45
Rapid feed		
Rapid feed X-, Y-, Z- axis	mm/min	36.000
Feed		
Work feed X / Y / Z axis	m/min	10x10x10
Tooling		
Number of tool stations	Pieces	24
Tool Ø	mm	100 (130)
Tool weight max.	kg	8
Tool-changing time chip/chip	sec	3,9
Tool-change time tool/tool	sec	1,8
Rotary Swivel Table		
Table diameter	mm	200
Height of stop rod	mm	375
Bore	mm	35
Increment min.	deg	0,001
Swivel range	deg	-15 - 115
Workpiece weight -15 to 30 degrees	kg	100
Workpiece weight 31 to 115 degrees	kg	50
Drive capacity		
Motor rating main drive	kW	9
Motor rating X-axis	kW	2,3
Motor rating for Y-axis drive	kW	2,3
Motor rating Z-axis	kW	2,3
Measures and weights		
Overall dimensions (length x width x height)	m	2,62x2,2x2,7
Weight	kg	4.600
Part No.		181405

Equipment

- The totally enclosed workspace features a large door and side doors for easy access, safety and cleanliness
- 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
- An electronic hand-wheel simplifies machine set-up
- The automatic central lubrication system ensures proper lubrication of all lube points



Rotary swivel table with a table diameter of 200 mm

Standard Equipment

Siemens 828D control, BT40 24-station tool changer with dual-arm gripper, screw-type chip conveyor with bucket, rigid tapping, remote service for Siemens, 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, RS232 and RJ45 card interface, USB port, automatic central lubrication, work lamp, 3-color signal lamp, toolbox with tools, leveling bolts and blocks, 4th and 5th Axis Ø200 mm Rotary Table

Options	Part No.
• Upgrade Spindle Taper from BT40 to SK40	257404
• Upgrade Spindle Taper from BT40 to HSK63	253372
• Spindle speed upgrade 10.000 to 12.000 rpm (belt type)	253609

For additional options for this machine, visit our website.

For complete information on the X.mill 5X 1000 with FANUC Oi MF (5) and Heidenhain TNC 620 controls, please visit:
www.knuth-machinetools.com