

Vertical Machining Centers

X.mill 400 (BT40)



SKU : 181359

This model is very popular with customers who are looking for a quick, inexpensive solution for smaller workshops or who want to convert from conventional to CNC machining.

- Compact design with small footprint
- Built to last robust machine body
- Oil cooled powerful main spindle
- Air-conditioned electrical cabinet

TECHNICAL SPECS

WORKING AREA

| | |
|--|-----------------|
| Table dimensions | 600 mm x 300 mm |
| Table load capacity | 150 kg |
| Number of T-slots | 3 positions |
| T-slots, width | 14 mm |
| T-slots, spacing | 100 mm |
| Spindle nose-to-table surface distance | 100 mm - 580 mm |

TRAVELS

| | |
|---------------|--------|
| Travel X-axis | 400 mm |
| Travel Y-axis | 230 mm |
| Travel Z-axis | 450 mm |

HEADSTOCK

| | |
|---------------|---------------------|
| Spindle speed | 8000 1/min |
| Spindle mount | BT 40 JIS (MAS 403) |

FEED

| | |
|-------------------|-------------------------|
| Rapid feed X-axis | 12000 mm/min |
| Rapid feed Y-axis | 12000 mm/min |
| Rapid feed Z-axis | 10000 mm/min |
| Work feed X-axis | 1 mm/min - 10000 mm/min |
| Work feed Y-axis | 1 mm/min - 10000 mm/min |
| Work feed Z-axis | 1 mm/min - 10000 mm/min |

TOOLING

| | |
|----------------------------|--------------|
| Number of tool stations | 12 positions |
| Tool Ø | 100 (130) mm |
| Tool length (max.) | 300 mm |
| Tool weight max. | 8 kg |
| Tool-change time tool/tool | 7 sec |

ACCURACIES

| | |
|------------------------|---------|
| Positioning accuracies | 0.02 mm |
| Repeatability | 0.01 mm |

DRIVE CAPACITY

| | |
|-------------------------|---------|
| Motor rating main drive | 3.7 kW |
| Motor rating X-axis | 0.75 kW |
| Motor rating Y-axis | 0.75 kW |
| Motor rating Z-axis | 1 kW |
| Total power consumption | 10 kVA |

MEASURES AND WEIGHTS

| | |
|--|------------------------|
| Overall dimensions (length x width x height) | 2.1 m x 1.9 m x 2.45 m |
| Weight | 2200 kg |



12-position tool changer



Siemens Sinumerik 808D control



Introduction to CNC milling for series production and training



Large access doors on the side



PRODUCT DETAILS

Highlights

- Powerful BT 40 spindle with speeds up to 8.000 rpm
- Solid cast-iron machine frame with extra low center of gravity and small footprint
- Siemens 808D control and Siemens drives ensure maximum process reliability and efficient programming

Machine Design

- Solid Y-shaped cast-iron machine body integrates many years of experience and state-of-the-art technology
- All axes move on premium, fully enclosed linear guideways and precision ball screws for high accuracy and low friction
- Solid machine table features 3 slots and a load capacity of 150 kg
- The Z axis drive is supported by a counter-weight with guide rollers
- Electronic hand-wheel simplifies machine set-up
- The automatic central lubrication system ensures proper lubrication of all lube points

Spindle

- Spindle runs on multiple bearings to ensure excellent absorption and dissipation of forces during machining
- The premium spindle unit features a large tool mount and includes a spindle oil cooler - a great advantage in continuous operations

Tool Changer

- Robust 12-station tool changer with tool changing time of 7 seconds
- For a max. workpiece weight of 3 kg

CONTROLS & SOFTWARE

Siemens 808D Advance control

- SINUMERIK 808D ADVANCE -- the perfect solution for modern standard machines
- CNC and drive communicate via a high-speed bus to ensure efficient positioning control plus high precision and optimum cutting performance
- This is topped by a guaranteed superior price/performance ratio
- In combination with a new generation of spindle and axis drives, the SINUMERIK 808D ADVANCE with 8.4" LCD provides an innovative ready-to-use digital CNC solution for modern standard machines

Advantages - Digital solution provides higher precision:

- Increased overload capacity supports a faster acceleration and deceleration of machine tools
- Constant cutting speeds result in an increased surface quality of the workpiece

Increased ruggedness:

- During heavy machining operations, an automatic spindle torque adjustment will help protect machining tools and spindle systems.
- The SINAMICS features a wide voltage range to prevent machine shut-downs during poor voltage supply conditions. This will significantly reduce machine down-times.

Increased operator comfort:

- A fast Ethernet connection facilitates easy start-up and diagnostics of machine tools and simplifies NC program use

STANDARD EQUIPMENT

Work lamp
 Automatic central lubrication
 Operating tools
 Operator instructions
 Electronic hand-wheel
 Enclosure
 Coolant system
 Air gun
 levelling pads and bolts
 Siemens 808D Advance control
 Operational health status indicator
 12-station automatic tool changer