

# Vertical Machining Centers X.mill T 800 Si CNC



## SKU: 423501 CUSTOM MODEL

Compact all-in-one solution for complex solutions and powerful 4-axis machining

- Optimized frame design using FEM analysis
- Extra wide Y-shaped column for increased rigidity
- Ø32 mm C3 preloaded ball screws for high accuracy
- BT-40 main spindle mounts

# **TECHNICAL SPECS**

#### WORKING AREA

Table dimensions	900 mm x 550 mm
Table load capacity	800 kg
Spindle axis-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	800 mm
Travel Y-axis	520 mm
Travel Z-axis	550 mm

#### HEADSTOCK

Spindle speed	10000 1/min
Spindle mount	BT 40
Torque, constant	45 Nm

#### **RAPID FEED**

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

Work feed X / Y / Z	axis 10	) m/min x 10	m/min

#### TOOLING

Number of tool stations	24 positions
Tool Ø	100 (130) mm
Tool weight max.	8 kg
Tool-change time tool/too	l 8 sec

#### ACCURACIES

Positioning accuracies	0.005 mm
Repeatability	0.003 mm

#### **DRIVE CAPACITY**

Motor rating main drive	9 kW
Motor rating X-axis	2.3 kW
Motor rating Y-axis	2.3 kW
Motor rating Z-axis	3.3 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	4400 kg

Siemens







*The Siemens 828 D features state-of-theart operating technology and functionality for maximum efficiency* 



*Quick-action tool changer with dual-arm gripper and 24 tool stations* 

## **PRODUCT DETAILS**

# Includes an extensive optional equipment package for the production of complex workpieces

• Control upgrade to Siemens 828D with PPU 280 and Siemens Shopmill, plus additional software functions, like residual material detection, simultaneous recording, 3D simulation and measuring cycles

#### This machine is also preconfigured with the following options:

• BT 40 tool mount, oil cooler for main spindle, coolant flow through main spindle with filter system, oil skimmer and enclosure with closed top, flush-out system and link conveyor for chip removal, tool changer with dual-arm gripper and 24 tools, Preparation (wire harness) for 4th and 5th axis

#### **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

#### 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

# STANDARD EQUIPMENT

Shopmill Softwareoption für Sinumerik 828D Spindle oil cooler Coolant through spindle 30 bar with double filter Oil skimmer Chip wash system BT40 24-station tool changer with dual-arm gripper Chip conveyor chain type Siemens 828 D control USB port **Ridgid tapping** Heat Exchanger for electric control cabinet Work lamp Automatic lubrication system Coolant system Manual coolant spray gun Autom. power off Electronic hand-wheel Spindle air system Fully enclosed work space (without top cover) 3-color signal lamp Toolbox with tools Leveling bolts and blocks