

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 mount

TECHNICAL SPECS

WORKING AREA

Table dimensions	35 in x 22 in
Table load capacity	1760 lbs
Spindle axis-to-table surface distance	4.33 in - 25.98 in
Spindle center-to-stand distance	20 in
Number of T-slots	5 positions
T-slot (width x spacing)	0.71 in x 3.15 in

TRAVELS

Travel X-axis	31.5 in
Travel Y-axis	20 in
Travel Z-axis	22 in

HEADSTOCK

Spindle speed	10000 rpm
Spindle mount	BT 40
Torque, constant	33 ft.lb.

RAPID FEED

Work feed X / Y / Z axis

Rapid feed X-, Y-, Z- axis	1417 in/min
FEED	

33 fpm x 33 fpm

TOOL HEAD

Number of tool stations	24 positions
Tool Ø	100 (130) in
Tool weight max.	18 lbs
Tool-change time tool/tool	8 sec

ACCURACIES

Positioning accuracies	0.0002 in
Repeatability	0.00012 in

DRIVE CAPACITY

Motor rating main drive 12.1 Hp	
Motor rating X-axis 3.1 Hp	
Motor rating Y-axis 3.1 Hp	
Motor rating Z-axis 4.43 Hp	
Total power consumption 15 kVA - 20 kVA	

CONTROL

Control	Siemens	

MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	98 in x 87 in x 100 in
Weight	9680 lbs







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 preloaded 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 Software option for Sinumerik 828D

Spindle oil cooler

Coolant flow through spindle, 30 bar with double filter

Oil skimmer

Chip flushing system

BT40 24-station tool changer with dual-arm gripper

Chain-type chip conveyor

Siemens 828 D control

USB port

Rigid 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

Tool box including tools

Alignment bolts and alignment plates