KNUTH MACHINE TOOLS

CNC Slant Bed Lathes

Roturn 400 M (Si 828D)



SKU: 422336 CUSTOM MODEL

This ROTURN M Series machine has all the features of a classic compact CNC production lathe. Modern, rigid inclined-bed design with linear guides on all axes, powered collet chuck and hydraulically moved tailstock quill. Including C-axis, 12-station tool turret, and driven tools for axial and radial drilling and milling A link conveyor for chip removal and a highly efficient coolant system complete the equipment package. The Siemens 828 D Basic control meets all requirements for advanced control technology.

- Powerful main spindle motor
- High-resolution C-axis
- 12-station tool turret with driven tools
- Chip conveyor included
- Siemens 828 control

TECHNICAL SPECS

WORKING AREA

Workpiece length (max.)	340 mm
Center height	200 mm
Turning diameter over bed	400 mm
Turning diameter over support	250 mm
Machining length (max.)	330 mm

TRAVELS

Travel X-axis	150 mm
Travel Z-axis	350 mm

HEADSTOCK

Lathe chuck diameter	200 mm
Speed range	50 1/min - 3000 1/min
Spindle mount	A2-6
Spindle bore	62 mm
Spindle bore with draw tube	47 mm

RAPID FEED

Rapid feed X-axis	20000 mm/min
Rapid feed Z-axis	25000 mm/min

TOOLING

Number of tool stations	12 positions
Tool shank dimensions	20 mm x 20 mm
Boring bar mount Ø	32 mm
Speed, driven tools	3000 1/min

TAILSTOCK

Tailstock taper	5 MT
Tailstock quill diameter	88 mm
Tailstock quill stroke	85 mm

DRIVE CAPACITY

Main motor rating	15 / 11 kW
Motor rating coolant pump	0.18 kW
Motor rating, driven tools	2.3 kW
Driven tools, continuous load	2.3 kW

MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	3.75 m x 1.9 m x 1.92 m
Weight	3740 kg



HPRA Tool Setter by Renishaw



Quck-action clamping within the work space



HPRA with RP3 Probe



Separate stand provides secure support of the HPRA

PRODUCT DETAILS

Highlights

- Future-proof: the Siemens 828 D Basic control meets all requirements for advanced control technology
- A hydraulic 3-B chuck with passage is included in the scope of delivery as standard
- Hinged belt conveyor and high-performance coolant system included in standard equipment

Machine Design

- Heavy machine frame with inclined bed ensuring high rigidity and easy chip removal
- Precise linear guides in X and Z for high stability and accuracy even at highest loads
- The enclosed work space is easily accessible through a large sliding door
- Tailstock with hydraulically operated guill
- Automatic central lubrication system ensures reliable lubrication of guideways

Spindle

- Max. Spindle speed 3.000 1/min (Roturn 400M) or 2.000 1/min (Roturn 402M)
- Motor power 11/15 kW

Tool Changer

- The 12-station tool turret driven tools (BMT) ensures a large work area and quick and precise tool changes
- Solid structure and powerful clamping virtually eliminate vibrations resulting in longer tool life
- Powerful main drive and a wide speed range for milling, drilling and thread cutting
- High-resolution C-axis allows for precise contour cutting and precise positioning

Tool gauging

- The machine features a high-precision tool gauging arm for tool gauging and breakage monitoring
- The Renishaw HPRA system consists of a clip-on gauging arm that is used by hand within the work space and can be locked in a repeatable kinematic position
- Upon completion of the tool gauging, it quickly can be removed

STANDARD EQUIPMENT

Siemens 828 D control

Bar feeder interface Hydr. 3-jaw- lathe chuck 200 mm with borehole 12-station tool changer 1 piece driven tool holder radial 1 piece driven tool holder axial Hydr. tailstock Automatic central lubrication Chain-type chip conveyor Heat Exchanger for electric control cabinet Closed work space LED work lamp Coolant system Air gun Coolant system flush gun Tool pre setter Renishaw HPRA Operating tools Operator manual

OPTIONAL EQUIPMENT

- Preparation Barfeeder Interface, SKU: 270250
- LNS Alpha SL 65-S bar feeder (1,5 m), SKU: 253904
- LNS Sprint 545 bar feeder (3 m), SKU: 254109