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 D control

TECHNICAL SPECS

WORKING AREA

Workpiece length (max.)	13 in
Center height	8 in
Turning diameter over bed	16 in
Turning diameter over support	10 in
Machining length (max.)	13 in

TRAVELS

Travel X-axis	5.9 in
Travel Z-axis	14 in

HEADSTOCK

Lathe chuck diameter	8 in
Speed range	50 rpm - 3000 rpm
Spindle mount	A2-6
Spindle bore	2.4 in
Spindle bore with draw tube	1.9 in

RAPID FEED

Rapid feed X-axis	787.4 in/min
Rapid feed Z-axis	984.25 in/min

TOOL HEAD

Number of tool stations	12 positions
Tool shank dimensions	0.8 in x 0.8 in
Boring bar mount Ø	1.3 in
Speed, driven tools	3000 rpm

TAILSTOCK

Tailstock taper	5 MT
Tailstock quill diameter	3 in
Tailstock quill stroke	3 in

DRIVE CAPACITY

Main motor rating	15 / 11 Hp
Motor rating coolant pump	0.2 Hp
Motor rating, driven tools	3 Hp
Driven tools, continuous load	3.08 Hp

MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	148 in x 75 in x 76 in
Weight 8	8228 lbs



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 quill
- Automatic central lubrication system ensures reliable lubrication of guideways

Spindle

- Max. spindle speed 3,000 rpm (Roturn 400M) or 2,000 rpm (Roturn 402M)
- Motor rating 15 / 20 HP

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
Rod loader interface
Hydraulic 3-jaw lathe chuck, Ø 200 mm with bore
12-station tool changer with driven tools
1 Driven tool holder, radial
1 Driven tool holder, axial
Hydr. tailstock
Automatic central lubrication
Chain-type chip conveyor
Heat exchanger for electric control cabinet
Enclosed work space
LED work lamp
Coolant system
Compressed air gun
Coolant gun

Tool measuring System Renishaw HPRA Operating tools

Operator manual

OPTIONAL EQUIPMENT

Preparation for rod loader interface, SKU: 270250