

# CNC Slant Bed Lathes Roturn 400 C



# SKU: 180633

This machine of the ROTURN C series impresses with the classic virtues of a compact CNC production lathe. With its Siemens 828 D Basic control, it meets all the requirements for current control technology. The inclined bed machine with 8-station tool turret and powerful 15 kW (20 hp) main spindle motor has a hydraulic 3-jaw chuck with through-hole. The tailstock is equipped with a hydraulically operated quill and a large stroke. A flat top conveyor and a high-performance coolant system round out the standard equipment.

- Powerful main spindle motor
- 8 station tool turret
- Includes chip conveyor
- Siemens 828 D control
- Chuck with through-hole

# **TECHNICAL SPECS**

# **WORKING AREA**

Workpiece length (max.)	17 in
Center height	8 in
Turning diameter over bed	16 in
Turning diameter over support	10 in

#### **TRAVELS**

Travel X-axis	7.9 in
Travel Z-axis	18 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	1.8 in

#### **RAPID FEED**

Rapid feed X-axis	629.92 in/min
Rapid feed Z-axis	787.4 in/min

#### **TOOL HEAD**

Number of tool stations	8 positions
Tool shank dimensions	1 in x 1 in
Boring bar mount Ø	1.6 in

#### **TAILSTOCK**

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

#### **DRIVE CAPACITY**

Main motor rating	20 / 15 Hp
Motor rating coolant pump	0.2 Hp

# **MEASURES AND WEIGHTS**

Overall dimensions (length x width x height)	150 in x 74 in x 76 in
Weight	7348 lbs



Siemens Sinumerik 828 D - a compact and user-friendly solution for lathes



Pressure gauge for pressure monitoring



Central lubrication device and maintenance



45° inclined bed with linear guides



Siemens drive (here X-axis)

#### 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 with a maximum stroke of 3 in
- Automatic central lubrication system ensures reliable lubrication of guideways

#### **Spindle**

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

#### **Tool Changer**

• The 8-station tool turret ensures a large work area and quick and precise tool changes

#### **CONTROLS & SOFTWARE**

#### Siemens 828 D control

#### SINUMERIK 828 D – The workhorse in the compact class of CNCs

#### **Highlights**

- Compact, robust, maintenance-free control panel-based CNC
- Comfortable program and parameter input via QWERTY keyboard
- Maximum machining precision
- Intelligent kinematic transformations for machining of cylindrical parts, and for angled workpiece levels
- SINUMERIK MDynamics with the new Advanced Surface feature: for perfect part surfaces and shortest machining times in mold making applications
- ProgramGUIDE: fastest machining time and maximum flexibility for large series productions
- Unique spectrum of technology cycles from milling contours with residual material recognition to process measurements
- Animated Elements: unique operation and programming assistance with animated sequences
- Modern data transfer options via USB stick, CF card and network (Ethernet)

#### **CNC** hardware

- Control-panel based high-performance CNC Control
- Robust front control panel made of magnesium die-casting
- Integreated full-size QWERTY keyboard
- Maintenance-free design (no buffer battery required)

#### **CNC performance data and functions**

- Dynamic feed-forward control
- Linear, circular and helical interpolation
- · Tapping without compensating chuck, plus thread cutting
- Toggle between inch and metric units
- FRAME concept for individual coordinate transformations, rotations, scaling and mirroring
- 100 adjustable zero offsets
- Synchronous actions and quick help function output

#### **CNC** technology cycles

- Large selection of drilling cycles
- Large selection of milling cycles for standard geometry
- Large selection of position patterns for drilling and milling operations
- High-speed settings for mold making applications
- Geometry calculator for free contour input
- Machining cycle for contour pockets / contour spigots with isolated contours

# **Graphic features**

- Graphical online help system, similar to PC system
- Graphical CNC simulation with level display

#### **CNC** tool management

- Display of tool and magazine data on one screen
- Tool management with plain-text tool names
- Loading/unloading feature for easy magazine assignment
- Tool management with tool life monitoring
- 10.4" TFT color monitor

# STANDARD EQUIPMENT

Siemens 828 D control
Hydraulic 3-jaw lathe chuck, Ø 200 mm with bore
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

# **OPTIONAL EQUIPMENT**

• Upgrades for your KNUTH machine tool - CNC, SKU: 270061