CNC Slant Bed Lathes
Roturn 400 C

KNUTH MACHINE TOOLS

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 control
- Chuck with through-hole

TECHNICAL SPECS

WORKING AREA

Workpiece length (max.)	430 mm
Center height	200 mm
Turning diameter over bed	400 mm
Turning diameter over support	250 mm

TRAVELS

Travel X-axis	200 mm
Travel Z-axis	450 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	46 mm

RAPID FEED

Rapid feed X-axis	16000 mm/min
Rapid feed Z-axis	20000 mm/min

TOOLING

Number of tool stations	8 positions
Tool shank dimensions	25 mm x 25 mm
Boring bar mount Ø	40 mm

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

MEASURES AND WEIGHTS

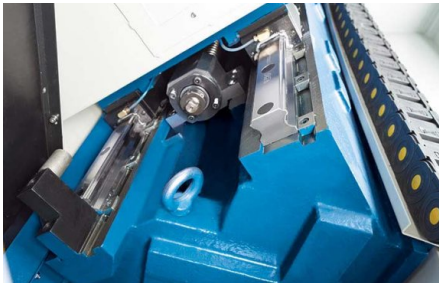|	
Overall dimensions (length x width x height)	3.8 m x 1.87 m x 1.91 m
Weight	3340 kg

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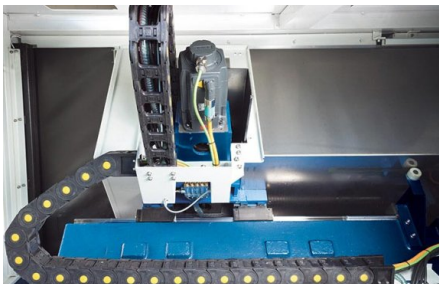

Pressure gauge for pressure monitoring

Central lubrication device and maintenance unit

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 85 mm
- Automatic central lubrication system ensures reliable lubrication of guideways

Spindle

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

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
Hydr. 3-jaw- lathe chuck 200 mm with borehole
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

OPTIONAL EQUIPMENT

- Preparation Barfeeder Interface, SKU : 270250
- Upgrades for your KNUTH machine tool - CNC, SKU : 270061

KNUTH on YouTube
Information to the point

On our YouTube channel you can find videos for nearly all machines from our program. We show the machines from current deliveries and you get an impression of the handling, the processing quality and the machining performance.

Are you interested in a machine for which you cannot find a current video?
Please feel free to contact us!