

SKU : 182296

This StarChip Series machine has all the features of a classic CNC production lathe. The modern Siemens control meets all requirements for advanced control technology. The machine features an inclined bed with 12-station tool turret and a powerful 15 kW main spindle motor, including a hydraulic 3-jaw chuck with through-hole. A hinged belt conveyor and a highly efficient coolant system complete the equipment package.

- Large turning length and turning diameter
- Powerful main spindle motor
- 12-fold tool turret
- Hydraulically positionable tailstock
- Link belt chip conveyor and chip trolley included



TECHNICAL SPECS

WORKING AREA

Workpiece length (max.)	1000 mm
Maximum workpiece weight	200 kg - 500 kg
Angle of slant bed	45 deg
Turning-Ø over bed (max.)	560 mm
Turning-Ø over support	350 mm

TRAVELS

Travel X-axis	200 mm
Travel Z-axis	1050 mm

HEADSTOCK

Spindle speed	4500 1/min
Spindle mount	ISO A2-6
Lathe chuck diameter	250 mm
Spindle bore	65 mm
Spindle bore with draw tube	50 mm

RAPID FEED

Rapid feed X-axis	30000 mm/min
Rapid feed Z-axis	30000 mm/min

TOOLING

Number of tool stations	12 positions
Tool shank dimensions	25 mm x 25 mm
Diameter	40 mm

ACCURACIES

Positioning accuracy X-axis	± 0,008 mm
Positioning accuracy Z-axis	± 0,008 mm
Repeatability X-axis	± 0,004 mm
Repeatability Z-axis	± 0,004 mm

TAILSTOCK

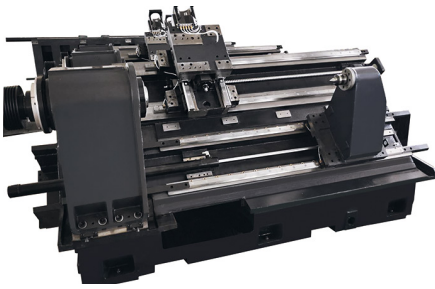
Tailstock taper	5 MT
Tailstock quill stroke	900 mm

DRIVE CAPACITY

Motor rating main drive	15 kW
Main drive, continuous load	11 kW
Motor rating X-axis	1.8 kW
Motor rating Z-axis	1.8 kW

MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	3.57 m x 1.86 m x 1.9 m
Weight	4500 kg



PRODUCT DETAILS

- Heavy machine frame with 45° inclined bed ensures high rigidity and easy chip removal
- Large linear guides on X and Z ensure maximum stability and accuracy
- High quality preloaded ball screws connect to powerful drives via a zero-loss transmission clutch.
- The design with 2 additional linear guides ensures collision-free tailstock movements
- The enclosed work space is easily accessible through a large sliding door
- The 12-station tool turret ensures a large work area and quick and precise tool changes
- Optional tool changer with driven tools, and C axis for precise contour milling and drilling is available
- A powerful 15 kW headstock motor delivers high torque across the entire speed range
- Hydraulic 250 mm 3-jaw chuck with through-hole
- Automatic central lubrication system ensures reliable lubrication of guideways
- Hinged belt conveyor and high-performance coolant system included in standard equipment
- The machine is ready for the connection of an optional rod feeder

Proven record:

- Future-proof: the Siemens 828 D Basic control meets all requirements for advanced control technology
- Easy, dialog-guided user interface
- Complete bandwidth of technology cycles
- High performance and precision

CONTROLS & SOFTWARE

Siemens 828D 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
- ShopMill: shortest programming time for single parts and small batch productions
- 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)
- Easy Message: maximum machine availability due to process monitoring per texting (SMS)

CNC hardware

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

CNC performance data and functions

- SINUMERIK MDynamics package with Advanced Surface for mold making applications
- Tool changing time: ~2 ms (PPU 260/261) / ~1 ms (PPU 280/281)
- Number of Look Ahead sets: 100 (PPU 260/261) / 150 (PPU 280/281)
- Jerk-limited acceleration
- Dynamic feed-forward control
- 4-axis simultaneous interpolation (X, Y, Z and rotary axis)
- Linear, circular and helical interpolation
- Tapping without compensating chuck, plus thread cutting
- Oriented spindle holder

- 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

- Technology cycles for programGUIDE and ShopMill work step programming are available
- 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

- Animated Elements: input help for machining parameters with animated sequences
- 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
- Number of tool edges: 256 (PPU 260/261) / 512 (PPU 280/281)
- Tool management with tool life monitoring

STANDARD EQUIPMENT

Siemens 828D control
 12-station turret
 Electronic hand-wheel
 Hydr. 3-jaw chuck Ø 250 mm
 Auto bar feeder interface
 Chip conveyor chain type
 Programable tailstock
 Coolant system flush gun
 Air gun
 Coolant system
 Automatic central lubrication
 Heat exchanger control cabinet
 Work lamp
 Operational health status indicator
 Operator instructions

OPTIONAL EQUIPMENT

- Oil/coolant separator for Starchip 560 / 560 L, SKU : 253738
- Automatic operator door for Starchip 560 / 560 L, SKU : 253739
- Air conditioner for control cabinet for Starchip 560 / 560 L, SKU : 253740
- Tool turret with driven tools for Starchip 560 / 560 L, SKU : 253741
- Main spindle with 80 mm through-hole (no draw tube) for Starchip 560/560L, SKU : 253742
- LNS Alpha SL 65-S bar feeder (1,5 m), SKU : 253904
- LNS Sprint 545 bar feeder (3 m), SKU : 254109