

SKU : 100357

Our Forceturn series is the optimal solution for customers who want to machine large parts with a powerful CNC lathe. The robust flat bed design ensures high precision when machining heavy workpieces that can be up to 5,000 mm (197 in) long. The control is easy to use and has a teach-in function. Thanks to the two electronic handwheels, the machine can be operated in a similar way to a manual lathe. Options allow adaptation to special requirements. This makes the Forceturn series the best choice for maintenance departments or single part production.

- Powerful main drive for heavy machining
- Servo-driven 4-station tool changer
- 2 electronic hand-wheels for manual operation
- Cycle programming for series production



TECHNICAL SPECS

WORKING AREA

| | |
|---------------------------|---------|
| Turning diameter over bed | 670 mm |
| Bed width | 450 mm |
| Center height | 335 mm |
| Turning-Ø over support | 400 mm |
| Workpiece length (max.) | 3100 mm |

TRAVELS

| | |
|---------------|---------|
| Travel X-axis | 450 mm |
| Travel Z-axis | 3000 mm |

HEADSTOCK

| | |
|---------------|-----------------------|
| Speed range | 27 1/min - 2250 1/min |
| Spindle mount | D1-8 |
| Spindle bore | 85 mm |

RAPID FEED

| | |
|-------------------|-------------|
| Rapid feed X-axis | 5000 mm/min |
| Rapid feed Z-axis | 5000 mm/min |

TOOLING

| | |
|-------------------------|-------------|
| Number of tool stations | 4 positions |
|-------------------------|-------------|

ACCURACIES

| | |
|-----------------------------|----------|
| Positioning accuracy X-axis | 0.015 mm |
| Positioning accuracy Z-axis | 0.02 mm |
| Repeatability X-axis | 0.007 mm |
| Repeatability Z-axis | 0.01 mm |

TAILSTOCK

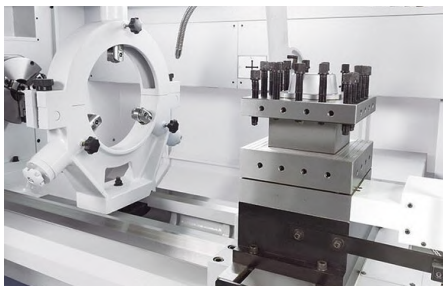
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|--------------------------|--------|
| Tailstock taper | 5 MT |
| Tailstock quill diameter | 105 mm |
| Tailstock quill stroke | 170 mm |

DRIVE CAPACITY

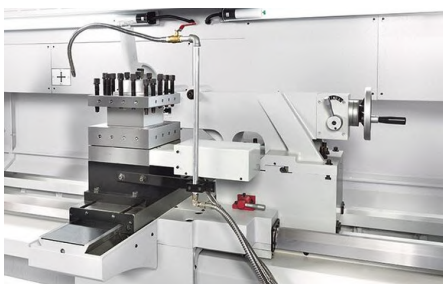
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|-----------------------------|--------|
| Motor rating main drive | 22 kW |
| Main drive, continuous load | 15 kW |
| Motor rating X-axis | 2 kW |
| Motor rating Z-axis | 3.6 kW |
| Total power consumption | 40 kVA |

MEASURES AND WEIGHTS

| | |
|--|-------------------------|
| Overall dimensions (length x width x height) | 5.5 m x 2.25 m x 2.25 m |
| Weight | 5600 kg |



Option: steady rests up to 400 mm diameter



Easy handling: for positioning, the tailstock can be coupled to the support



Compact control unit with electronic hand-wheels



Interface for data transmission, swivelling control operating unit

PRODUCT DETAILS

Highlights

- The Fagor control featuring intuitive, easy to learn cycle programming, including Profile Editor, for batch and single part production of complex workpieces
- Graphical simulation for added safety
- 2 electronic hand-wheels at the control panel for manual operation and for easy, quick setup of new workpieces and tools

Machine Design

- Lots of experience went into the design and construction of this machine bed featuring large guides that are hardened, ground and counter-laminated
- Powerful main drive motor handles part weights up to 1,7 t with ease
- A high-performance coolant system and automatic central lubrication system are included
- Spindle bore 85mm (models 630) or 105mm (models 800)

Spindle

- Infinitely variable, programmable, and adjustable spindle speeds with automatic 3-step main gear

Main gear

- Motor power 15/22 kW

Tool Changer

- Heavy, automatic 4-station servo-driven tool changer for programmed tool changes

STANDARD EQUIPMENT

Fagor 8058 Elite control
 2 electronic hand-wheels
 Automatic 3-step gears
 4-station servo tool holder
 3-jaw chuck Ø 300 mm
 Tailstock
 Coolant system
 Central lubrication
 Work lamp
 Operating tools
 Operating manual and programming instructions

OPTIONAL EQUIPMENT

- Steady rest (130-370mm), SKU : 250935
- Steady rest (50-300mm), SKU : 250936
- Steady rest (280-400mm), SKU : 250937
- Chain type chip conveyor, SKU : 251188
- Follow Rest (50 - 250mm), SKU : 251189
- Sauter 8-Fach VDI 40 hydr. Servorevolver, SKU : 254035



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!**