CNC Flat Bed Lathes

Forceturn 800.50

SKU : 100355

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	818 mm
Bed width	450 mm
Center height	420 mm
Turning-Ø over support	570 mm
Workpiece length (max.)	5100 mm

TRAVELS

Travel X-axis	450 mm
Travel Z-axis	5000 mm

HEADSTOCK

Speed range	20 1/min - 1500 1/min
Spindle mount	A1-11
Spindle bore	105 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	0.03 mm
Repeatability X-axis	0.007 mm
Repeatability Z-axis	0.015 mm

TAILSTOCK

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

DRIVE CAPACITY

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)	7.5 m x 2.25 m x 2.45 m
Weight	8000 kg

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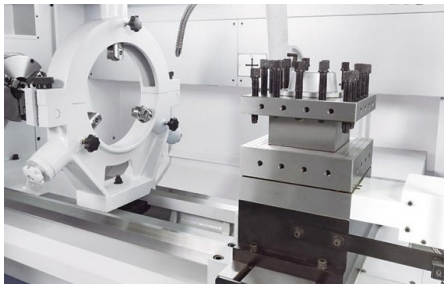
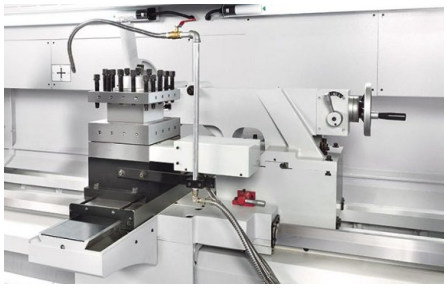


Automatic changing 4-fold steel holder

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

PRODUCT DETAILS

Highlights

- Fagor 8055i FL-TC 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

CONTROLS & SOFTWARE

Fagor 8055i FL-TC control

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- The FAGOR 8055 Numeric Controls are user-friendly and easy to handle
- A graphical Profile Editor is available to facilitate contour input. The contour to be produced can easily be created by using the information from parts drawings
- The graphically displayed cycles can be used individually or they can be linked within a user application
- The Fagor 8055i FL-TC Cycle Control is a powerful CNC, specifically designed for the most demanding machine tool applications. Its calculation capacity and high speed ensure maximum power and increased programming flexibility.
- Profile Editor
- DIN ISO programming is also possible
- Fixed cycles with options for graphic geometry definition
- With multi-threaded thread cycle
- Thread repair with cycle
- Graphic simulation with solid body display, including simultaneous for editing
- Easy to use tool management
- USB port
- RS232 port
- Look Ahead function (75 blocks)
- Block Processing Time: 1.5 ms
- Compact Flash with storage expansion up to 2 GB
- Optional C axis function prepared for lathes
- Optional up to 1 MB RAM user memory
- Optional free M-Codes, inputs and outputs

STANDARD EQUIPMENT

Fagor 8055i FL-TC control
2 electronic hand-wheels
3-jaw chuck Ø 300 mm
Automatic 3-step gears
4-station servo tool holder
Coolant system
Central lubrication
Tailstock
Work lamp
Operating tools
Operating manual and programming instructions

OPTIONAL EQUIPMENT

- Steady rest (280 - 400mm for Forceturn 800 (part no. 100353-100355), SKU : 250941
- Steady rest (130 - 370mm for Forceturn 800 (part no. 100353-100355), SKU : 250939
- Steady rest (50 - 300mm for Forceturn 800 (part no. 100353-100355), SKU : 250940
- Live rest (50 - 250mm for Forceturn, SKU : 250942

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