

SKU : 100353

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	32 in
Bed width	18 in
Center height	17 in
Turning-Ø over support	22 in
Workpiece length (max.)	63 in

TRAVELS

Travel X-axis	17.7 in
Travel Z-axis	59 in

HEADSTOCK

Speed range	20 rpm - 1500 rpm
Spindle mount	A1-11
Spindle bore	4.1 in

RAPID FEED

Rapid feed X-axis	196.85 in/min
Rapid feed Z-axis	196.85 in/min

TOOL HEAD

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

ACCURACIES

Positioning accuracy X-axis	0.00059 in
Positioning accuracy Z-axis	0.00059 in
Repeatability X-axis	0.00028 in
Repeatability Z-axis	0.00028 in

TAILSTOCK

Tailstock taper	5 MT
Tailstock quill diameter	4 in
Tailstock quill stroke	7 in

DRIVE CAPACITY

Motor rating main drive	29.5 Hp
Main drive, continuous load	20.11 Hp
Motor rating X-axis	2.7 Hp
Motor rating Z-axis	4.83 Hp
Total power consumption	40 kVA

MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	158 in x 89 in x 89 in
Weight	9900 lbs



Automatic changing 4-fold steel holder



Option: steady rests up to 16 in 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 3748 lb with ease
- A high-performance coolant system and automatic central lubrication system are included
- Spindle bore 3.35" (model 630) or 4.13" (model 800)

Spindle

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

Main gear

- Motor rating 20 / 30 HP

Tool Changer

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

CONTROLS & SOFTWARE

Fagor 8055i FL-TC control

- 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 12"
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 (11 - 15.7" for Forceturn 800 (part no. 100353-100355), SKU : 250941
- Steady rest (5.12 - 14.6" for Forceturn 800 (part no. 100353-100355), SKU : 250939
- Steady rest (2.0 - 11.8" for Forceturn 800 (part no. 100353-100355), SKU : 250940
- Live rest (2.0 - 9.8" for Forceturn, SKU : 250942