

CNC Lathe Machines

Forceturn 800.50



SKU: 100365

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.)	201 in

TRAVELS

Travel X-axis	17.7 in
Travel Z-axis	197 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	0.00118 in
Repeatability X-axis	0.00028 in
Repeatability Z-axis	0.00059 in

TAILSTOCK

Tailstock taper	5 MT
Tailstock quill diameter	4 in
Tailstock guill 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)	296 in x 89 in x 97 in
Weight	17600 lbs



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



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 handwheels



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 3748 lb with ease
- A high-performance coolant system and automatic central lubrication system are
- Spindle bore 3.35" (model 630) or 4.13" (model 800)

Spindle

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

Main gear

• Motor rating 20 / 30 HP

Fagor 8058 Elite control

Tool Changer

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

STANDARD EQUIPMENT

2 electronic hand-wheels Automatic 3-step gears 4-station servo tool holder 3-jaw chuck Ø 12" Tailstock Coolant system Central lubrication Work lamp Operating tools Operating manual and programming instructions

OPTIONAL EQUIPMENT

- Steady rest (11 15.7"), SKU: 250941
- Steady rest (5.12 14.6"), SKU: 250939 Steady rest (2.0 11.8"), SKU: 250940
- Chain-type chip conveyor, SKU: 254040
- Live rest (1.97-9.8"), SKU: 250942
- Sauter 8-station tool turret acc. to VDI 40, servo-driven turret, SKU: 254036