

### SKU : 100358

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 | 26 in  |
| Bed width                 | 18 in  |
| Center height             | 13 in  |
| Turning-Ø over support    | 16 in  |
| Workpiece length (max.)   | 201 in |

### TRAVELS

|               |         |
|---------------|---------|
| Travel X-axis | 17.7 in |
| Travel Z-axis | 197 in  |

### HEADSTOCK

|               |                   |
|---------------|-------------------|
| Speed range   | 27 rpm - 2250 rpm |
| Spindle mount | D1-8              |
| Spindle bore  | 3.3 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 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) | 296 in x 89 in x 97 in |
| Weight                                       | 16720 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 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 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

## STANDARD EQUIPMENT

Fagor 8058 Elite control  
 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 (5-14.6 in), SKU : 250935
- Steady rest (1.97-11.8"), SKU : 250936
- Steady rest (11-15.7" ), SKU : 250937
- Chain-type chip conveyor, SKU : 254037
- Sauter 8-station tool turret acc. to VDI 40, servo-driven turret, SKU : 254035