

# 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	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



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



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 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 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 3step main gear

#### Main gear

• Motor power 15/22 kW

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 300 mm
Tailstock
Coolant system
Central lubrication
Work lamp
Operating tools
Operating manual and programming instructions

# **OPTIONAL EQUIPMENT**

- Steady rest (280 400mm), SKU: 250941
- Steady rest (130 370mm), SKU: 250939
- Steady rest (50 300mm), SKU: 250940
- Chain Type conveyor, SKU: 254040
- Live rest (50- 250mm), SKU: 250942
- Sauter 8-Fach VDI 40 hydr. Servorevolver, SKU: 254036