

# Conventional Horizontal Lathes

## Turnado 280/1500 PRO

**SKU : 320564**

The machines of the Turnado PRO series are the modern version of the classic lathe. The PRO models are the latest generation of our universal lathes, which have been tried and tested for 20 years. With constant cutting speed, rapid traverses and an extended speed range that can be controlled by an inverter, these models are characterized by high-performance machining, excellent surface quality and time efficiency. They are easy to recognize by the new ergonomic cladding design, which integrates all functions into an overall concept.

- Infinitely variable speed range
- Apron with rapid feed motor
- Extensive standard equipment
- Constant cutting speed



### TECHNICAL SPECS

#### WORKING AREA

Center width	1500 mm
Center height	280 mm
Turning-Ør over bed	560 mm
Turning diameter over gap bridge	785 mm
Turning-Ø over support	355 mm
Gap bridge length	170 mm
Bed width	350 mm

#### TRAVELS

Travel X-axis	316 mm
Travel Z1-axis	130 mm
Swing range of top slide	± 52°

#### HEADSTOCK

Speed range, low	25 1/min - 200 1/min
Speed range, high	200 1/min - 1600 1/min
Spindle bore	80 mm
Spindle mount	Camlock D1-8
Spindle taper	7 MT

#### FEED

Feed X-axis	0.02 mm/R - 0.573 mm/R
Feed Z-axis	0.059 mm/R - 1.646 mm/R

#### THREADING

Threading, metric	0.2 mm - 14 mm
Threading, diametric	(50) 4-112 DP
Threading, module	0.1 mm - 7 mm
Threading, whitworth	(60) 2-112 TPI

#### TAILSTOCK

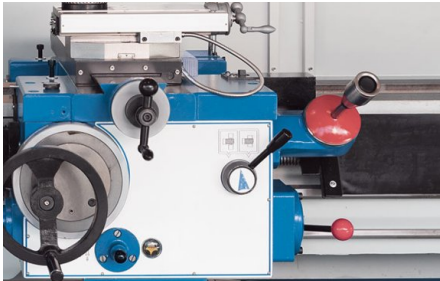
Tailstock quill diameter	75 mm
Tailstock taper	MK 5
Tailstock quill stroke	180 mm
Tailstock traverse adjustment	± 12 mm

#### DRIVE CAPACITY

Motor rating main drive	7.5 kW
-------------------------	--------

#### MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	2.84 m x 1.15 m x 1.46 m
Weight	2370 kg



*Support moves in linear and cross direction via motorized rapid feed for reduced down-time*



## PRODUCT DETAILS

- With a new apron design, rapid feed and a modern ergonomic machine frame, the Turnado Lathe PRO series continues its success story
- A heavily ribbed machine bed, rigid headstock and a massive one-piece cast-iron stand form a solid machine base
- Removable bridge allows machining of short workpieces with large diameters
- Back-gearing and an advanced electronic control technology of the powerful main spindle drive ensure high torque and a wide range of speeds
- High-precision pre-loaded spindle bearings ensure superior concentricity and load capacity
- All guides are adjustable
- Gears, transmission shafts, and guideways are hardened and ground to guarantee quiet operation and long tool life
- The apron runs in an oil bath for low maintenance and high reliability
- A central lubrication system inside the support supplies all guideways with lubrication and simplifies maintenance
- Micrometer bed stop ensures high repeatability on the Z-axis
- The tailstock can be adjusted sideways for taper turning
- The extensive features of the X.Pos Position Indicator are complemented here with a digital speed indicator and an easy to program auxiliary function
- Constant cutting speed: During face turning, the spindle speed automatically adapts to the changing workpiece diameter – the constant cutting speed at the cutting edge of the turning tool ensures superior turning results with quality comparable to CNC lathes

## CONTROLS & SOFTWARE

### 3-axis position indicator, X.pos 3.2 VC

- Integrating multiple functions, this new generation of 3 axis digital readouts significantly offer a much better control over the machining processes, greatly decreasing down-times and error rates
- Integrating multiple functions, this new generation of 3 axis digital readouts significantly offer a much better control over the machining processes, greatly decreasing down-times and error rates
- It features a totally sealed enclosure made of high quality polyester film which protects it against hazardous environments in shop floors, such as dust or fumes and offers excellent chemical resistance to most commonly used industry solvents
- The optical scales provide 5 micron resolution (0.005 mm) with outside cover from aluminum for protection against oil, coolant and chips.

#### **Basic Functions**

- Resolution of 0,005 mm
- Spindle control ON/OFF
- Unit measurement conversion Inch / Metric
- Setting / Resetting current position
- Coordinate display switching ABS / INC
- Radius / Diameter display
- Z1/Z2 Axes summing
- Pocket calculator functions

#### **Extended Functions**

- Axis position is maintained when display is turned off
- Hole circle pattern calculation
- Radius / diameter toggle
- Reference function for tool gauging
- Taper turning function

#### **Constant cutting speed**

- Allows you to have constant cutting speed during - the spindle speed automatically adjusts based on the turning diameter

## **STANDARD EQUIPMENT**

3-axis position indicator, X.pos 3.2 VC  
 Quick tool changer head WC  
 Quick change tool holder WCD 32150  
 Rapid traverse for X- and Z-axis  
 3-jaw chuck Ø 315 mm  
 4-jaw face chuck Ø 350 mm  
 Face plate Ø 450 mm  
 Follow and steady rests  
 Coolant system  
 Micrometer longitudinal stop  
 Thread gauge  
 Reducing sleeve  
 Dead center  
 Traveling cover for the toolpost  
 Chuck guard  
 Foot brake pedal  
 Fixed splash guard (wall)  
 Work light  
 Toolbox with operating tools  
 Operator instructions