

Conventional Horizontal Lathes

Turnado 230/1000 PRO

SKU : 320562

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	1000 mm
Center height	230 mm
Turning-Ø over bed	460 mm
Turning diameter over gap bridge	690 mm
Turning-Ø over support	224 mm
Gap bridge length	155 mm
Bed width	300 mm

TRAVELS

Travel X-axis	285 mm
Travel Z1-axis	128 mm
Swing range of top slide	± 52°

HEADSTOCK

Speed range, low	30 1/min - 600 1/min
Speed range, high	600 1/min - 3000 1/min
Spindle bore	58 mm
Spindle mount	Camlock D1-6
Spindle taper	6 MT

FEED

Feed X-axis	0.025 mm/R - 1.384 mm/R
Feed Z-axis	0.055 mm/R - 3.061 mm/R

THREADING

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

TAILSTOCK

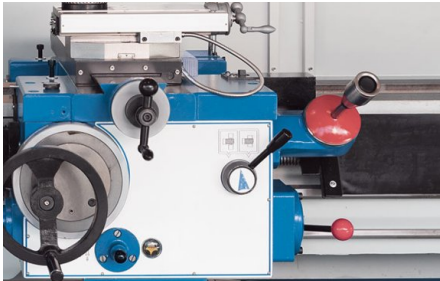
Tailstock quill diameter	60 mm
Tailstock taper	MK 4
Tailstock quill stroke	120 mm
Tailstock traverse adjustment	± 13 mm

DRIVE CAPACITY

Motor rating main drive	7.5 kW
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MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	2.2 m x 1.08 m x 1.57 m
Weight	1720 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
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- 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 change tool holder head WB
 Quick change tool holder WBD 25120
 Rapid traverse for X- and Z-axis
 3-jaw chuck Ø 250 mm
 4-jaw face plate chuck Ø 300 mm
 Face plate Ø 350 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



KNUTH on YouTube

Information to the point

On our YouTube channel you can find videos for nearly all machines from our program. We show the machines from current deliveries and you get an impression of the handling, the processing quality and the machining performance.

**Are you interested in a machine for which you cannot find a current video?
Please feel free to contact us!**