Conventional Horizontal Lathes

Turnado 230/2000 V

SKU : 320575

The turning machines of the Turnado series are characterized by their robust construction, powerful motor and versatility. For more than 20 years they have been among the tried and tested bestsellers of our conventional lathes. The V models are also equipped with an extended, infinitely variable speed range. In combination with the position indicator and integrated function of the constant cutting speed, you achieve a superior surface quality when facing. A high-quality quick-change toolholder system also lessens non-productive time and costs.

- Infinitely variable adjustable rotation range
- Classic design with rigid construction = built to last
- One-piece heavy-duty cast-iron bed for increased rigidity
- 3-axis position indicator with multiple turning functions
- Adjustable longitudinal stops with automated feed shut-off
- Extensive standard equipment

TECHNICAL SPECS

WORKING AREA

Center height	230 mm
Workpiece length (max.)	2000 mm
Turning-Ø over bed	460 mm
Turning-Ø over support	224 mm
Turning diameter over gap bridge	690 mm
Gap bridge length	155 mm
Bed width	300 mm

DETAILS

Equipment	with position indicator and infinitely variable speed adjustment

TRAVELS

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

HEADSTOCK

Spindle speeds	L 30-600 / H 600-3000 1/min
Spindle bore	58 mm
Spindle mount	Camlock D1-6
Spindle taper	6 MT

FEED

Feed X-axis	0.014 mm/R - 0.784 mm/R
Feed Z-axis	0.031 mm/R - 1.7 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	4 MT
Tailstock quill stroke	120 mm
Tailstock traverse adjustment	± 13 mm

DRIVE CAPACITY

Motor rating main drive	7.5 kW

MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	3.25 m x 1.08 m x 1.34 m
Weight	2100 kg

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PRODUCT DETAILS

- The Turnado V Series Universal Lathes are widely tested and proven and our definite bestsellers with a low price and lasting high value

Machine bed

- A heavily ribbed machine bed, rigid headstock and a massive one-piece thick-walled cast-iron stand form a solid machine base for efficient and precisely machining
- A removable bridge allows machining of short workpieces with very large diameters
- The wide v-block guideways are hardened and ground for lasting precision

Headstock/ feed gear

- The powerful motor features a modern variable frequency drive, and the two-step main spindle gear ensures high torque across the entire infinitely variable speed range
- The Turnado 230 V series features an extended maximum speed range and a wider application spectrum
- All gears and shafts are hardened and ground and run in an enclosed oil bath
- The large spindle capacity allows clamping of shafts and tubes with large diameters
- The high quality spindle support features optimum rigidity and preloading for high precision even under high radial and axial loads as well as long lasting performance
- A 3-jaw lathe chuck with hard reversible jaws, a 4-jaw independent chuck, and a face plate with large diameter are included in the machine's standard equipment
- The user-friendly control panel facilitates rapid user familiarization and intuitive operation
- The feed gear offers a large number of thread leads for metric and Withworth tapping

Support

- The support is designed extra-wide and can easily handle high machining forces
- The control lever for the feed switch and apron nut provide automatic safety interlocking and reliably prevent operational errors
- The stop spindle features four adjustable cams to provide automatic linear feed shut-off
- This way, repetitive machining processes with different Z axis positions can be simplified by presetting the desired positions in the necessary sequence
- The micrometer bed stop can be used to set precise travel distance limits
- The slip coupling for the automatic feed is positioned centrally on the apron for easy adjustments
- The thread gauge and support allow reliable determination of the pitch after an interrupted tapping process, and also simplifies machining of multi-lead threads
- The top slide swivels and has large, easy to read scaling
- The large, swiveling safety cover at the support protects the user and keeps the work space clean
- A central lubrication system at the support supplies all guideways with lubrication and simplifies maintenance

Tailstock

- The tailstock quill is equipped with a robust and easy to read scale
- The long quill stroke allows for complex drilling and centering jobs
- The tailstock can be adjusted laterally for machining of conical shafts

Accessories

- The standard brake pedal is not only practical, but also a safety feature
- A large and sturdy splash guard an the rear of the machine ensures a clean machine environment
- A bright LED light is integrated in the support cover for optimum lighting throughout the work space
- The multi-functional quick-action tool changer system with tool changer cartridge is included in the standard equipment of this series
- A steady and a live rest are a must for long workpieces and also included in the standard package
- The Turnado Lathe is equipped with the latest generation of our position indicators. Ensures high work precision, lower error rate, and increased operator safety
- Extended X.Pos Position Indicator functionality with the addition of the "V-constant" function
- During facing, the spindle speed is automatically adapted to the changing workpiece diameters, resulting in a surface quality that is comparable to the surface grade achieved with CNC lathes
- A coolant system and extensive operating tools complete the equipment package

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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 enviroments 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 / Reseting 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
Adjustable feed stops
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
Protective shield for the toolpost
Chuck guard
Foot brake pedal
Fixed splash guard (wall)
Work light
Toolbox with operating tools
Operator instructions

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