Conventional Horizontal Lathes

V-Turn 410/1000

SKU : 300820

Our bestseller V-Turn is a precision lathe that is also suitable for production. Equipped with an inverter and a high-performance motor, it achieves spindle speeds of up to 3,000 1/min and processes workpieces with small diameters efficiently and of the best quality. The models also offer strength and stability for heavier machining. When facing, the "constant cutting speed" function integrated in the X-Pos adapts the spindle speed to the turning diameter and thus delivers quality that is comparable to the results of a CNC machine.

- Constant cutting speed
- High spindle speed and motor power
- Extensive standard equipment
- Roller bearing from world-leading manufacturer NSK

TECHNICAL SPECS

WORKING AREA

Center width	39.37 in
Center height	8 in
Turning diameter over bed	15 in
Turning diameter over gap bridge	23 in
Turning-Ø over support	10 in
Gap bridge length	10 in
Bed width	10 in

TRAVELS

Travel X-axis	8.3 in
Travel Z1-axis	6 in
Swing range of top slide	± 45°

HEADSTOCK

Speed range, high	550 rpm - 3000 rpm
Speed range, low	30 rpm - 550 rpm
Spindle bore	2 in
Spindle mount	Camlock D1-6
Spindle taper	6 MT

FEED

Feed X-axis	0.00098 in/R - 0.03346 in/R
Feed Z-axis	0.00197 in/R - 0.06693 in/R

THREADING

Threading, metric	(39) 02-14 mm
Threading, diametric	(21) 8-44 DP
Threading, module	0.3 mm - 3.5 mm
Threading, whitworth	(45) 2-72 TPI

TAILSTOCK

Tailstock quill diameter	2 in
Tailstock taper	4 MT
Tailstock quill stroke	5 in
Tailstock traverse adjustment	± 0,5 in

DRIVE CAPACITY

Motor rating main drive	7.4 Hp

MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	77 in x 40 in x 52 in
Weight	2640 lbs

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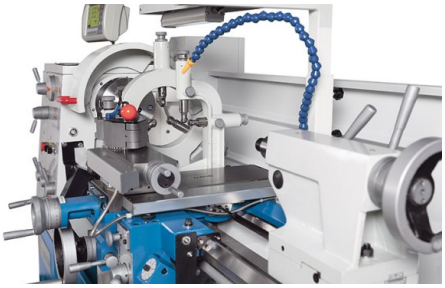

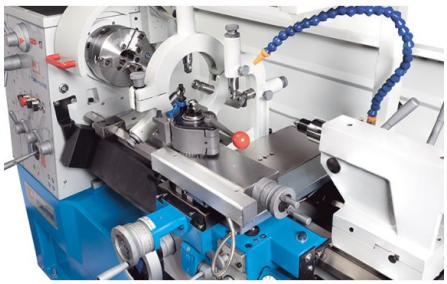

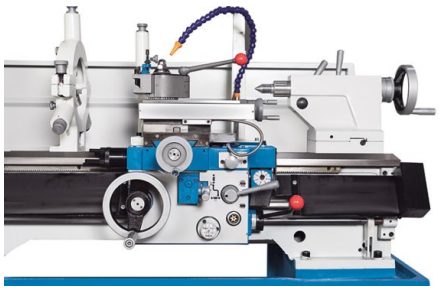

PRODUCT DETAILS

- 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
- A heavy ribbed machine bed and a massive one-piece cast-iron frame provide the solid basis for this machine
- Wide, hardened and ground guideways ensure superior turning results and long life
- Large spindle bearings and high-precision headstock ensure excellent concentricity
- Headstock gears and shafts are hardened and ground for quiet operation und constant speed
- 7 Hp headstock motor ensures powerful machining
- Spindle speeds are infinitely variable from 30 to 550 and 550 to 3000 rpm
- Micrometer and turret stop are included
- Integrated central lubrication at the support for low maintenance
- The extensive features of the X.Pos Position Indicator are complemented here with a digital speed indicator and an easy to program auxiliary function
- Incl. 3-axis position indicator with integrated spindle speed display, fully assembled
- The electromagnetic brake on the main spindle is maintenance-free and slows the machine safely and reliably

CONTROLS & SOFTWARE

3-axis position indicator, X.pos 3.2 VC

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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
- Optical Scales: 5 µm resolution (0.000197") with outside cover from aluminum for protection against oil, coolant and chips

Basic Functions

- Resolution of 0.000197"
- 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

Follow rest
Reducing Sleeve
Dead center
3-axis position indicator, X.pos 3.2 VC
4-jaw face plate chuck Ø 10 inch
Face plate (13" diam.)
Quick-change tool holder head WB
Quick change tool holder WBD 25120
Coolant system
Steady rest
Turret stop
Micrometer stop
Chip tray
Fixed splash guard (wall)
Protective shield for the toolpost
Chuck guard
Foot brake pedal
Work light
Thread gauge
Toolbox with operating tools
Operator instructions

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