

# Conventional Horizontal Lathes V-Turn 410 PRO



# **TECHNICAL SPECS**

# WORKING AREA

Center width	1000 mm
Center height	205 mm
Turning diameter over bed	380 mm
Turning diameter over gap bridge	580 mm
Turning-Ø over support	255 mm
Gap bridge length	250 mm
Bed width	250 mm

#### TRAVELS

Travel X-axis	210 mm
Travel Z1-axis	140 mm
Swing range of top slide	± 45°

#### HEADSTOCK

Speed range, high	550 1/min - 3000 1/min
Speed range, low	30 1/min - 550 1/min
Spindle bore	52 mm
Spindle mount	Camlock D1-6
Spindle taper	6 MT

#### FEED

Feed X-axis	0.013 mm/R - 0.45 mm/R
Feed Z-axis	0.026 mm/R - 0.9 mm/R

## THREADING

Threading, metric	(39) 0,2-14 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	50 mm
Tailstock taper	4 MT
Tailstock quill stroke	120 mm
Tailstock traverse adjustment	± 13 mm

# DRIVE CAPACITY

Motor rating main drive 5.5 kW

# **MEASURES AND WEIGHTS**

Overall dimensions (length x width x height)	1.94 m x 1 m x 1.6 m
Weight	1210 kg

# SKU: 300822

The newly designed PRO models of our bestseller V-Turn convince with improved ergonomics and more safety. Equipped with an inverter and a high-performance spindle motor, they can easily reach 3,000 revolutions per minute. Workpieces with a small diameter can thus be efficiently machined. However, the models also offer strength and stability for heavier machining. The built-in function of the constant cutting speed, which adapts the spindle speed to the diameter when facing, enables turning results that are comparable to CNC machines to be achieved.

- Ergonomic machine housing
- Improved apron with automated feed
- Constant cutting speed
- High spindle speed and motor power
- Roller bearings from world-leading manufacturer NSK



Extensive accessories, including quickchange tool holder system



Central lubrication is integrated into the support for easy maintenance and handling

# **PRODUCT DETAILS**

- Incl. 3-axis position indicator with integrated spindle speed display, fully assembled
- The redesigned machine enclosure and added safety features make this machine even more ergonomic, complementing functionality and design
- 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 heavily ribbed machine bed, rigid headstock and a massive one-piece cast-iron stand form a solid machine base
- Wide, induction-hardened guideways ensure superior turning results and long life
- Facing and top slides feature adjustable guideways and spindle nuts
- High-precision pre-loaded spindle bearings ensure superior concentricity and load capacity
- A powerful 5.5 kW main spindle motor ensures rapid acceleration and powerful chip removal across the entire speed range
- Back-gearing ensures high torque for highly efficient machining
- Rugged feed switch at the support simplifies operation
- The extensive features of the X.Pos Position Indicator are complemented here with a digital speed indicator and an easy to program auxiliary function
- 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
- 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

Fixed stainless steel safety cover for tension and lead screw 3-axis position indicator, X.pos 3.2 VC 4-jaw face plate chuck Ø 250 mm Face plate Ø 350 mm Quick change tool holder head WB Quick change tool holder WBD 25120 Coolant system Steady rest Chip tray Fixed splash guard (wall) Traveling cover for the toolpost Follow rest Turret stop Micrometer stop Foot brake pedal Chuck guard Work light Toolbox with operating tools Dead center **Reducing Sleeve** Operator instructions