

# Conventional Horizontal Lathes Basic 180 V



## SKU: 300807

Basic 180 V is one of the heaviest machines in this popular market segment. With a bed width of 206 mm (8 in) and a 30 percent higher total weight, its solid construction has a positive effect on the processing quality. This lathe also enables heavier machining operations that meet industrial requirements. Equipped with an inverter, it can easily reach 3,000 revolutions per minute. The constant cutting speed function also ensures surface qualities comparable to that of a CNC lathe when facing.

- Largest bed width in this machine class
- Constant cutting speed
- High spindle speed and motor power
- Extensive standard equipment for a wide range of applications

# **TECHNICAL SPECS**

#### WORKING AREA

Center width	1000 mm
Turning diameter over bed	356 mm
Turning-Ø over support	220 mm
Bed width	206 mm

#### TRAVELS

Travel X-axis	178 mm
Travel Z1-axis	92 mm
Swing range of top slide	± 50°

#### HEADSTOCK

Speed range, high	550 1/min - 3000 1/min
Speed range, low	30 1/min - 550 1/min
Spindle mount	Camlock D1-4
Spindle bore	38 mm
Spindle taper	5 MT

### FEED

Feed X-axis	0.014 mm/R - 0.206 mm/R
Feed Z-axis	0.043 mm/R - 0.653 mm/R

#### THREADING

Threading, metric	(37) 0,4-7 mm	
Threading, whitworth	(28) 4-56 TPI	

#### TAILSTOCK

Tailstock quill diameter	45 mm
Tailstock taper	3 MT
Tailstock quill stroke	120 mm
Tailstock traverse adjustment	± 10 mm

#### **DRIVE CAPACITY**

#### **MEASURES AND WEIGHTS**

Overall dimensions (length x width x height)	1.95 m x 0.75 m x 1.55 m
Weight	880 kg





# **PRODUCT DETAILS**

- Cast-iron bed, heavily ribbed
- All box ways are induction-hardened and precision-ground
- Headstock with D1-4' mount, bore diam. 38 mm, run in 2 adjustable tapered roller bearings
- All gears are made of Cr-Ni steel, hardened, precision-ground, with oil-bath lubrication
- Tailstock can be moved ± 10 mm for taper turning
- Guides are adjustable via tapered gibs
- Test certificate in accordance with DIN
- Including 3-axis position indicator, fully assembled
- Position indicator with speed display
- Infinitely variable spindle speed on 2 gear levels
- Speed up to 3000 min-1
- Constant cutting speed: speed adapts to the part radius constant speed ensures uniform quality finish at any diameter.
- Main motor rating 4 kW

## **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 4-jaw face plate chuck Ø 200 mm Face plate Ø 320 mm Quick change tool holder head WE Quick change tool holder WED 20100 Coolant system Steady and follow rests Chip tray Fixed splash guard (wall) Chuck guard Foot brake pedal Work light Micrometer stop Reducing sleeve Dead center Protective shield for the toolpost Thread gauge Toolbox with operating tools Operator instructions