

Conventional Lathes

Basic 180 Super

SKU : 300805

The Basic 180 Super is the largest mechanics lathe in the KNUTH Machine Tools catalog and is also one of the heaviest machines in this popular market segment. The large bed width of 206 mm (8 in) and a 30 percent higher total weight have a positive effect on the overall machining quality and enable machining services that also meet industrial requirements. Equipped with position indicator, quick-change holder and other standard accessories, the BASIC 180 Super has been one of our best-selling conventional lathes for more than 20 years.

- Heavy-duty wide machine bed
- Rugged construction for minimal vibration
- Powerful motor for demanding operations
- 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

Spindle speed	45 1/min - 1800 1/min
Spindle bore	38 mm
Spindle mount	Camlock D1-4
Spindle taper	5 MT

FEED

Feed X-axis	0.015 mm/R - 0.22 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

Motor rating main drive	2.4 kW
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MEASURES AND WEIGHTS

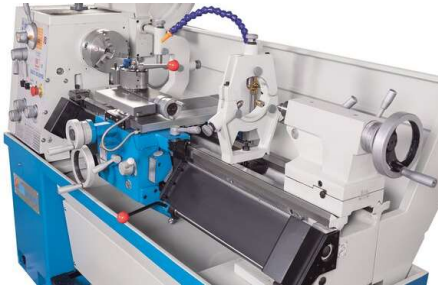
Overall dimensions (length x width x height)	1.95 m x 0.75 m x 1.55 m
Weight	880 kg



Support with enclosed oil-bath for low maintenance



High-quality electric components by Siemens ensure maximum reliability



Large bed width of 206 mm and 30% higher total weight have a positive impact on machining power and precision



Headstock gears and shafts are hardened and ground for quiet operation and constant speed



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
- Powerful main drive (2.4 kW), including base frame
- Guides are adjustable via tapered gibs
- Test certificate in accordance with DIN
- Including 3-axis position indicator, fully assembled

CONTROLS & SOFTWARE

3-axis position indicator X.Pos 3.2

- 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
- 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

STANDARD EQUIPMENT

3-axis position indicator X.Pos 3.2
 Quick-change toolpost head WE
 Quick change tool holder WED 20100
 3-jaw chuck Ø 160 mm
 4-jaw face plate chuck Ø 200 mm
 Face plate Ø 320 mm
 Steady and follow rests
 Coolant system
 Micrometer stop
 Thread gauge
 Reducing sleeve
 Dead center
 Protective shield for the toolpost
 Chuck guard
 Foot brake pedal
 Fixed splash guard (wall)
 Work light
 Chip tray
 Operating manual
 Toolbox with operating tools



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!