

Conventional Lathes TDM S 560 x 2000



SKU: 470623 **TRIAL MACHINE**

The machine is tested and fully functional and comes with a 12-month warranty

The TDM S series is a modern version of the classic universal lathe. It features a large work area, manually shifted spindle drive, and a feed system with rapid feed and feed stop. A wide selection of included standard equipment and many possible options make this machine very versatile and productive. A modern position indicator is included. The models in this series feature premium components and carefully machined surfaces.

- Classic design with rigid construction
- One-piece heavy-duty cast/iron bed for increased rigidity
- Rapid feed on X and Z axes
- Adjustable longitudinal stops for automated feed shut-off
- 3-axis position indicator

TECHNICAL SPECS

| wo | RK | TN | GΑ | REA | |
|----|----|----|-----|-----|---|
| | | | · / | | ١ |

| Center width | 2000 mm |
|----------------------------------|---------|
| Center height | 280 mm |
| Turning diameter over bed | 560 mm |
| Turning diameter over support | 340 mm |
| Turning diameter over gap bridge | 788 mm |
| Gap bridge length | 300 mm |
| Bed width | 400 mm |
| | |

TRAVELS

| Travel X-axis | 375 mm |
|--------------------------|---------|
| Travel Z-axis | 2000 mm |
| Travel Z1-axis | 200 mm |
| Swing range of top slide | ± 90° |

HEADSTOCK

| Speed range | 15 1/min - 1500 1/min |
|---------------|-----------------------|
| Spindle bore | 85 mm |
| Spindle mount | Camlock D1-8 |
| Spindle taper | 7 MT |
| | |

FEED

| Feed X-axis | 0.02 mm/R - 0.4 mm/R |
|-------------|-----------------------|
| Feed Z-axis | 0.05 mm/R - 0.82 mm/R |

TOOLING

| Number of tool stations | 4 positions | |
|-------------------------|----------------|--|
| THREADING | | |
| Threading, metric | 0.5 mm - 14 mm | |
| Threading, whitworth | 2 TPI - 56 TPI | |

| Tailstock quill diameter | 85 mm |
|-------------------------------|--------|
| Tailstock taper | 5 MT |
| Tailstock quill stroke | 165 mm |
| Tailstock traverse adjustment | 5 mm |

DRIVE CAPACITY

| Motor rating main drive | 11 kW |
|---------------------------|---------|
| Motor rating feed | 0.37 kW |
| Motor rating coolant pump | 0.1 kW |

MEASURES AND WEIGHTS

| Overall dimensions (length x width x height) | 3.47 m x 1.03 m x 1.26 m |
|--|--------------------------|
| Weight | 3050 kg |





Large diameter steady rest included with standard equipment; illustration shows machine with optional equipment



Adjustable stop cams automatically shut off the feed





PRODUCT DETAILS

- The robust design, long-term precision and intuitive operation have been proven in the production environment
- . The heavy machine bed is made of premium Meehanite cast-iron and features wide, ground and hardened dual v-guides
- The heavy one-piece base ensures maximum rigidity and minimum vibration
- For machining of short parts with large diameters, one bed gap can be removed
- The large spindle capacity allows short clamping of long workpieces through the lathe chuck
- The 12-step main spindle gears run in an enclosed oil bath and provide high torque across the entire speed range for powerful chip removal
- All gears and shafts are hardened and ground
- A precision bearing (FAG or SKF) ensures superior concentricity at deep machining depth (0.003 mm 200 mm)
- The top slide swivels and includes a 4-station tool changer system
- Guides on Z axis and Y axis for precise adjustments and smooth operation
- Feed gears and apron are lubricated in an oil bath
- The automatic feed stop system provides 4 switchable positions simplifies machining operations in series productions
- The rapid feed on X and Z axes reduces down times and simplifies operation
- The tailstock easily adjusts for taper turning via a side-mounted control
- The user-friendly control panel features ergonomically placed selector levers for easy operation and operator safety
- The chuck guard is equipped with a heavy-duty swivel mechanism and an electric monitoring system
- A swiveling guard can be mounted at the support to contain chips and coolant splatter
- Lead screw and feed shaft are protected by a reliable cover
- Robust and bright LED lighting technology is integrated in the splatter guard
- Position indicator with glass scales on all axes, fully assembled and provided with covers
- Extensive functions of the position indicator include a wide variety of easy to program additional functions
- All machines include a powerful coolant system

Standard Equipment

- Rapid feed
- 3-axis Posi GF 800 Chuck flange, 275 mm
- Shaft guides
- Thread gauge
- Fixed dead centers
- Steady rest
- Follow Rest
- Reducing sleeve for main spindle
- Change Gears
- 4-station tool holder
- Splatter guard
- Support protective cover
- Chuck protector
- Quick-action tool holder with 6 magazines
- LED Work Lamps
- Operating tools
- Operator manual



KNUTH on YouTubeInformation 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!