

**SKU : 470621**

### TRIAL MACHINE

The TDM S series machines belong to the class of universal lathes. They are equipped with an inverter that produces spindle speeds up to 2,000 rpm. The virtually intuitive operation makes this machine ideal for training applications. It features a large work area, manually shifted spindle drive, and a 4-station feed stop. 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
- Infinitely variable spindle speed
- Adjustable longitudinal stops for automated feed shut-off
- 3-axis position indicator



## TECHNICAL SPECS

### WORKING AREA

Center width	1000 mm
Center height	215 mm
Turning diameter over bed	430 mm
Turning diameter over gap bridge	650 mm
Turning diameter over support	240 mm
Gap bridge length	250 mm
Bed width	300 mm

### TRAVELS

Travel X-axis	245 mm
Travel Z-axis	635 mm
Travel Z1-axis	125 mm

### HEADSTOCK

Speed range, high	235 1/min - 2000 1/min
Speed range, low	20 1/min - 170 1/min
Spindle bore	58 mm
Spindle mount	Camlock D1-6
Spindle taper	6 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
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### THREADING

Threading, metric	0.5 mm - 7 mm
Threading, whithworth	4 TPI - 56 TPI

### TAILSTOCK

Tailstock quill diameter	58 mm
Tailstock taper	4 MT
Tailstock quill stroke	150 mm
Tailstock traverse adjustment	10 mm

### DRIVE CAPACITY

Motor rating main drive	7.5 kW
Motor rating coolant pump	0.1 kW

### MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	2.15 m x 0.81 m x 1.19 m
Weight	1450 kg

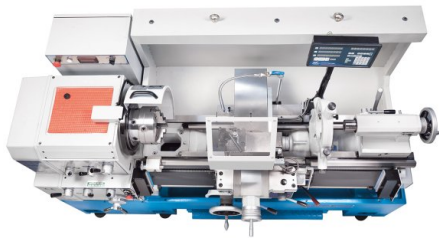
## PRODUCT DETAILS



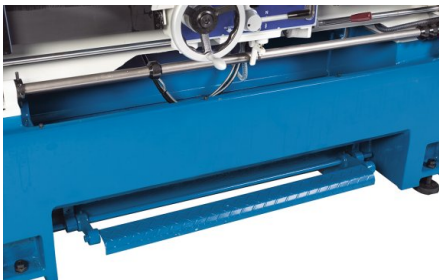
*Rigid rest included with standard equipment; shown with optional equipment*



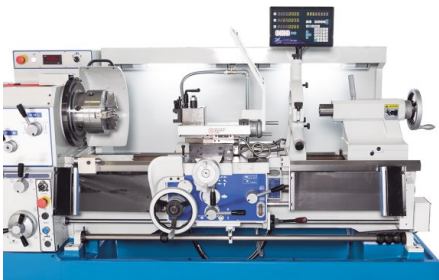
*Yaskawa Inverter for infinitely variable spindle speed*



*Small footprint and powerful cutting capacity; shown with optional equipment*



*Adjustable stop cams automatically shut off the feed*



- The TDM S 430 combines maximum precision with optimum handling for single parts and small batch productions in tool making and device construction. In addition, it fulfills all requirements for training and continued education on an industrial level
- The robust construction, high safety standards, and intuitive operation have been proven in the production environment
- The heavy machine bed is made of Meehanite cast-iron and features wide, ground and hardened dual v-guides
- 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
- FAG/SKF bearings provide 3x support for the main spindle
- All gears and shafts are hardened and ground to ensure quiet operation and low wear
- The two-step main spindle gear runs in an enclosed oil bath
- A powerful, infinitely variable main spindle drive provides high torque for powerful machining
- The selected spindle speed is shown on the easy to read digital display
- The top slide swivels and includes a sturdy 4-station tool holder
- Guides on Z axis and Y axis for precise adjustments and smooth operation
- Feed gears and apron are lubricated in an oil bath
- The included stop system is suitable for series production
- The tailstock easily adjusts for taper turning of shafts 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
- Lead screw and feed shaft are protected by a reliable cover
- A robust LED lighting system provides optimum lighting of the work area without raising the temperature
- A thread gauge allows the user reliable determination of the pitch, and also simplifies machining of multi-lead threads
- 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

- 3-axis Posi GF 800
- Chuck flange, 195 mm
- Thread gauge
- Change Gears
- Fixed dead centers
- Reducing sleeve for main spindle
- 4-station tool holder
- Steady rest
- Follow Rest
- Splatter guard
- Support protective cover
- Chuck protector
- Quick-action tool holder with 6 magazines
- LED work lamp
- Operating tools
- Operator manual