

Conventional Vertical Lathes

VDM 1600 S

SKU : 301393

The VDM series of vertical lathes offers modern, conventional solutions for machining large workpiece diameters and heavy workpiece weights. Their design enables particularly easy and safe loading and unloading. The feed drive is a high-torque servo motor and a powerful hydraulic system clamps the crossbeam. The main drive provides high torque for heavy machining and a side support is available for machining the outer contour. The standard mounted 3-axis position indicator ensures precision.

- Optimum assembly with crane and forklift
- Infinitely variable feed control via servo motor
- Long, sturdy vertical boom
- Side support with boom and independent feed
- Reduction gear drive for high torque



TECHNICAL SPECS

WORKING AREA

| | |
|---------------------------------------|---------|
| Rotating diameter (max.) | 1600 mm |
| Turning diameter of upper tool holder | 1600 mm |
| Turning diameter of side tool holder | 1400 mm |
| Machining height (max.) | 1000 mm |
| Swivel range of upper tool holder | ± 30° |
| Workpiece length (max.) | 1000 mm |
| Workpiece weight (max.) | 5000 kg |

TRAVELS

| | |
|-------------------------------|--------|
| Travel X1 axis, upper support | 915 mm |
| Travel Z1 axis, upper support | 800 mm |
| Travel W-axis, traverse | 650 mm |
| Travel X2 axis, side support | 630 mm |
| Travel Z2 axis, side support | 900 mm |

HEADSTOCK

| | |
|-----------------------|---------------------|
| Speed range | 5 1/min - 160 1/min |
| Spindle torque (max.) | 25000 Nm |
| Rotary table diameter | 1400 mm |

RAPID FEED

| | |
|-----------------------------|-------------|
| Rapid feed of upper support | 1800 mm/min |
| Rapid feed of side support | 1800 mm/min |

FEED

| | |
|-------------------|------------------------|
| Feed speed X-axis | 0.8 mm/min - 86 mm/min |
| Feed speed Z-axis | 0.8 mm/min - 86 mm/min |
| Feed speed W-axis | 440 mm/min |

TOOLING

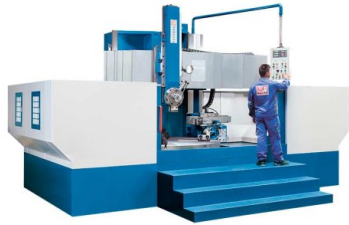
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|------------------|---------------|
| Tool holder | 30 mm x 40 mm |
| Tool weight max. | 50 kg |

DRIVE CAPACITY

| | |
|-------------------------|--------|
| Motor rating main drive | 30 kW |
| Motor rating X-axis | 4.7 kW |
| Motor rating Z-axis | 4.7 kW |

MEASURES AND WEIGHTS

| | |
|--|-----------------------|
| Overall dimensions (length x width x height) | 6.5 m x 4.2 m x 4.4 m |
| Weight | 12500 kg |



Vertical support includes a 5-station tool holder, side support with independent feed for inside and outside turning

PRODUCT DETAILS

- Infinitely variable feed control via servo-motor
- Optimum tooling and easy access for cranes and forklift trucks
- Heavy-duty column with wide, hardened guideways
- Hydraulic clamping of cross traverse
- Rigid guide construction ensures maximum rigidity and accuracy of the vertical boom
- Spindle runs in a high-precision two-row roller bearing and is adjustable
- Reduction gear drive ensures high torque and a speed range of 10 - 315 rpm
- Servo motor technology ensures powerful, infinitely variable feed of the vertical boom

STANDARD EQUIPMENT

3-axis position indicator X.Pos 3.2
 Totally enclosed work space
 Chip conveyor
 Tool holder vertical
 Tool holder horizontal
 Automatic central lubrication
 Work lamp
 Anchor bolts
 Operating tools
 Operator manual

OPTIONAL EQUIPMENT

- Coolant System, SKU : 251430



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