

## Heavy leading and feed spindle lathes, characterised by excellent flexibility, precision and economy. Featuring Siemens inverter Vario drive

### Facts that impress in terms of quality, performance and price

- ▶ Tempered and polished z-axis guideway
- ▶ Spindle collet Camlock DIN ISO 702-2 no. 8
- ▶ Precision slide
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ All guides adjustable using cleats
- ▶ Shafts, gears and main spindle run in oil bath
- ▶ Adjustment range top slide  $\pm 90^\circ$
- ▶ Guaranteed concentricity of spindle nose better than 0.015 mm
- ▶ Gearwheels smooth running, tempered and ground borne on 2 re-adjustable precision taper rollers
- ▶ Clear-cut selector lever for switching the feed speeds
- ▶ Closed design of the quick shift feed gear
- ▶ Gears and shafts tempered and ground, running in oil bath on precision bearings
- ▶ Hand wheels decoupled and approved in line with EN 23125
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Right-handed/left-handed rotation switchable on bed slide, switchable via switching spindle
- ▶ Central lubrication in bed slide
- ▶ Leading spindle cover
- ▶ Emergency stop button, motor circuit breaker, lockable main switch
- ▶ Emergency stop device with foot pedal
- ▶ Safety hand wheels with release function in the X and Z axis
- ▶ Tailstock adjustable  $\pm 10$  mm for turning spheres
- ▶ Tailstock spindle sleeve and handwheel with adjustable fine scaling 0.025 mm
- ▶ Fast, easy adjustment without tools thanks to clamping lever
- ▶ Grey cast iron prism bed with strong ribbing, induction tempered and precision ground
- ▶ Coolant system featuring separate coolant tank, fill level display and oil trap; easy and complete draining and cleaning as per DIN
- ▶ LED machine lamp in chip guard
- ▶ Two speeds
- ▶ Spindle bore/bar passage  $\varnothing 105$  mm
- ▶ Siemens Sinamics frequency inverter / Safety Integrated
- ▶ Electrical system with Siemens components
- ▶ Energy chain for material-friendly cable and hose guiding
- ▶ Scale on thread gauge adjustable
- ▶ Quick change tool holder SWH 7-C
- ▶ 1 tool holder 32 x 150 type D for square chisels 25 mm
- ▶ Digital position display DPA 21
- ▶ Glass scales

### Control Cabinet

- › 24 Volt DC Power Supply
- › All contactors und relays by Siemens or Schneider



### Siemens Inverter SINAMICS G120D

made in EU



More information: „SIEMENS SINAMICS G 120D Frequency inverters“ on page 140

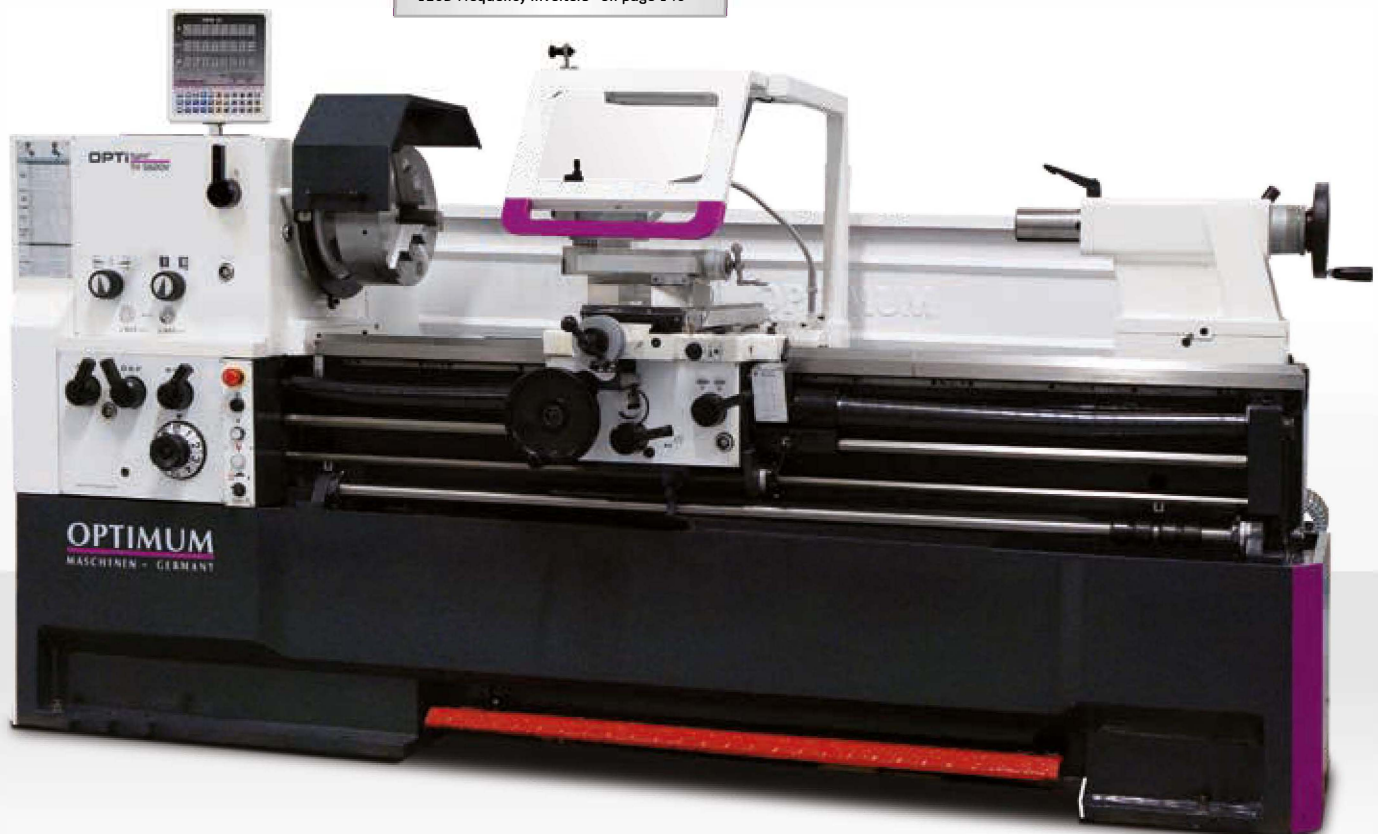


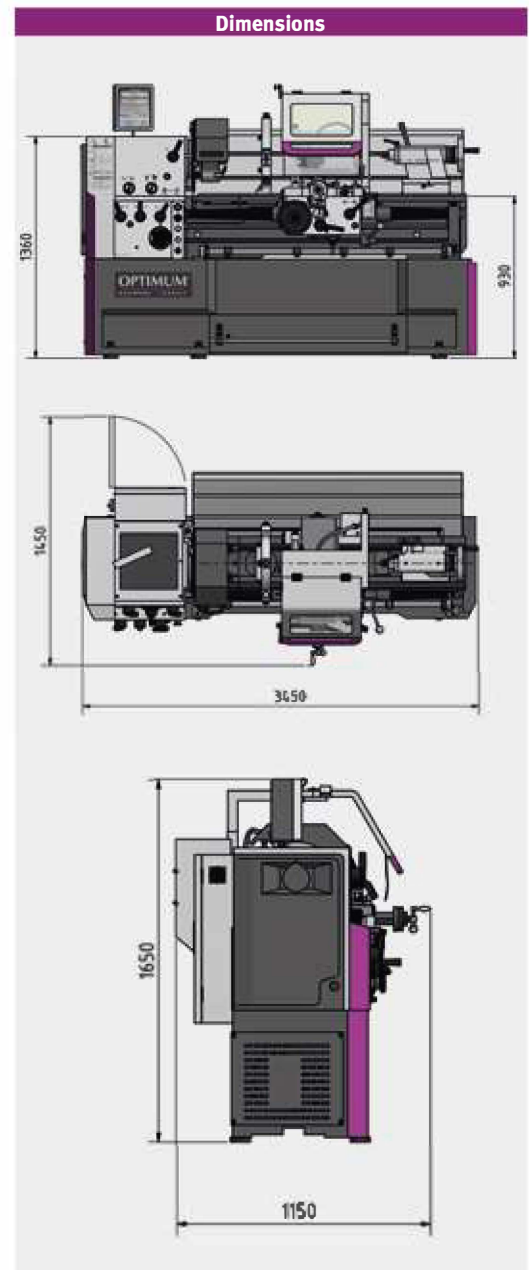
Fig.: TH 5615V - Shown with optional lathe chuck

## Technical specifications, accessories and dimensions

Model	TH 5620V
Article no.	3462175
<b>Technical specifications</b>	
Electrical connection	400 V / 3 Ph ~50 Hz
Total rated value	8.5 kW
Coolant pump motor	125 Watts
<b>Spindle</b>	
Drive motor	7.5 kW
Spindle taper	Ø 113 mm (taper 1:20)
Spindle seat	Camlock DIN ISO 702-2 No. 8
Spindle bore, bar passage diameter	Ø 105 mm
Quick change tool holder	SWH 7-C
<b>Work area</b>	
Centre height	280 mm
Centre width	1 910 mm
Swing Ø over machine bed	560 mm
Swing in the bed bridge	790 mm
Turning length in bed bridge	170 mm
Swing over cross slide	355 mm
Bed width	350 mm
<b>Speed range</b>	
Spindle speed	25 - 1 600 rpm
Number of speeds	2 speeds; electronically controlled
<b>Travel</b>	
Top slide travel	130 mm
Cross slide travel	316 mm
<b>Feeds and pitches</b>	
Longitudinal feed within the range	0.031 - 1.7 mm/U (42)
Cross feed within	0.014 - 0.784 mm/U (42)
Pitch - metric in range	0.1 - 14 mm/U (47)
Pitch - inch in range	112 - 2 turns/inch (60 pitches)
Diametral pitch in range	4 - 112 turns/π (50 pitch)
Modular thread in range	0.1 - 7 mm x π (34 thread)
<b>Tailstock</b>	
Tailstock seat	MT 5
Spindle sleeve diameter / stroke	Ø 75 mm / 180 mm
<b>Dimensions</b>	
Length x width x height	3 340 x 1 150 x 1 650 mm
Weight	2 720 kg

Lathe chuck	Article no.
<b>OPTIMUM lathe chucks</b>	
Three-jaw lathe chuck Ø 315 mm no. 8, centric	3442768
Four-jaw lathe chuck Ø 315 mm no. 8, centric	3442856
Four-jaw lathe chuck Ø 315 mm no. 8, individual	3442888
<b>BISON lathe chucks</b>	
Three-jaw lathe chuck Ø 315 mm no. 8, centric	3450335
Four-jaw lathe chuck Ø 315 mm no. 8, centric	3450385
› Information about lathe chucks from page 184	

Accessories	Article no.
Clamping disc Ø 450 mm no. 8	3442982
Travelling centre MT 5	3440705
BISON co-travelling centre MT 5	3451005
Spare tool holder 40 x 160 type H for round	3384326
Spare tool holder 32 x 150 Type D square	3384308
Lathe tool set HM 32 mm, 5-part (see page 193)	3441674
Position stop with granular adjustment	3444023



**Remember to order  
a lathe chuck**

### Scope of supply

- › Steady rest passageway max. Ø 165 mm
- › Follow rest passageway max. Ø 95 mm
- › LED machine lamp
- › Reduction sleeve Ø 113 mm / MT 5
- › One fixed and one alloyed centre MT 5
- › Quick change tool holder 7-C
- › Tool holder 32 x 150 type D for square chisels 25 mm
- › Thread gauge
- › Replaceable gear set
- › Gear wheels for threading gauge (metric)
- › Machine initially filled with premium grade oil
- › Operating tool

**Heavy leading and feed spindle lathes, characterised by excellent flexibility, precision and economy.**  
With DPA 21 digital position display and quick change tool holder.

**Facts that impress in terms of quality, performance and price**

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- ▶ Spindle collet Camlock DIN ISO 702-2 no. 8
- ▶ Precision slide
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ All guides adjustable using cleats
- ▶ Gears and shafts running in oil bath
- ▶ Adjustment range top slide  $\pm 90^\circ$
- ▶ Guaranteed concentricity of spindle nose better than 0.015 mm
- ▶ Main spindle runs in oil bath
- ▶ Gearwheels smooth running, tempered and ground borne on 2 re-adjustable precision taper rollers
- ▶ Clear-cut selector lever for switching the feed speeds
- ▶ Closed design of the quick shift feed gear
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- ▶ Hand wheels decoupled and approved in line with EN 23125
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Right-handed/left-handed rotation switchable on bed slide, switchable via switching spindle
- ▶ Central lubrication in bed slide
- ▶ Leading spindle cover
- ▶ emergency stop button, motor circuit breaker, lockable main switch
- ▶ Emergency stop device with foot pedal
- ▶ Safety hand wheels with release function in the X and Z axis
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- ▶ Grey cast iron prism bed with strong ribbing, induction tempered and precision ground
- ▶ Coolant system featuring separate coolant tank, fill level display and oil trap; easy and complete draining and cleaning as per DIN
- ▶ LED machine lamp in chip guard
- ▶ Electrical system with Siemens components
- ▶ Energy chain for material-friendly cable and hose guiding
- ▶ Scale on thread gauge adjustable
- ▶ Quick change tool holder SWH 7-C
- ▶ 1 tool holder 32 x 150 type D for square chisels 25 mm

**Control Cabinet**

- › 24 Volt DC Power Supply
- › All contactors und relays by Siemens or Schneider

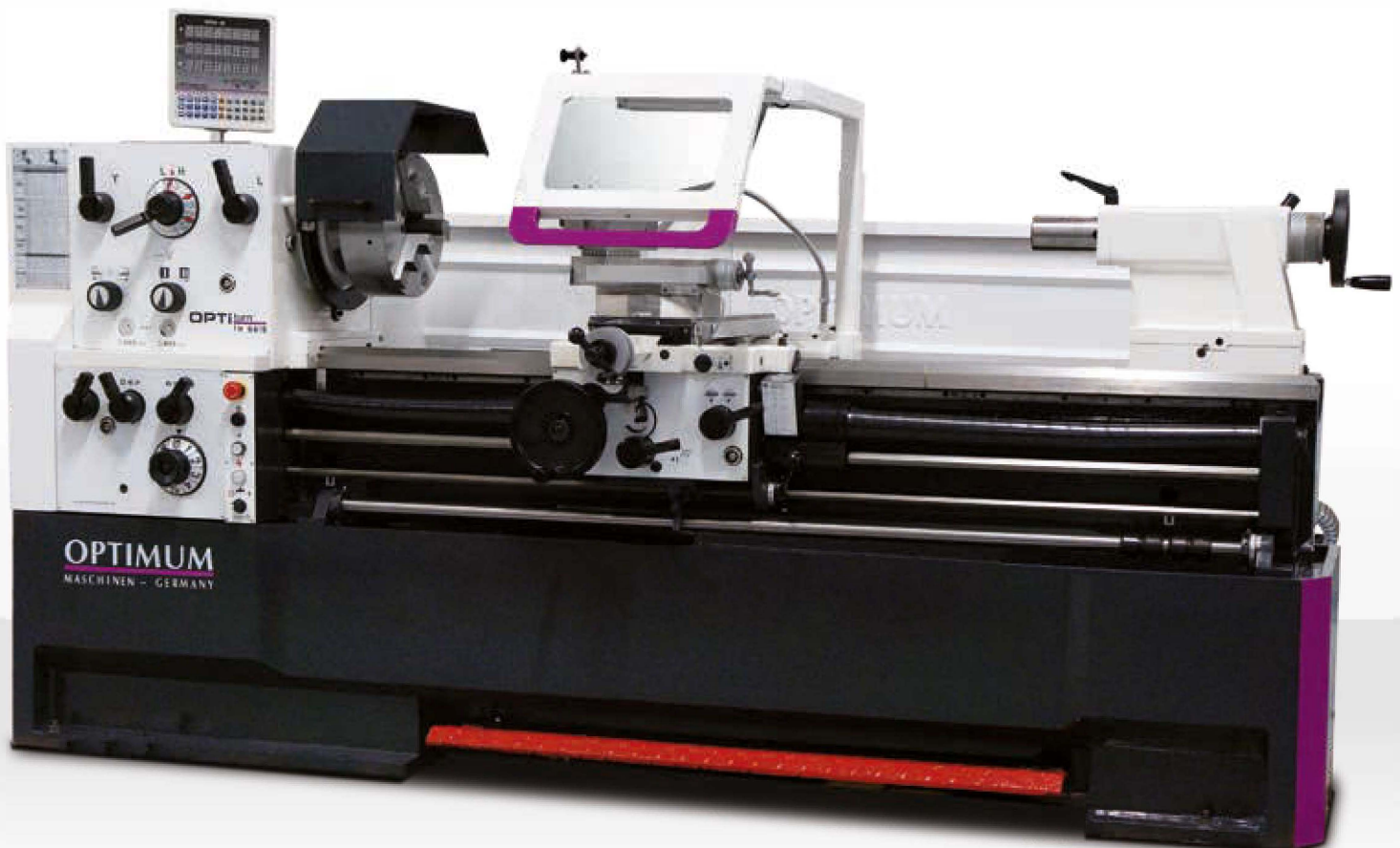


Fig.: TH 5615D - Shown with optional lathe chuck



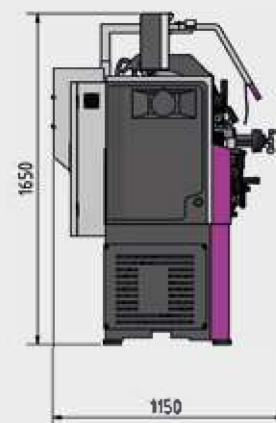
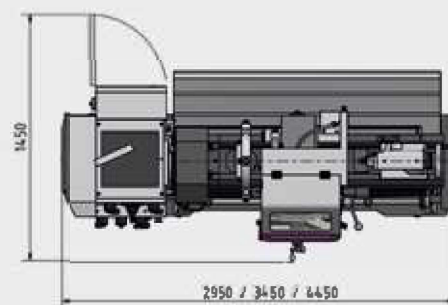
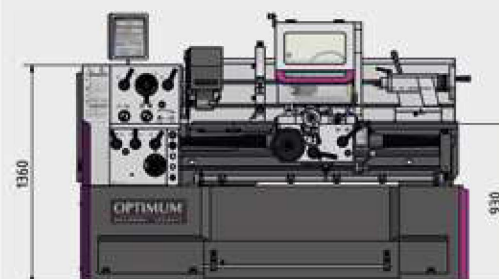
## Technical specifications, accessories and dimensions

Model	TH 5615D	TH 5620D	TH 5630D
Article no.	3462160	3462170	3462180
Technical specifications			
Electrical connection	400 V / 3 Ph ~50 Hz		
Total rated value	8.5 kW		
Coolant pump motor	125 Watts		
Spindle			
Drive motor	7.5 kW		
Spindle taper	MT 7		
Spindle seat	Camlock DIN ISO 702-2 No. 8		
Spindle bore, bar passage diameter	Ø 80 mm		
Quick change tool holder height	SWH 7-C		
Work area			
Centre height	280 mm		
Centre width	1 420 mm	1 910 mm	2 910 mm
Swing Ø over machine bed	560 mm		
Swing in the bed bridge	790 mm		
Turning length in bed bridge	170 mm		
Swing over cross slide	355 mm		
Bed width	350 mm		
Speed range			
Spindle speed	25 - 1 600 rpm		
Number of speeds	12 speeds		
Travel			
Top slide travel	130 mm		
Cross slide travel	316 mm		
Feeds and pitches			
Longitudinal feed within the range	0.059 - 1.646 mm/U (35)		
Cross feed within	0.020 - 0.573 mm/U (35)		
Pitch - metric in range	0.2 - 14 mm/U (47)		
Pitch - inch in range	112 - 2 turns/inch (60 pitches)		
Diametral pitch in range	4 - 112 turns/π (50 pitch)		
Modular thread in range	0.1 - 7 mm x π (34 thread)		
Tailstock			
Tailstock seat	MT 5		
Spindle sleeve diameter / stroke	Ø 75 mm / 180 mm		
Dimensions			
Length	2 950 mm	3 450 mm	4 450 mm
width x height	1 150 x 1 650 mm		
Weight	2 300 kg	2 720 kg	3 000 kg

Lathe chuck	Art no.
<b>OPTIMUM lathe chucks</b>	
Three-jaw lathe chuck Ø 315 mm no. 8, centric	3442768
Four-jaw lathe chuck Ø 315 mm no. 8, centric	3442856
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Four-jaw lathe chuck Ø 315 mm no. 8, centric	3450385
<b>Accessories</b>	
Clamping disc Ø 450 mm no. 8	3442982
Travelling centre MT 5	3440705
BISON co-travelling centre MT 5	3451005
Spare tool holder 40 x 160 type H for round	3384326
Spare tool holder 32 x 150 Type D square	3384308
Lathe tool set HM 32 mm, 5-part (see page 193)	3441674
Vibration damping machine base SE3 (6 pcs. required)	3381018
Position stop with granular adjustment	3444022

\*Important information on transport surcharges and „General notes on operating our machines“ on page 253

### Dimensions



**Remember to order  
a lathe chuck**

### Scope of supply

- › Steady rest passageway max. Ø 165 mm
- › Follow rest passageway max. Ø 95 mm
- › LED machine lamp
- › Reduction sleeve MT 7 / MT 5
- › One fixed and one alloyed centre MT 5
- › Quick change tool holder 7-C
- › Tool holder 32 x 150 type D for square chisels 25 mm
- › Thread gauge
- › Replaceable gear set
- › Gear wheels for threading gauge (metric)
- › Machine initially filled with premium grade oil
- › Operating tool