

Precision feed and lead spindle lathe – unique in terms of precision and operation with Siemens inverter Vario drive

Facts that impress in terms of quality, performance and price

- ▶ Tempered and polished z-axis guideway
- ▶ Precision slide
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ Quadruple tool holder
- ▶ 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
- ▶ Quick-switching feed gear with closed design, 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
- ▶ Mechanical longitudinal feed switch-off of bed slide with four configurable eccentrics
- ▶ Leading spindle cover
- ▶ Emergency stop device with foot pedal
- ▶ Safety hand wheels with release function in the X and Z axis
- ▶ Scale on thread gauge adjustable
- ▶ Central lubrication in bed slide
- ▶ Tailstock adjustable ± 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
- ▶ Generously dimensioned chip guard with integrated LED machine lamp
- ▶ Quick change tool holder SWH 5-B
- ▶ Tool holder 25 x 120 type D for square chisels 20 mm
- ▶ Digital position display DPA 21 with speed display
- ▶ Lines routed in energy chain

Control Cabinet

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



Siemens Inverter SINAMICS G120D

made in EU



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



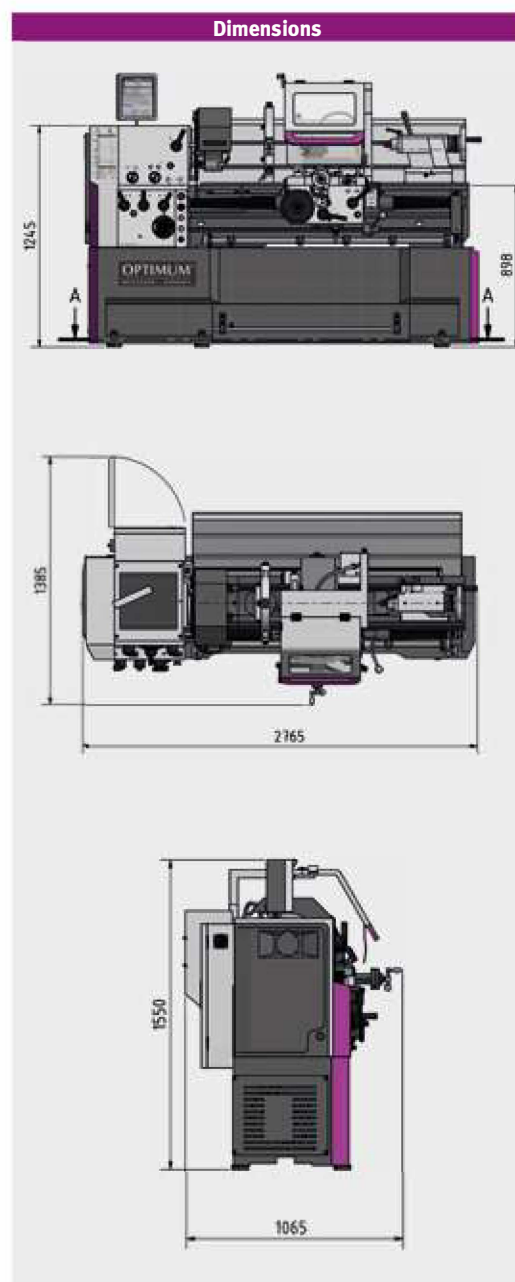
Fig.: TH 4615V - Shown with optional lathe chuck

Technical specifications, accessories and dimensions

Model	TH 4615V
Article no.	3462125
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	SWH 5-B
Work area	
Centre height	230 mm
Centre width	1 560 mm
Swing Ø over machine bed	460 mm
Swing in the bed bridge	690 mm
Turning length in bed bridge	240 mm
Swing over cross slide	270 mm
Bed width	300 mm
Speed range	
Spindle speed	30 - 2 000 rpm
Number of speeds	Electronically controlled
Travel	
Top slide travel	125 mm
Cross slide travel	285 mm
Feeds and pitches	
Longitudinal feed within the range	0.031 - 1.7 mm/rev (42 feeds)
Cross feed within	0.014 - 0.784 mm/rev (42 feeds)
Pitch - metric in range	0.1 - 14 mm/rev (41 pitches)
Pitch - inch in range	112 - 2 turns/inch (41 pitches)
Diametral pitch in range	4 - 112 turns/π (50 thread)
Modular thread in range	0.1 - 7 mm x π (34 thread)
Tailstock	
Tailstock seat	MT 4
Spindle sleeve diameter / stroke	Ø 60 mm / 130 mm
Dimensions	
Length x width x height	2 765 x 1 065 x 1 550 mm
Weight	2 020 kg

Lathe chuck	Art no.
OPTIMUM lathe chucks	
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
BISON lathe chucks	
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	Art 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	3444022
› More accessories for lathes from page 188	



**Remember to order
a lathe chuck**

Scope of supply

- › Steady rest passageway max. Ø 160 mm
- › Follow rest passageway max. Ø 100 mm
- › LED machine lamp
- › Reduction sleeve MT 7 / MT 4
- › Fixed centre MT 4
- › Quick change tool holder 5-B
- › Tool holder 25 x 120 type D for square chisels 20 mm
- › Thread gauge
- › Replaceable gear set
- › Machine initially filled with premium grade oil
- › Operating tool

Precision leading and feed spindle lathes – unique in terms of precision and control.
With DPA 21 digital position display and quick change tool holder.

Facts that impress in terms of quality, performance and price

- ▶ Tempered and polished z-axis guideway
- ▶ Precision slide
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ Quadruple tool holder
- ▶ 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
- ▶ Quick-switching feed gear with closed design, 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
- ▶ Mechanical longitudinal feed switch-off of bed slide with four configurable eccentrics
- ▶ Leading spindle cover
- ▶ Emergency stop device with foot pedal
- ▶ Safety hand wheels with release function in the X and Z axis
- ▶ Scale on thread gauge adjustable
- ▶ Central lubrication in bed slide
- ▶ Tailstock adjustable ± 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
- ▶ Generously dimensioned chip guard with integrated LED machine lamp
- ▶ Quick change tool holder SWH 5-B
- ▶ Tool holder 25 x 120 type D for square chisels 250 mm
- ▶ Digital position display DPA 21 with speed display

As of TH 4615:

- ▶ Lines routed in energy chain

Control Cabinet

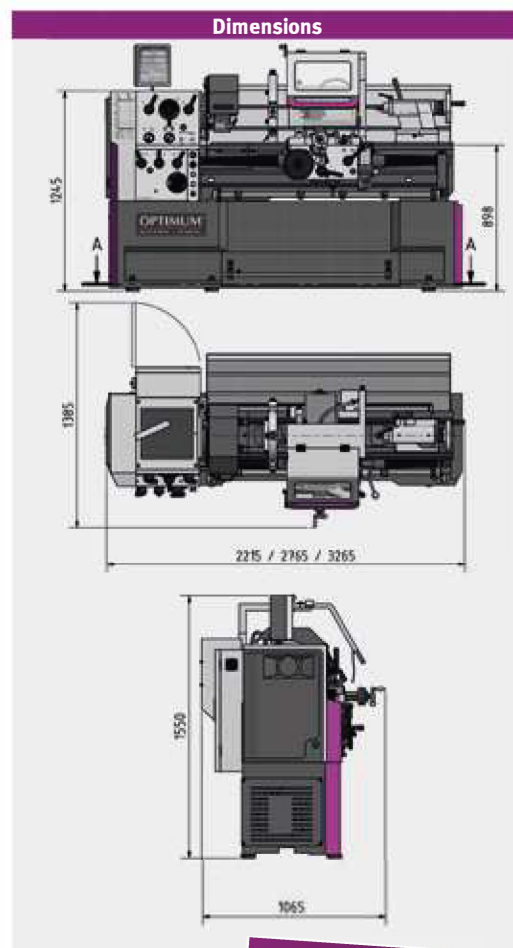
- > 24 Volt DC Power Supply
- > All contactors and relays by Siemens or Schneider



Fig.: TH 4615D - Shown with optional lathe chuck

Technical specifications, accessories and dimensions

Model	TH 4610D	TH 4615D	TH 4620D
Article no.	3462110	3462120	3462130
Technical specifications			
Electrical connection	400 V / 3 Ph ~50 Hz		
Total rated value	5.8 kW		
Coolant pump motor	125 Watts		
Spindle			
Drive motor	5.5 kW		
Spindle taper	MT 6		
Spindle seat	Camlock DIN ISO 702-2 No. 6		
Spindle bore, bar passage diameter	Ø 58 mm		
Quick change tool holder	SWH 5-B		
Work area			
Centre height	230 mm		
Centre width	1 060 mm	1 560 mm	2 060 mm
Swing Ø over machine bed	460 mm		
Swing in the bed bridge	690 mm		
Turning length in bed bridge	240 mm		
Swing over cross slide	270 mm		
Bed width	300 mm		
Speed range			
Spindle speed	25 - 2 000 rpm		
Number of speeds	12 speeds		
Travel			
Top slide travel	125 mm		
Cross slide travel	285 mm		
Feeds and pitches			
Longitudinal feed within the range	0.031 - 1.7 mm/rev (42 feeds)		
Cross feed within	0.014 - 0.784 mm/rev (42 feeds)		
Pitch - metric in range	0.1 - 14 mm/rev (41 pitches)		
Pitch - inch in range	112 - 2 turns/inch (41 pitches)		
Diametral pitch in range	4 - 112 turns/π (50 thread)		
Modular thread in range	0.1 - 7 mm x π (34 thread)		
Tailstock			
Tailstock seat	MT 4		
Spindle sleeve diameter / stroke	Ø 60 mm / 130 mm		
Dimensions			
Length	2 215 mm	2 765 mm	3 265 mm
width x height	1 065 x 1 550 mm		
Weight	1 720 kg	1 977 kg	2 400 kg



**Remember to order
a lathe chuck**

Scope of supply

- › Steady rest passageway max. Ø 160 mm
- › Follow rest passageway max. Ø 100 mm
- › LED machine lamp
- › Reduction sleeve MT 6 / MT 4
- › One fixed and one alloyed centre MT 4
- › Quick change tool holder 5-B
- › Tool holder 25 x 120 type D for square chisels 20 mm
- › Thread gauge
- › Replaceable gear set
- › Gear wheels for threading gauge (metric)
- › Machine initially filled with premium grade oil
- › Operating tool

Accessories	Art no.
Spare tool holder 25 x 120 Type D for square	3384306
Spare tool holder 32 x 130 type H for round chisels	3384324
Lathe tool set HM 20 mm, 5-part (see page 192)	3441670
Lathe tool set HM 20 mm, 5-part Extension kit (see page 192)	3441617
Clamping disc Ø 350 mm no. 6	3442980
Universal collet chuck device 5C	3441507
Collet kit 3 - 25 mm, 5C, 17-part	3441509
Vibration damping base SE 3 (6 pcs. needed)	3381018
Collet chuck 5C - Camlock no. 6	3441556
Position stop with granular adjustment	3444022
› More accessories for lathes from page 188	

Lathe chuck	Art no.
OPTIMUM lathe chucks	
Three-jaw lathe chuck Ø 250, no. 6, centre clamping	3442765
Four-jaw lathe chuck Ø 250 mm no. 6, centre clamping	3442852
Four-jaw lathe chuck Ø 250 mm no. 6, individual clamping	3442884
BISON lathe chucks	
Three-jaw lathe chuck Ø 250, no. 6, centre clamping	3450330
Four-jaw lathe chuck Ø 250 mm no. 6, centre clamping	3450380
› Information about lathe chucks from page 184	