

LATHES



Fully equipped leading and feed spindle lathes.

TH 3309D / TH 3309V with digital position display DPA 21, TH 3309V with continuously variable speed control

Facts that impress in terms of quality, performance and price

- ▶ Tempered and polished z-axis guideway
- ▶ Prism bed with strong ribbing, induction tempered and precision ground
- ▶ Spindle collet Camlock DIN ISO 702-2 no. 4
- ▶ Precision slide
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ Hand wheels decoupled and approved in line with EN 23125
- ▶ Safety hand wheels with release function in the X and Z axis
- ▶ All guides adjustable using cleats
- ▶ Main spindle runs in oil bath
- ▶ Gearwheels smooth running, tempered and ground
- ▶ Adjustment range top slide $\pm 90^\circ$
- ▶ LED machine lamp integrated in chip guard
- ▶ Guaranteed concentricity of spindle nose better than 0.015 mm
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ DC 24-Volt electric system with two-channel safety circuit as per EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Clockwise/anti-clockwise rotation switchable on bed slide
- ▶ Leading spindle cover
- ▶ Tailstock adjustable ± 10 mm for turning spheres
- ▶ Tailstock spindle sleeve and handwheel with adjustable fine scaling 0.02 mm
- ▶ Fast, easy adjustment without tools thanks to clamping lever
- ▶ Machine chassis with tool compartment on right-hand side (left side with 3 covers (no compartments))
- ▶ Pull-out chip drawer with guide rails
- ▶ Lockable main switch
- ▶ Quadruple tool holder
- ▶ Emergency stop device with foot pedal
- ▶ Chuck protection approved in line with EN 23125
- ▶ Interchangeable gears in standard scope of delivery

TH 3309V SIEMENS inverter



SINAMICS G110M

- › Premium quality
- › Highest energy efficiency
- › Speed change easily adjustable via potentiometer

TH 3309D / TH 3309V Dig. Position display DPA 21



- › User-friendly membrane keyboard, splash water protected, sealed and dazzle free



Fig.: TH 3309D - Shown with optional lathe chuck



Technical specifications, accessories and dimensions

Model	TH 3309	TH 3309 D	TH 3309 V
Article no.	3402030	3402040	3402046
Output			
Electrical connection	400 V / 3 Ph ~50 Hz		
Drive motor	1.5 kW		
Spindle			
Spindle taper	MT5		
Spindle holder	Camlock DIN ISO 702-2 No. 4		
Spindle bore, bar passage diameter	Ø 38 mm		
Quadruple tool holder mounting height	16 mm		
Work area			
Centre height	165 mm		
Centre width	830 mm		
Swing diameter over machine bed*	330 mm		
Swing over cross slide	208 mm		
Bed width	181 mm		
Speed range			
Spindle speed	70 - 2 000 rpm	15 - 2 500 rpm	
Number of speeds	16 speeds	8 speed, electrical-ly controlled	
Travel			
Top slide travel	98 mm		
Cross slide travel	164 mm		
Feeds and pitches			
Longitudinal feed within the range	0.052 - 1.392 mm/rev (32 feeds)		
Cross feed within	0.014 - 0.38 mm/rev (32 feeds)		
Pitch - metric in range	0.4 - 7 mm/rev (26 pitches)		
Pitch - inch in range	56 - 4 hel./inch		
Tailstock			
Tailstock seat	MT3		
Tailstock- sleeve diameter/sleeve travel	Ø 32 mm/110 mm		
Dimensions and weight			
Length x width x height	1 685 x 745 x 1 320 (DPA 1 590) mm		
Net weight	510 kg	512 kg	510 kg

Lathe chuck	Article no.
OPTIMUM three-jaw lathe chuck Ø 200 mm no. 4, centric	3442762
OPTIMUM Four-jaw lathe chuck Ø 200 mm no. 4, centric	3442843
OPTIMUM Four-jaw lathe chuck Ø 200 mm no. 4, individual	3442879
BISON three-jaw lathe chuck Ø 160 mm no. 4, centric	3450305
BISON three-jaw lathe chuck Ø 200 mm no. 4, centric	3450310
BISON Four-jaw lathe chuck Ø 160 mm no. 4, centric	3450355
BISON Four-jaw lathe chuck Ø 200 mm no. 4, centric	3450360

› Information on lathe chucks from page 218

Accessories	Article no.
Vibration-damping machine base SE55 (8 units required)	3352981
Quick change tool holder SWH 3-E	3384303
Factory assembly SWH 3-E	9000400
Lathe tool set 16 mm, 11-part	3441604
Lathe tool set 16 mm, 5-part	3441668
Lathe tool set 16 mm, 5-part "Made in Germany"	3441216
Lathe tool set 16 mm, 5-part	3441610

› For information on lathe tool sets see page 224

› More accessories for lathes from page 214

*For important details on operating machines with frequency converters, general instructions and explanations of packaging surcharges, data on TPFR, see page 323

**The lathe (frequency converter) complies with the DIN EN 55011 standard: class C2

Dimensions

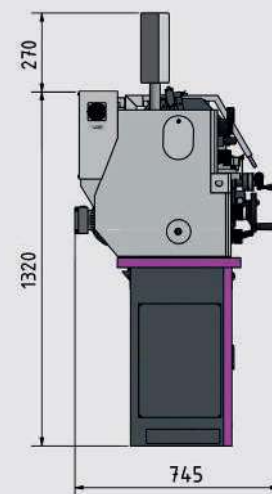
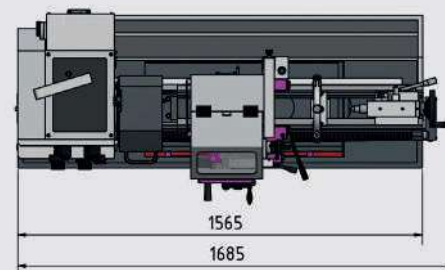
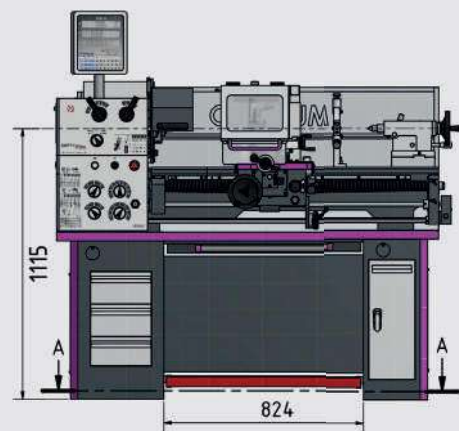


Fig.: TH 3309D

**Remember to order
a lathe chuck**

Contents of package

- › Steady rest passageway Ø 6 - Ø 50 mm
- › Follow rest passageway Ø 8 - Ø 30 mm
- › LED machine lamp
- › Reduction sleeve MT5 - MT3
- › Two fixed centres MT3
- › Quadruplicate tool holder 16 mm
- › Interchangeable gear set
- › Machine mobile base
- › Machine initially filled with premium grade oil
- › Operating tool

Feed and lead spindle lathes impress with their rugged design and simple handling. TM 3310D with DPA 31 digital position display

Facts that impress in terms of quality, performance and price

- ▶ Tempered and polished z-axis guideway
- ▶ Guaranteed concentricity of spindle nose better than 0.015 mm
- ▶ DC 24 Volt electrical system
- ▶ Free moving feed gear with rounded gear wheels running in an oil bath
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ Safety hand wheels with release function acc. to EN23125 in the X and Z axis
- ▶ Clockwise/anti-clockwise rotation switchable on bed slide
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch rod on the bed slide for selection of longitudinal or cross feed
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Tempered main spindle borne on adjustable, precision taper roller bearings
- ▶ Machine chassis with rugged steel design
- ▶ Motor circuit switch
- ▶ Main motor electrically braked
- ▶ Quadruple tool holder
- ▶ Emergency stop button right and left
- ▶ Three-jaw lathe chuck included in standard scope of delivery

TM 3310D - Digital position display DPA 31

Display:

- › User-friendly membrane keyboard, splash water protected, dazzle free and easy to clean

NEW



Measuring system:

- › Magnetic belt on X and Z0 axis
- › Scale on Z axis
- › The electronic measuring components of the scale are protected and sealed in the housing
- › Provides accurate and reliable measurement results even if the measuring system is operated in oil or coolant
- › Tolerant towards vibration and magnetic interference

User-friendly membrane keyboard



- › Lockable main switch
- › Control on
- › Direct run spindle
- › Emergency stop push button

Spindle holder



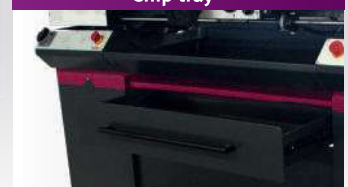
- › The spindle is designed as Camlock DIN ISO 702-2 no.4 holding fixture.

LED machine lamp



- › Dazzle-free, integrated into chip guard

Chip tray



- › Pull-out chip drawer with guide rails



Fig.: TM 3310D



Technical specifications, accessories and dimensions

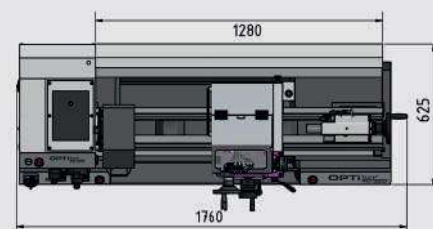
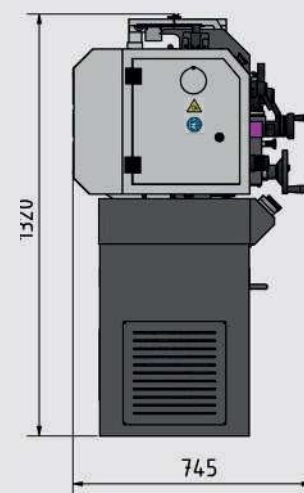
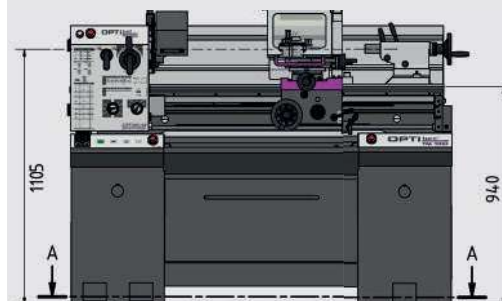
Model	TM 3310
Article no.	3403020
Model	TM 3310D
Article no.	3403025
Output	
Electrical connection	400 V / 3 Ph ~50 Hz
Spindle	
Drive motor	1.5 kW
Spindle taper	MT5
Spindle holder	Camlock DIN ISO 702-2 No. 4
Spindle bore, bar passage diameter	Ø 38 mm
Quadruple tool holder mounting height	max. 16 mm
Work areas	
Centre height	165 mm
Centre width	1 000 mm
Swing diameter over machine bed*	330 mm
Swing over cross slide	216 mm
Speed range	
Spindle speeds	65 - 2,000 rpm
Number of speeds	9 speeds
Travel	
Top slide travel	90 mm
Cross slide travel	168 mm
Feed and pitches	
Longitudinal feed within the range	0.02 - 0.4 mm/rev (24 feeds)
Cross feed within	0.01 - 0.2 mm/rev (32 feeds)
Pitch - metric in range	0.4 - 10 mm/rev (29 pitches)
Pitch - inch in range	56 - 4 hel./inch
Tailstock	
Tailstock seat	MT3
Spindle sleeve diameter / stroke	Ø 38 mm / 100 mm
Dimensions and weight	
Length x width x height	1 760 x 745 x 1 320 (DPA 1 590) mm
Net weight	469 kg/471 kg

Lathe chuck Ø 160 mm No. 4	Article no.
OPTIMUM Four-jaw lathe chuck centric clamping	3442840
BISON Four-jaw lathe chuck centre clamping	3450355
› Information on lathe chucks from page 218	

Accessories	Article no.
Follow rest passageway Ø 10 - Ø 70 mm	3441469
Steady rest passageway Ø 10 - Ø 70 mm	3441470
Vibration-damping machine base SE55 (6 units required)	3352981
Quick change tool holder SWH 3-E	3384303
Factory assembly SWH 3-E	9000400
Lathe tool set 16 mm, 11-part	3441604
Lathe tool set 16 mm, 5-part	3441668
Lathe tool set 16 mm, 5-part "Made in Germany"	3441216
Lathe tool set 16 mm, 5-part	3441610
› For information on lathe tool sets see page 224	
› More accessories for lathes from page 214	

*For important details on operating machines with frequency converters, general instructions and explanations of packaging surcharges, data on TPFR, see page 323

Dimensions



Our recommendation

cleancraft
flexCAT 378 EOT-PRO
Article no. 7003380



Contents of package

- › Three-jaw lathe chuck Ø 160 mm, no. 4
- › LED machine lamp
- › Reduction sleeve MT5 - MT3
- › Non-travelling centre MT3
- › Quadruplicate tool holder 16 mm
- › Interchangeable gear set
- › Machine mobile base
- › Machine initially filled with premium grade oil
- › Operating tool

Preface

Drilling

Milling

Turning

Measuring

Saws

Grinding

Polishing

Lighting

Fully equipped lathes for mechanics.

TH 3610D with DPA 21 digital position display

Facts that impress in terms of quality, performance and price

- ▶ Tempered and polished z-axis guideway
- ▶ Prism bed with strong ribbing, induction tempered and precision ground
- ▶ Spindle collet Camlock DIN ISO 702-2 no. 5
- ▶ Precision slide
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ All guides adjustable using cleats
- ▶ Main spindle runs in oil bath
- ▶ Gearwheels smooth running, tempered and ground
- ▶ Guaranteed concentricity of spindle nose better than 0.015 mm
- ▶ Gears and shafts tempered and ground, running in oil bath on precision bearings
- ▶ Hand wheels decoupled and approved in line with EN 23125
- ▶ Safety hand wheels with release function in the X and Z axis
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Motor circuit breaker, lockable main switch
- ▶ Clockwise/anti-clockwise rotation switchable on bed slide
- ▶ Leading spindle cover
- ▶ 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
- ▶ Machine chassis with tool compartments on both sides
- ▶ Pull-out chip drawer with guide rails
- ▶ Quadruple tool holder
- ▶ Emergency stop device with foot pedal
- ▶ LED machine lamp integrated in chip guard

Control cabinet



- > 24 Volt DC power supply
- > All contactors und relays by **SIEMENS** or **Schneider**

TH 3610D Dig. Position display DPA 21



- > User-friendly membrane keyboard, splash water protected, sealed and dazzle free
- > Glass scales



Fig.: TH 3610D - Shown with optional lathe chuck



Technical specifications, accessories and dimensions

Model	TH 3610	TH 3610D
article no.	3402050	3402060
Output		
Electrical connection	400 V / 3 Ph ~50 Hz	
Drive motor	1.5 kW	
Spindle		
Spindle taper	MT6	
Spindle holder	Camlock DIN ISO 702-2 No. 5	
Spindle bore, bar passage diameter	Ø 52 mm	
Quadruple tool holder mounting height	max. 16 mm	
Work area		
Centre height	180 mm	
Centre width	980 mm	
Swing diameter over machine bed*	356 mm	
Swing over cross slide	225 mm	
Bed width	187 mm	
Speed range		
Spindle speed	70 - 2 000 rpm	
Number of speeds	8 speeds	
Travel		
Top slide travel	100 mm	
Cross slide travel	170 mm	
Feeds and pitches		
Longitudinal feed within the range	0.052 - 1.392 mm/rev (32 feeds)	
Cross feed within	0.014 - 0.38 mm/rev (32 feeds)	
Pitch - metric in range	0.4 - 7 mm/rev (26 pitches)	
Pitch - inch in range	56 - 4 turns/inch (34 pitches)	
Tailstock		
Tailstock seat	MT3	
Tailstock spindle sleeve diameter / stroke	Ø 42 mm / 120 mm	
Dimensions and weight		
Length x width x height	1 930 x 725 x 1 350 / 1 620 mm	
Net weight	570 kg	572 kg

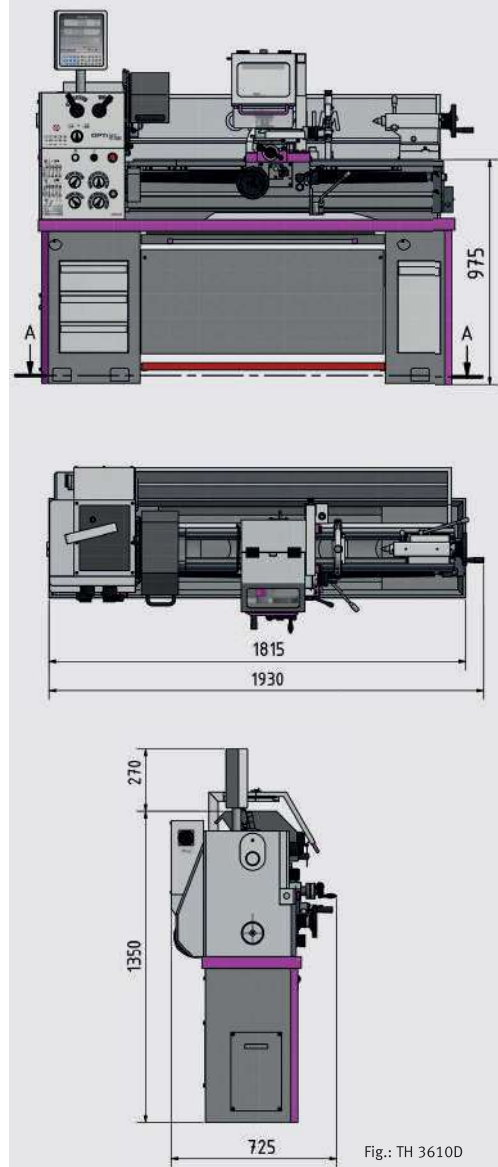
Lathe chuck	Article no.
OPTIMUM Four-jaw lathe chuck Ø 200 mm no. 5, centric	3442845
OPTIMUM Four-jaw lathe chuck Ø 200 mm no. 5, individual	3442880
BISON three-jaw lathe chuck Ø 200 mm no. 5, centric	3450315
BISON Four-jaw lathe chuck Ø 200 mm no. 5, centric	3450365

› Information on lathe chucks from page 218

Accessories	Article no.
Quick change tool holder SWH 3-E	3384303
Factory assembly SWH 3-E	9000400
Spare tool holder 20 x 100 type D for square chisels	3384304
Spare tool holder 30 x 100 type H for round chisels	3384322
Lathe tool set 16 mm, 11-part	3441604
Lathe tool set 16 mm, 5-part	3441668
Lathe tool set 16 mm, 5-part	3441610
› For information on lathe tool sets see page 224	
Collet chuck 5C	3441555
Vibration-damping machine base SE55 (6 units required)	3352981
Position stop with granular adjustment	3441523
› More accessories for lathes from page 214	

*For important details on operating machines with frequency converters, general instructions and explanations of packaging surcharges, data on TPFR, see page 323

Dimensions



**Remember to order
a lathe chuck**

Contents of package

- › Steady rest passageway Ø 10 - Ø 70 mm
- › Follow rest passageway Ø 10 - Ø 60 mm
- › LED machine lamp
- › Reduction sleeve MT6 - MT3
- › Non-travelling centre MT3
- › Fixed, but temperature resistant centre MT3
- › Quadruplicate tool holder 16 mm
- › Interchangeable gear set
- › Machine mobile base
- › Machine initially filled with premium grade oil
- › Operating tool

Preface

Drilling

Milling

Turning

Measuring

Saws

Grinding

Polishing

Lighting

Fully equipped lathes for mechanics. Impressive precision and performance

TH 4010D with digital position display DPA 21, TH 4010V additionally with **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. 5
- ▶ Precision slide
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ All guides adjustable using cleats
- ▶ 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
- ▶ Gears and shafts tempered and ground, running in oil bath on precision bearings
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ DC 24 Volt electrical system
- ▶ Lockable main switch
- ▶ Clockwise/anti-clockwise rotation switchable on bed slide
- ▶ Safety hand wheels with release function acc. to EN23125 in the X and Z axis
- ▶ 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
- ▶ Pull-out chip drawer with guide rails
- ▶ Emergency stop device with foot pedal
- ▶ Machine base with 3 covers (no compartments)
- ▶ Coolant system
- ▶ LED machine lamp in chip guard

TH 4010 / TH 4010D:

- ▶ Motor circuit switch

TH 4010V:

- ▶ Rev counter
- ▶ Speed monitoring in line with Machinery Directive
- ▶ Two speeds
- ▶ Quick change tool holder 3-E
- ▶ Tool holder 20 x 100 type D for square chisels



Fig.: TH 4010D - Shown with optional lathe chuck

TH 4010V SIEMENS inverter

Made in EU



- ▶ **SINAMICS G120D**
- ▶ More information: „Siemens SINAMICS G 120D Frequency inverters“ on page 174
- ▶ Safety Integrated

TH 4010D / TH 4010V Dig. Position display DPA 21



- ▶ User-friendly membrane keyboard, splash water protected, sealed and dazzle free



Technical specifications, accessories and dimensions

Model	TH 4010	
article no.	3402070	
Model	TH 4010D	TH 4010V**
article no.	3402080	3402085

Output			
Electrical connection	400 V / 3 Ph ~50 Hz		
Drive motor	1.5 / 2.4 kW		4 kW
Spindle			
Spindle taper	MT6		
Spindle holder	Camlock DIN ISO 702-2 No. 5		
Spindle bore, bar passage diameter	Ø 52 mm		
Quadruple tool holder mounting height	max. 16 mm		
Technical data			
Centre height	205 mm		
Centre width	1 000 mm		
Swing diameter over machine bed*	410 mm		
Swing over cross slide	255 mm		
Bed width	206 mm		
Swing without bed bridge	540 mm		
Turning length in bed bridge	165 mm		
Speed range			
Spindle speed	45 - 1 800 rpm	30 - 3 000 rpm	
Speeds	16 speeds	2 speeds elec. control	
Travel			
Top slide travel	100 mm		
Cross slide travel	195 mm		
Feeds and pitches			
Longitudinal feed within the range	0.043 - 0.653 mm/rev (48 feeds)		
Cross feed within	0.015 - 0.206 mm/rev (48 feeds)		
Pitch - metric in range	0.4 - 7 mm/rev (42 pitches)		
Pitch - inch in range	70 - 4 turns/inch (42 pitches)		
Tailstock			
Tailstock seat	MT3		
Tailstock- sleeve diameter/ sleeve travel	Ø 45 mm / 130 mm		
Dimensions and weight			
Length x width x height	1 920 x 740 x 1 222 (DPA 1 555) mm		
Net weight	735 kg	737 kg	780 kg

Lathe chuck Ø 200 mm No. 5	Article no.
OPTIMUM Four-jaw lathe chuck , centric - speed 3 000 rpm	3442845
OPTIMUM Four-jaw lathe chuck , single - speed 2 100 rpm	3442880
BISON three-jaw lathe chuck , centric - speed 3 000 rpm	3450315
BISON Four-jaw lathe chuck , centric - speed 3 000 rpm	3450365
› Information on lathe chucks from page 218	

Accessories	Article no.
Quick change tool holder SWH 3-E	3384303
Factory assembly SWH 3-E	9000400
Spare tool holder 20 x 100 type D for square chisels	3384304
Spare tool holder 30 x 100 type H for round chisels	3384322
Lathe tool set 16 mm, 11-part	3441604
Lathe tool set 16 mm, 5-part	3441668
Lathe tool set 16 mm, 5-part "Made in Germany"	3441216
› For information on lathe tool sets see page 224	
Levelling platen SE 2 (6 units required)	3381016
› More accessories for lathes from page 214	

*For important details on operating machines with frequency converters, general instructions and explanations of packaging surcharges, data on TPFR, see page 323

**The lathe (frequency converter) complies with the DIN EN 55011 standard: class C2

Dimensions

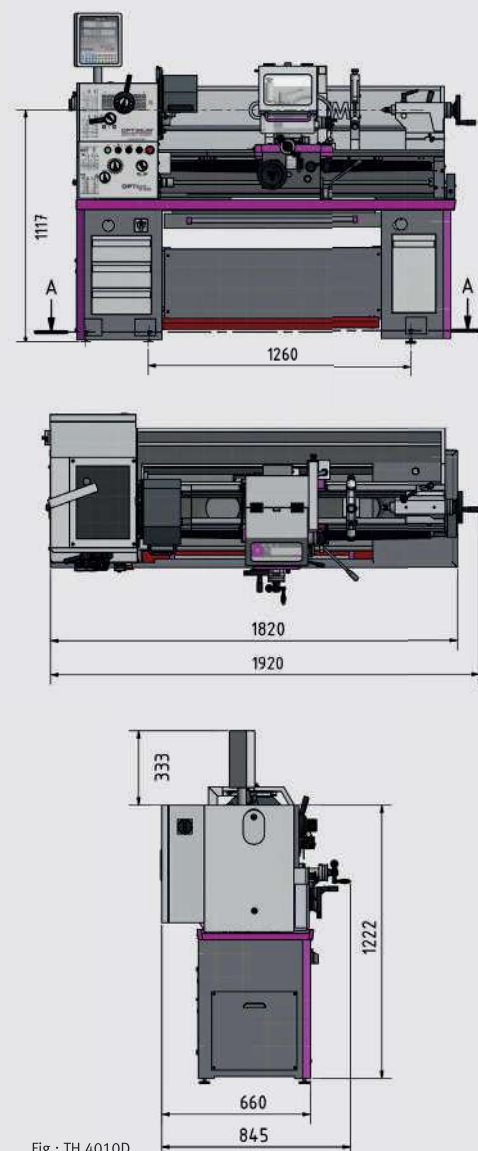


Fig.: TH 4010D

**Remember to order
a lathe chuck**

Contents of package
› Steady rest passageway Ø 10 - Ø 100 mm
› Follow rest passageway Ø 10 - Ø 80 mm
› LED machine lamp
› Reduction sleeve MT6 - MT3
› Non-travelling centre MT3
› Fixed, but temperature resistant centre MT3
› Change gear kit
› Machine initially filled with premium grade oil
› Operating tool
TH 4010 / TH 4010D
› Quadruplicate tool holder 16 mm
TH 4010V
› Quick change tool holder 3-E
› Tool holder 20 x 100 type D for square chisels

Feed and lead spindle lathes impress with their rugged design and simple handling. TM 4010D with DPA 21 digital position display

Facts that impress in terms of quality, performance and price

- ▶ Tempered and polished z-axis guideway
- ▶ Spindle collet Camlock DIN ISO 702-2 no. 4
- ▶ Guaranteed concentricity of spindle nose better than 0.015 mm
- ▶ All pitch gears made of steel, hardened and polished, shafts on needle bearings, all components lubricated in an oil bath
- ▶ Clockwise/anti-clockwise rotation switchable on bed slide
- ▶ Safety hand wheels with release function in the X and Z axis
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Perfectly concentric main spindle guarantees high load capacity thanks to use of precision taper roller bearings
- ▶ With safety device to prevent simultaneous operation of thread cutting and pitch mechanism
- ▶ Motor circuit switch
- ▶ Main motor electrically braked
- ▶ Coolant pump with coolant tank and fill level display Tank removable for easy cleaning
- ▶ LED machine lamp in machine housing
- ▶ Machine chassis with rugged steel design
- ▶ Emergency stop button right and left
- ▶ Lockable main switch
- ▶ Three-jaw lathe chuck included in standard scope of delivery

TM 4010D

- ▶ **Digital position display DPA21**
 - › User-friendly membrane keyboard, splash water protected, sealed and dazzle free
 - › Glass scales



YouTube
Follow this for the video presentation of our OPTIMUM lathe TM 4010D

Control cabinet



- › 24 Volt DC power supply
- › All contactors and relays by **SIEMENS** or **Schneider**

Membrane keyboard



- › User-friendly membrane keyboard with functions: machine on, coolant pump, light and direct run

Chip drawer



- › Fold-up type
- › Easy chip cleaning from front



Fig.: TM 4010D



Technical specifications, accessories and dimensions

Model	TM 4010	TM 4010D
Article no.	3403040	3403045
Output		
Electrical connection	400 V / 3 Ph ~50 Hz	
Total rated value	3 kW	
Coolant pump motor	100 Watts	
Spindle		
Drive motor	2.2 kW	
Spindle taper	MT6	
Spindle holder	Camlock DIN ISO 702-2 No. 5	
Spindle bore, bar passage diameter	Ø 53 mm	
Quick change tool holder	SWH 3-E	
Work areas		
Centre height	200 mm	
Centre width	1 000 mm	
Swing diameter over machine bed*	356 mm	
Swing over cross slide (1)	250 mm	
Bed width	203 mm	
Speed range		
Spindle speeds	70 - 2 000 rpm	
Number of speeds	8 speeds	
Travel		
Top slide travel	98 mm	
Cross slide travel	185 mm	
Feed and pitches		
Longitudinal feed within the range	0.014 - 0.38 mm/rev (26 feeds)	
Cross feed within	0.052 - 1.392 mm/rev (32 feeds)	
Pitch - metric in range	0.4 - 7 mm/rev (32 pitches)	
Pitch - inch in range	56 - 4 turns/inch (31 pitches)	
Tailstock		
Tailstock seat	MT4	
Spindle sleeve diameter / stroke	Ø 50 mm / 110 mm	
Dimensions and weight		
Length x width x height	1 935 x 780 x 1 740 mm	
Net weight	765 kg	767 kg

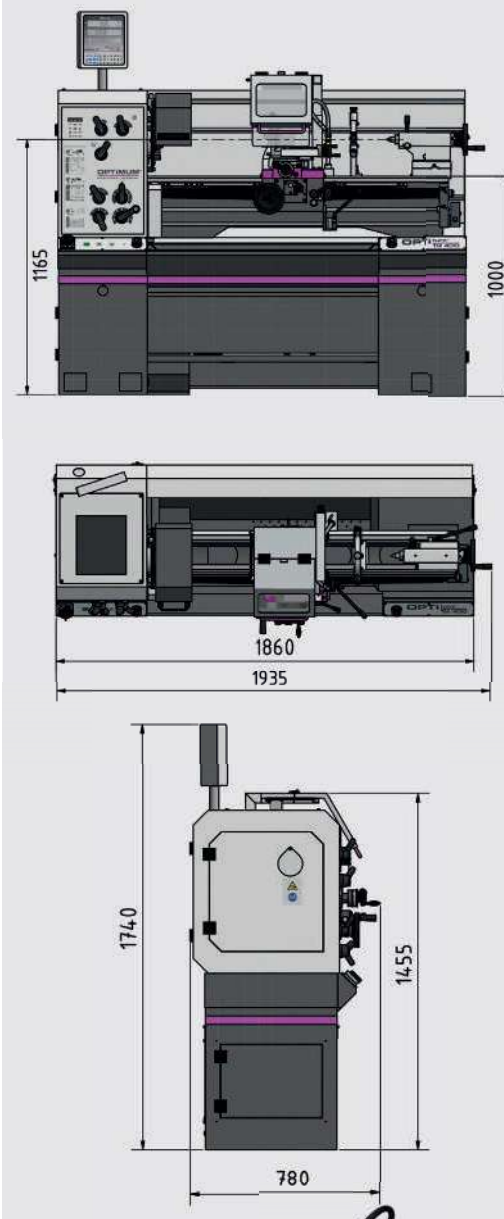
Lathe chuck	Article no.
BISON three-jaw lathe chuck Ø 200 mm no. 5 Centrically clamping (chuck flange 3450212 required)	3450210
BISON four-jaw lathe chuck Ø 250 mm no. 5 Centrically clamping (chuck flange 3450218 required)	3450216

› Information on lathe chucks from page 218

Accessories	Article no.
Spare tool holder 20 x 100 type D for square chisels	3384304
Spare tool holder 30 x 100 type H for round chisels	3384322
Lathe tool set 16 mm, 11-part	3441604
Lathe tool set 16 mm, 5-part	3441668
Lathe tool set 16 mm, 5-part "Made in Germany"	3441216
Lathe tool set 16 mm, 5-part	3441610
› For information on lathe tool sets see page 224	
Clamping disc Ø 320 mm no. 5	3442979
Vibration-damping machine base SE55 (6 units required)	3352981
› More accessories for lathes from page 214	

*Important information on transport surcharges and explanations of packaging surcharges, data on TPFR, and „Operation of machines with frequency converters“ on page 323
(1) Please note that operators are required to make conversions in the event of installing third-party chucks or flanged chucks to reach the stated, technically possible rotating diameter.

Dimensions



Our recommendation

cleancraft
flexCAT 378 EOT-PRO
Article no. 7003380



Contents of package

- › Three-jaw lathe chuck Ø 200 mm, no. 5
- › Fixed steady Ø 7 - Ø 102 mm
- › Travelling steady Ø 10 - Ø 60 mm
- › LED machine lamp
- › Reduction sleeve MT6 - MT3
- › Non-travelling centre MT4
- › Quick change tool holder 3-E
- › Tool holder 20 x 100 type D for square chisels 18 mm
- › Machine initially filled with premium grade oil
- › Operating tool

Preface

Drilling

Milling

Turning

Measuring

Saws

Grinding

Polishing

Lighting

WITH STEEL/CAST IRON CHASSIS

Visit our exhibition in Hallstadt/Bamberg

SIEMENS SINAMICS G 120D Frequency inverters

Information on the Vario lathes

TH 4210V / TH 4615V / TH 5620V / TX 5216V / TZ4V

SINAMICS G120D

Brief overview of benefits

Highlights at a glance

Advanced safety function (STO, SLS)

STO - safe torque off as per EN 61800-5

SLS - Safely limited speed as per EN 61800-5

- Recovery, low circuit feedback
- Energy savings up to 20 %
- No brake resistors required
- Fast and easy diagnostic capability through LEDs
- Standardised plug connections throughout
- Rugged and flat design (IP65)
- EMC class C3 as per EN 61800-3
- Safety Integrated without encoder!
- More direct switch-over
- Faster braking
- Resilient to high overload



Siemens
SAFETY INTEGRATED

DIN

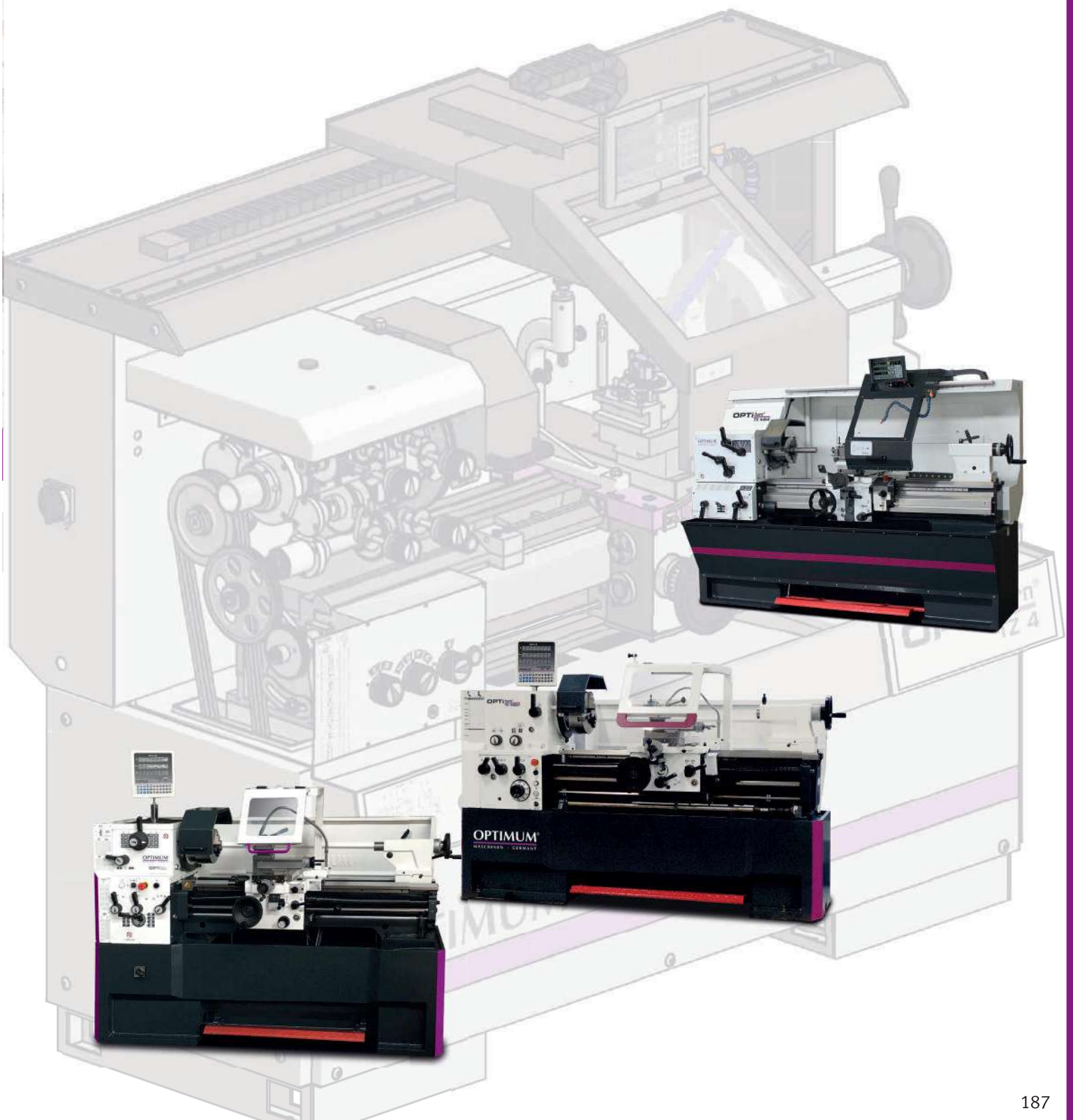
Machines as per
standard EN
61800

- A comprehensive safety package that helps to protect both persons and machines. And in an extremely efficient and economic way thanks to complete integration of the safety functions in the control and drive technology. In addition, it ensures safe and practical operation of your machine under all required operating conditions. The safety functions meet the requirements of DIN EN 61508 for use up to and including SIL (Safety Integrity Level) 2 and categories 3 and PL (Performance Level) d as per DIN EN ISO 13849.

The feature scope includes, for example:

- Functions for safe monitoring of speed and standstill
- Direct connection of all safety-related signals and their internal logical links

LATHES



Precision feed and lead spindle lathes with digital position display **NEWall** DP 700 and quick change tool holder

Facts that impress in terms of quality, performance and price

- ▶ Tempered and polished z-axis guideway
- ▶ Partly clad with travelling, generously dimensioned chip guard
- ▶ Travelling swarf guard with integrated position display, coolant hose and additional control panel
- ▶ Plane und top slide spindle tempered and ground, adjustable via split spindle nut
- ▶ Feed and lead screw cover
- ▶ Granular feed and tapping range
- ▶ LED machine light for complete elimination of the workspace
- ▶ Energy chain for material-friendly cable and hose guiding
- ▶ The default gear wheels for metric thread pitches and modular threads are already mounted in the machine. Interchangeable gears available as option for imperial and D.P threads
- ▶ Control cabinet with 24-V DC adapter
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Decoupled hand wheels approved in line with EN 23125
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Safety hand wheels with release function in the X and Z axis
- ▶ Chip tray pulls out to front
- ▶ Coolant system
- ▶ Quick change tool holder SWH 5-B
- ▶ Tool holder 25 x 120 type D for square chisels 20 mm
- ▶ Motor circuit switch

Control cabinet



- › 24 Volt DC power supply
- › All contactors and relays by **SIEMENS** or **Schneider**

Touch panel



Centralised control

- › For switching the lighting and coolant
- › Switch for two-speed motor
- › Foil keypad, easily cleanable

Bed geometry



- › Flat angle
- › Higher force absorption

Digital position display DP700

- › Intuitive and user-friendly user interface
 - › Durable foil keyboard
- (More informationen on page 234)



Fig.: TZ 4 - Shown with optional lathe chuck



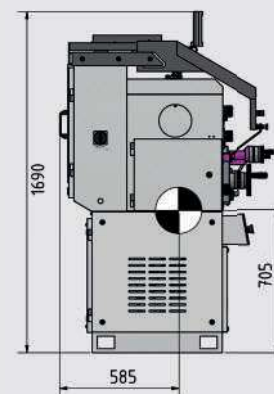
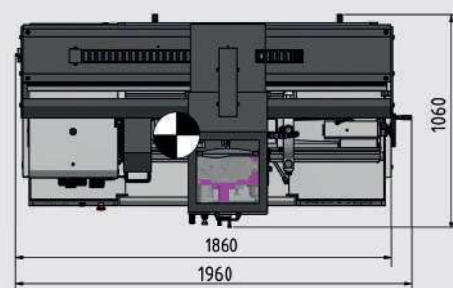
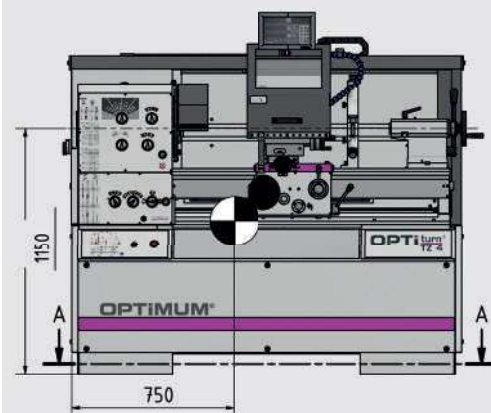
Technical specifications, accessories and dimensions

Model	TZ 4
Article no.	3432240
Output	
Electrical connection	400 V / 3 Ph ~50 Hz
Total rated value	5 kW
Coolant pump motor	125 Watts
Spindle	
Drive motor	3 kW/4.5 kW
Spindle taper	MT6
Spindle holder	DIN ISO 702-1 No. 5 Form A2
Spindle bore, bar passage diameter	Ø 52 mm
Quick change tool holder	SWH 5-B
Work area	
Centre height	200 mm
Centre width	800 mm
Swing diameter over machine bed*	400 mm
Swing over cross slide	245 mm
Bed width	260 mm
Speed range	
Spindle speed	45 - 1 800 rpm
Number of speeds	16 speeds
Travel	
Top slide travel	112 mm
Cross slide travel	212 mm
Feeds and pitches	
Longitudinal feed within the range	0.026 - 1.84 mm/rev (48 feeds)
Cross feed within	0.013 - 0.93 mm/rev (48 feeds)
Pitch - metric in range	0.2 - 14 mm/rev (26 pitches)
Pitch - inch in range (Interchangeable gear set accessory Art no. 3444160)	80 - 1 turns/inch (42 pitches)
Modular thread in range	0.1 - 7 mm x π (44 thread)
Diametral pitch in range (Interchangeable gear set accessory Art no. 3444160)	3 - 200 turns/π (33 pitch)
Tailstock	
Tailstock seat	MT3
Spindle sleeve diameter / stroke	Ø 50 mm / 110 mm
Dimensions and weight	
Length x width x height	1 960 x 1 060 x 1 690 mm
Net weight	1 250 kg

Lathe chuck	Article no.
BISON four-jaw lathe chuck Ø 250 mm no. 5 cast Centrically clamping (chuck flange 3450218 required)	3450216
Chuck flange for lathe chuck Ø 250 mm no. 5 (for lathe chuck 3450216)	3450218
BISON three-jaw lathe chuck Ø 200 mm no. 5 cast Centrically clamping (chuck flange 3450212 required)	3450210
Chuck flange for lathe chuck Ø 200 mm no. 5 (lathe chuck 3450210)	3450212

Accessories	Article no.
Clamping disc Ø 320 mm no. 5	3442979
BISON chuck flange for lathe chuck Ø 160 mm (Szf 3450245)	3450246
BISON collet chuck 16C - Ø 160 mm requires chuck flange 3450246	3450245
Lathe tool set HM 25 mm, 5-part (see page 226)	3441623
Interchangeable gear set for imperial and D.P thread	3444160
Levelling platen SE 1 (8 units required)	3381012
› More accessories for lathes from page 214	

Dimensions



Follow this for the video presentation of our OPTIMUM TZ 4 lathe



Remember to order a lathe chuck

Contents of package

- › Steady rest passageway Ø 10 - Ø 130 mm
- › Follow rest passageway Ø 10 - Ø 100 mm
- › Reduction sleeve MT6 - MT3
- › Non-travelling centre MT3
- › Fixed, but temperature resistant centre MT3
- › Quick change tool holder 5-B
- › Tool holder 25 x 120 type D for square chisels 20 mm
- › Machine initially filled with premium grade oil
- › Operating tool

Precision feed and lead spindle lathe with electronically controlled drive and digital position display **NEWALL** DP 700

Facts that impress in terms of quality, performance and price

- ▶ Tempered and polished z-axis guideway
- ▶ Partly clad with travelling, generously dimensioned chip guard
- ▶ Travelling swarf guard with integrated position display, coolant hose and additional control panel
- ▶ Plane and top slide spindle tempered and ground, adjustable via split spindle nut
- ▶ Feed and lead screw cover
- ▶ Granular feed and tapping range
- ▶ LED machine light for complete elimination of the workspace
- ▶ Energy chain for material-friendly cable and hose guiding
- ▶ The default gear wheels for metric thread pitches and modular threads are already mounted in the machine. Interchangeable gears available as option for imperial and D.P threads
- ▶ Control cabinet with 24-V DC adapter
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Decoupled hand wheels approved in line with EN 23125
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ All contactors and relays by Siemens, Schneider or Eaton
- ▶ Safety hand wheels with release function in the X and Z axis
- ▶ Reduction of the main spindle braking time thanks to energy recuperation
- ▶ Chip tray pulls out to front
- ▶ Coolant system
- ▶ Quick change tool holder SWH 5-B
- ▶ Tool holder 25 x 120 type D for square chisels 20 mm

Digital position display DP700

- › Intuitive and user-friendly user interface
 - › Durable foil keyboard
- (More information on page 234)

Siemens inverter

Made in EU



- › **SINAMICS G120D**
- › More information: „Siemens SINAMICS G 120D Frequency inverters“ on page 186

Touch panel



Centralised control

- › For switching the lighting and coolant
- › Foil keypad, easily cleanable

Bed geometry



- › Flat angle
- › Higher force absorption



Fig.: TZ 4 - Shown with optional lathe chuck



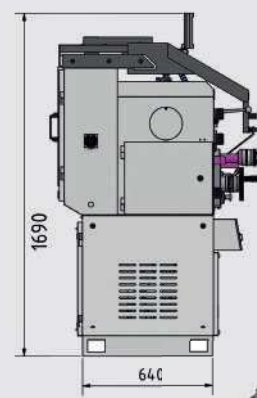
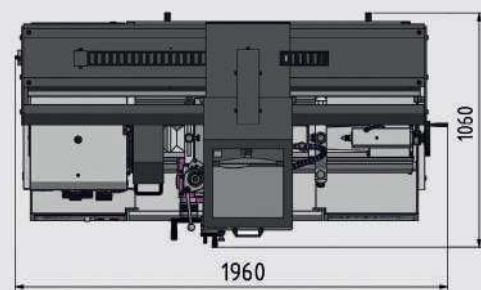
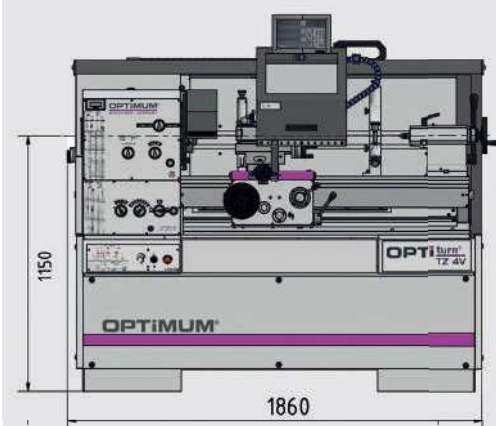
Technical specifications, accessories and dimensions

Model	TZ 4V
Article no.	3432245
Output	
Electrical connection	400 V / 3 Ph ~50 Hz
Total rated value	6 kW
Coolant pump motor	125 Watts
Spindle	
Drive motor	5.5 kW
Spindle taper	MT6
Spindle holder	DIN ISO 702-1 No. 5 Form A2
Spindle bore, bar passage diameter	Ø 52 mm
Quick change tool holder	SWH 5-B
Work area	
Centre height	200 mm
Centre width	800 mm
Swing diameter over machine bed*	400 mm
Swing over cross slide	245 mm
Bed width	260 mm
Speed range	
Spindle speed	50 - 3 000 rpm
Number of speeds	2 speed, electrically controlled
Travel	
Top slide travel	112 mm
Cross slide travel	212 mm
Feeds and pitches	
Longitudinal feed within the range	0.0263 - 1.8416 mm/rev (48 feeds)
Cross feed within	0.0133 - 0.9321 mm/rev (48 feeds)
Pitch - metric in range	0.2 - 14 mm/rev (26 pitches)
Pitch - inch in range (Interchangeable gear set accessory Art no. 3444160)	80 - 1 turns/inch (42 pitches)
Modular thread in range	0.1 - 7 mm x π (44 thread)
Diametral pitch in range (Interchangeable gear set accessory Art no. 3444160)	3 - 200 turns/π (33 pitch)
Tailstock	
Tailstock seat	MT3
Spindle sleeve diameter / stroke	Ø 50 mm / 110 mm
Dimensions and weight	
Length x width x height	1 960 x 1 060 x 1 690 mm
Net weight	1 250 kg

Lathe chuck	Article no.
BISON four-jaw lathe chuck Ø 250 mm no. 5 steel Centric clamping (chuck flange 3450218 required)	3450217
Chuck flange for lathe chuck Ø 250 mm no. 5 (for lathe chuck 3450218)	3450218
BISON three-jaw lathe chuck Ø 200 mm no. 5 cast Centric clamping (chuck flange 3450212 required)	3450210
Chuck flange lathe chuck Ø 200 mm no. 5 (lathe chuck 3450210)	3450212

Accessories	Article no.
Clamping disc Ø 320 mm no. 5	3442979
BISON chuck flange for lathe chuck Ø 160 mm (Szf 3450245)	3450246
BISON collet chuck 16C - Ø 160 mm (requires chuck flange 3450246)	3450245
Lathe tool set HM 25 mm, 5-part (see page 226)	3441623
Interchangeable gear set for imperial and D.P thread	3444160
Levelling platen SE 1 (8 units required)	3381012
➤ More accessories for lathes from page 214	

Dimensions



Our recommendation

cleancraft
flexCAT 378 EOT-PRO
Article no. 7003380



**Remember to order
a lathe chuck**

Contents of package

- Steady rest passageway Ø 10 - Ø 130 mm
- Follow rest passageway Ø 10 - Ø 100 mm
- Reduction sleeve MT6 - MT3
- Non-travelling centre MT3
- Fixed, but temperature resistant centre MT3
- Quick change tool holder 5-B
- Tool holder 25 x 120 type D for square chisels 20 mm
- Machine initially filled with premium grade oil
- Operating tool

Precision leading and feed spindle machines, mature technology, fully equipped, easy to operate.

TH 4210D / TH 4215D with DPA 21 digital position display

Facts that impress in terms of quality, performance and price

- ▶ Tempered and polished z-axis guideway
- ▶ Spindle collet Camlock DIN ISO 702-2 no. 6
- ▶ Precision slide
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ All guides adjustable using cleats
- ▶ 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
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ All metric pitches in range from 0.2 to 14 mm/rev and all inch pitches in range of 72 - 2 turns per inch configurable on control panel without replacing the interchangeable gear wheels thanks to gear shift
- ▶ Clockwise/anti-clockwise rotation switchable on bed slide, switchable via switching spindle
- ▶ Central lubrication in bed slide
- ▶ Leading spindle cover
- ▶ Safety hand wheels with release function acc. to EN23125 in the X and Z axis
- ▶ Tailstock adjustable ± 10 mm for turning spheres
- ▶ Tailstock spindle sleeve and handwheel with adjustable fine scaling 0.025 mm
- ▶ Fast, easy adjustment of the tailstock without tools thanks to clamping lever
- ▶ Grey cast iron prism bed with strong ribbing, induction tempered and precision ground
- ▶ LED machine lamp in chip guard
- ▶ Coolant system featuring separate coolant tank, fill level display and oil trap; easy and complete draining and cleaning as per DIN
- ▶ Chassis and machine bed single-piece cast meehanite
- ▶ Emergency stop device with foot pedal
- ▶ Quadruple tool holder

Control cabinet



- › 24 Volt DC power supply
- › All contactors and relays by **SIEMENS** or **Schneider**

TH 4210D / TH 4215D Dig. Position display DPA 21



- › User-friendly membrane keyboard, splash water protected, sealed and dazzle free
- › Sensor supplied for acquiring spindle speeds



Fig.: TH 4210D - Shown with optional lathe chuck



Technical specifications, accessories and dimensions

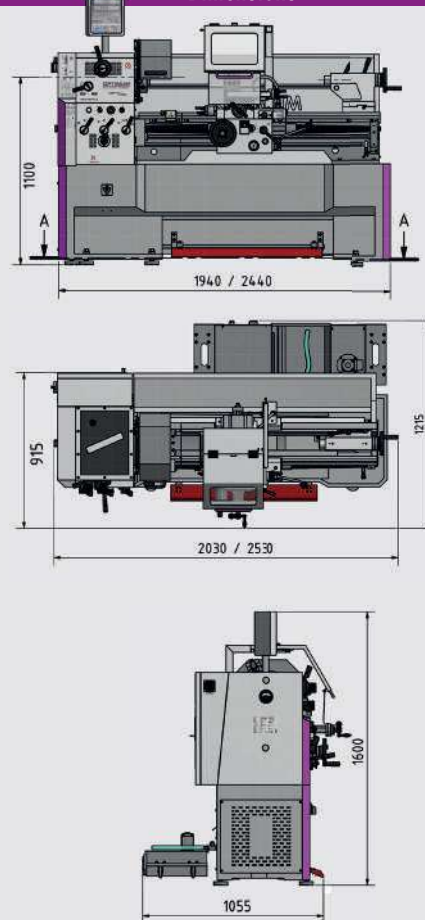
Model	TH 4210	
Article no.	3462050	
Model	TH 4210D	TH 4215D
Article no.	3462055	3462070

Output		
Electrical connection	400 V / 3 Ph ~50 Hz	
Total rated value	4.6 kW	
Coolant pump motor	100 W	
Spindle		
Drive motor	3 kW / 4.5 kW	
Spindle taper	MT6	
Spindle holder	Camlock DIN ISO 702-2 No. 6	
Spindle bore, bar passage diameter	Ø 52 mm	
Quick change tool holder height	20 mm	
Work area		
Centre height	210 mm	
Centre width	1 000 mm	1 500 mm
Swing diameter over machine bed*	420 mm	
Swing over cross slide	250 mm	
Bed width	250 mm	
Swing without bed bridge	590 mm	
Turning length in bed bridge	260 mm	
Speed range		
Spindle speed	45 - 1 800 rpm	
Number of speeds	16 speeds	
Travel		
Top slide travel	140 mm	
Cross slide travel	230 mm	
Feeds and pitches		
Longitudinal feed within the range	0.05 - 1.7 mm/rev (17 feeds)	
Cross feed within	0.025 - 0.85 mm/rev (17 feeds)	
Pitch - metric in range	0.2 - 14 mm/rev (39 pitches)	
Pitch - inch in range	72 - 2 turns/inch (45 pitches)	
Diametral pitch in range	8 - 44 turns/π (21 pitch)	
Modular thread in range	0.3 - 3.5 mm x π (18 thread)	
Tailstock		
Tailstock seat	MT4	
Tailstock spindle sleeve diameter / stroke	Ø 50 mm / 120 mm	
Dimensions and weight		
Length	1 940 mm	2,440 mm
Width x height	915 x 1 375 (DPA 1 600) mm	
Net weight	1 160 kg	1 340 kg
Net weight with DPA 21	1 162 kg	

Lathe chuck	Article no.
OPTIMUM lathe chucks cast iron Ø 250 mm No. 6	
Three-jaw lathe chuck, centric	3442765
Four-jaw lathe chuck, centric	3442852
Four-jaw lathe chuck, single	3442884
BISON lathe chuck Ø 250 mm no. 6	
Three-jaw lathe chuck, centric	3450330
Four-jaw lathe chuck, cast, centric	3450380
Three-jaw lathe chuck, steel, centric	3450530
Four-jaw lathe chuck, steel, centric	3450580
› Information on lathe chucks from page 218	

Accessories	Article no.
Quick change tool holder SWH 5-B	3384305
Factory assembly SWH 5-B	9000400
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	3441670
Lathe tool set HM 20 mm, 5-part	3441617
› For information on lathe tool sets see page 225	
Vibration damping machine base SE 85 (6 units)	3352982
Universal collet chuck device 5C	3441507
› More accessories for lathes from page 214	

Dimensions



Remember to order a lathe chuck

Contents of package

- › Steady rest passageway Ø 10 - Ø 130 mm
- › Follow rest passageway Ø 10 - Ø 100 mm
- › LED machine lamp
- › Reduction sleeve MT6 - MT4
- › Non-travelling centre MT4
- › Fixed, but temperature resistant centre MT4
- › Quad tool holder max. 20 mm
- › Interchangeable gear set
- › Gear wheels for threading gauge (metric)
- › Machine initially filled with premium grade oil
- › Operating tool

Precision leading and feed spindle machines, mature technology, fully equipped, easy to operate. Featuring Siemens inverter Vario drive

Facts that impress in terms of quality, performance and price

- ▶ Tempered and polished z-axis guideway
- ▶ Grey cast iron prism bed with strong ribbing, induction tempered and precision ground
- ▶ Spindle collet Camlock DIN ISO 702-2 no. 6
- ▶ Precision slide
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ All guides adjustable using cleats
- ▶ 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
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ All metric pitches in range from 0.2 to 14 mm/rev and all inch pitches in range of 72 - 2 turns per inch configurable on control panel without replacing the interchangeable gear wheels thanks to gear shift
- ▶ Clockwise/anti-clockwise rotation switchable on bed slide, switchable via switching spindle
- ▶ Central lubrication in bed slide
- ▶ Leading spindle cover
- ▶ Safety hand wheels with release function acc. to EN23125 in the X and Z axis
- ▶ Speed monitoring in line with Machinery Directive
- ▶ Tailstock adjustable ± 10 mm for turning spheres
- ▶ Tailstock spindle sleeve and handwheel with adjustable fine scaling 0.025 mm
- ▶ Fast, easy adjustment of the tailstock without tools thanks to clamping lever
- ▶ 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
- ▶ Chassis and machine bed single-piece cast meehanite
- ▶ Emergency stop device with foot pedal
- ▶ Quick change tool holder 5-B included in standard scope of delivery
- ▶ Tool holder 25 x 120 type D for square chisels 20 mm included in standard scope of delivery

SIEMENS inverter

Made in EU



› SINAMICS G120D

› More information: „Siemens SINAMICS G 120D Frequency inverters“ on page 174

Control cabinet



› 24 Volt DC power supply
› All contactors und relays by
[SIEMENS](#) or [Schneider](#)

Digital position display DPA 21

› User-friendly membrane keyboard, splash water protected, sealed and dazzle free
› Rev counter



Fig.: TH 4210V - Shown with optional lathe chuck

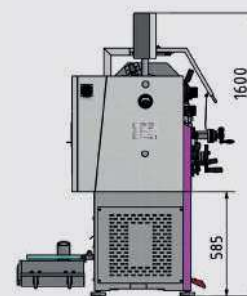
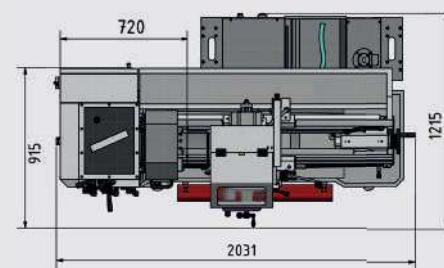
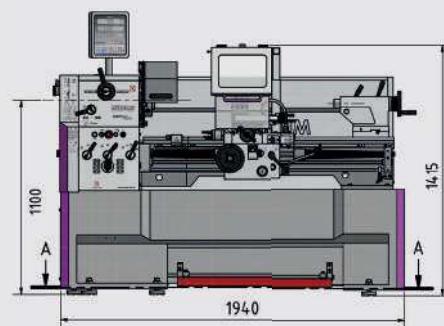


Technical specifications, accessories and dimensions

Model	TH 4210V
Article no.	3462060
Output	
Electrical connection	400 V / 3 Ph ~50 Hz
Total rated value	5.6 kW
Coolant pump motor	100 W
Spindle	
Drive motor	5.5 kW
Spindle taper	MT6
Spindle holder	Camlock DIN ISO 702-2 No. 6
Spindle bore, bar passage diameter	Ø 52 mm
Quick change tool holder	SWH 5-B
Quick change tool holder height	25 mm
Work area	
Centre height	210 mm
Centre width	1 000 mm
Swing diameter over machine bed*	420 mm
Swing over cross slide	250 mm
Bed width	250 mm
Swing without bed bridge	590 mm
Turning length in bed bridge	260 mm
Speed range	
Spindle speed	30 - 3 000 rpm
Number of speeds	2 gears, electronically controlled
Travel	
Top slide travel	140 mm
Cross slide travel	230 mm
Feeds and pitches	
Longitudinal feed within the range	0.05 - 1.7 mm/rev (17 feeds)
Cross feed within	0.025 - 0.85 mm/rev (17 feeds)
Pitch - metric in range	0.2 - 14 mm/rev (39 pitches)
Pitch - inch in range	72 - 2 turns/inch (45 pitches)
Diametral pitch in range	8 - 44 turns/π (21 pitch)
Modular thread in range	0.3 - 3.5 mm x π (18 thread)
Tailstock	
Tailstock seat	MT4
Tailstock spindle sleeve diameter / stroke	Ø 50 mm / 120 mm
Dimensions and weight	
Length x width x height	2 031 x 915 (coolant tank 1 215) x 1 415 (DPA 1 600) mm
Net weight	1 162 kg

Accessories	Article no.
Quick change tool holder SWH 5-B	3384305
Factory assembly SWH 5-B	9000400
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 25 mm, 5-part	3441672
Lathe tool set HM 25 mm, 5-part, extension kit	3441623
Lathe tool set HM 20 mm, 5-part	3441670
Lathe tool set HM 20 mm, 5-part, extension kit	3441617
› For information on lathe tool sets see page 225	
Vibration damping machine base SE 85 (6 units required)	3352982
Clamping block set 20-05	3440654
› More accessories for lathes from page 214	

Dimensions



Remember to order a lathe chuck

Contents of package

- › Steady rest passageway Ø 10 - Ø 130 mm
- › Follow rest passageway Ø 10 - Ø 100 mm
- › LED machine lamp
- › Reduction sleeve MT6 - MT4
- › Non-travelling centre MT4
- › Quick change tool holder 5-B
- › Tool holder 25 x 120 type D for square chisels 20 mm
- › Interchangeable gear set
- › Position stop with granular adjustment
- › Machine initially filled with premium grade oil
- › Operating tool

Lathe chuck	Article no.
OPTIMUM lathe chucks Ø 250 mm No. 6	
Three-jaw lathe chuck, centric	3442765
Four-jaw lathe chuck, centric	3442852
Four-jaw lathe chuck, single	3442884
BISON lathe chuck Ø 250 mm No. 6	
Three-jaw lathe chuck, centric	3450330
Four-jaw lathe chuck, centric	3450380
Three-jaw lathe chuck, steel	3450530
Four-jaw lathe chuck, steel	3450580
› Information on lathe chucks from page 218	

Precision feed and lead spindle lathe complies with strictest requirements in terms of technical equipment and precision. With digital position display **NEWALL** DP 700

Facts that impress in terms of quality, performance and price

- ▶ Machine bed and chassis made heavily ribbed cast material
- ▶ Single-part steel machine chassis
- ▶ High degrees of rigidity of the spindle bar housing thanks to strong ribbed 25GG cast material
- ▶ Precision slide
- ▶ shafts on needle bearings, all components lubricated in oil bath
- ▶ Hardened and polished bed guides
- ▶ All electronic controls centrally accessible
- ▶ All feed gearwheels made of steel, hardened and polished
- ▶ 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
- ▶ Coolant system featuring separate coolant tank, fill level display and oil trap; easy and complete draining and cleaning as per DIN
- ▶ Complete feed and lead spindle cover
- ▶ Working area completely illuminated
- ▶ Easy to service thanks to removable rear panel
- ▶ Hardened and polished spindle guarantees high degrees of accuracy and durability
- ▶ The powerful machining performance means that a high level of chip removal during roughing work is no problem
- ▶ Energy chain for material-friendly cable and hose guiding
- ▶ Lockable chip guard moves with the bed slide with integrated position indicator and coolant hose, manually adjustable
- ▶ No interchangeable gears required
- ▶ With safety device to prevent simultaneous operation of thread cutting and pitch mechanism
- ▶ Electronically braked motor
- ▶ Electronic feed shut-off of Z axis
- ▶ Electrical position shut-off with quadruple positioning stop
- ▶ Three-jaw lathe chuck included in standard scope of delivery
- ▶ Quick change tool holder SWH 5-B included in standard scope of delivery

Control cabinet



- › 24 Volt DC power supply
- › All contactors and relays by **SIEMENS** or **Schneider**

Touch panel



Centralised control

- › Machine lamp
- › Coolant
- › Feed bar drive

Dig. Position display DPA 700



- › Intuitive and user-friendly user interface
- (More information see page 234)





Technical specifications, accessories and dimensions

Model	TX 4414
Article no.	3432420
Output	
Electrical connection	400 V / 3 Ph ~50 Hz
Total rated value	6.1 kW
Coolant pump motor	100 W
Spindle	
Drive motor	5.5 kW
Spindle taper	MT6
Spindle holder	Camlock DIN ISO 702-2 No. 6
Spindle bore, bar passage diameter	Ø 52 mm
Quick change tool holder	SWH 5-B
Work area	
Centre height	220 mm
Centre width	1 280 mm
Swing diameter over machine bed*	440 mm
Swing over cross slide	250 mm
Bed width	300 mm
Speed range	
Spindle speed	40 - 2 200 rpm
Number of speeds	12 speeds
Travel	
Top slide travel	153 mm
Cross slide travel	290 mm
Feeds and pitches	
Longitudinal feed within the range	0.05 - 0.752 mm/rev. (44 St)
Cross feed within	0.025 - 0.376 mm/rev. (44 St)
Metric pitch	0.5 - 7.5 mm/rev. (44 St)
Pitch - inch in range	60 - 4 hel./inch (44 St)
Diametral pitch in range	0.25 - 3.75 mm x π (44 St)
Modular thread in range	120 - 8 hel./π (44 St)
Tailstock	
Tailstock seat	MT4
Tailstock- sleeve diameter/ sleeve travel	Ø 58 mm/ 180 mm
Dimensions and weight	
Length x width x height	2,410 x 1,085 x 1,825 mm
Net weight	1,630 kg

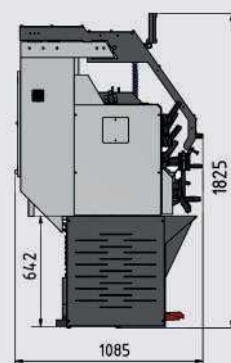
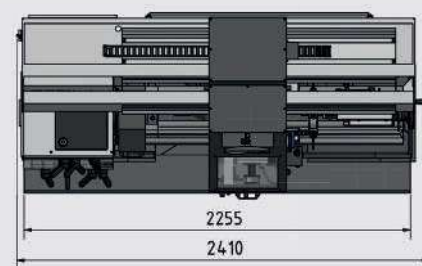
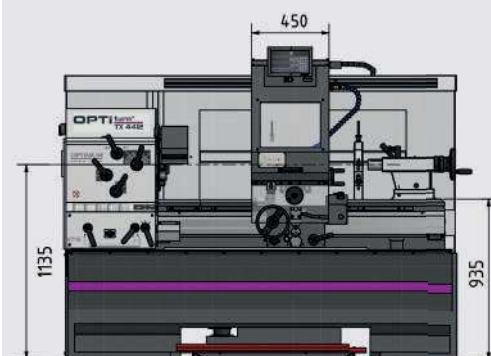
Lathe chuck Ø 200 mm Camlock No. 6	Article no.
OPTIMUM Four-jaw lathe chuck, centric	3442846
BISON Four-jaw lathe chuck, centric	3450370
› Information on lathe chucks from page 218	



Accessories	Article no.
Follow rest passageway Ø 10 - Ø 170 mm	3438015
Steady rest passageway Ø 15 - Ø 165 mm	3438017
Clamping disc Ø 350 mm Camlock DIN ISO 702-2 No. 6	3442980
Travelling centre MT4	3440704
BISON co-travelling centre MT4	3451004
Vibration damping machine base SE 85 (6 units required)	3352982
› More accessories for lathes from page 214	

*For important details on operating machines with frequency converters, general instructions and explanations of packaging surcharges, data on TPFR, see page 323

Dimensions



Our recommendation

cleancraft
flexCAT 378 EOT-PRO
Article no. 7003380



Contents of package

- › Three-jaw lathe chuck Ø 200 mm no. 6
- › Two non-travelling centres MT3 and MT5
- › Reduction sleeve MT6 - MT5
- › Quick change tool holder SWH 5-B
- › Machine initially filled with premium grade oil
- › Operating tool

Preface

Drilling

Milling

Turning

Measuring

Saws

Grinding

Polishing

Lighting

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
- ▶ 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
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Clockwise/anti-clockwise rotation switchable on bed slide, switchable via switching spindle
- ▶ Mechanical longitudinal feed switch-off of bed slide with four configurable eccentrics
- ▶ Leading spindle cover
- ▶ Safety hand wheels with release function acc. to EN23125 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 of the tailstock 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
- ▶ Emergency stop device with foot pedal
- ▶ Quick change tool holder 5-B included in standard scope of delivery
- ▶ Tool holder 25 x 120 type D for square chisels 20 mm included in standard scope of delivery

Control cabinet



- › 24 Volt DC power supply
- › All contactors and relays by SIEMENS or Schneider

Dig. Position display DPA 21



- › User-friendly membrane keyboard, splash water protected, sealed and dazzle free

as of TH 4615: energy chain



- › for routing that is easy on the cable and hose material

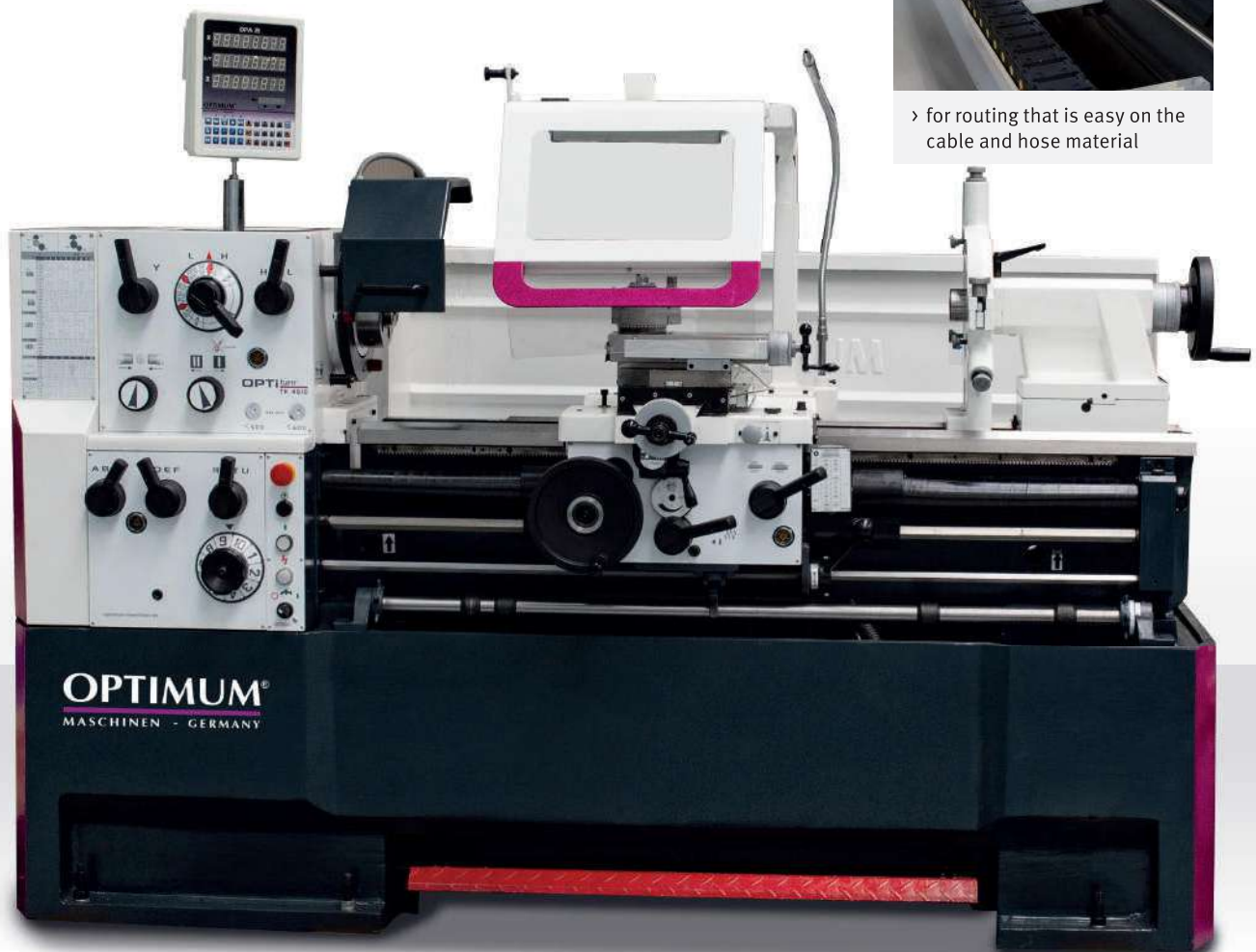


Fig.: TH 4615D - Shown with optional lathe chuck

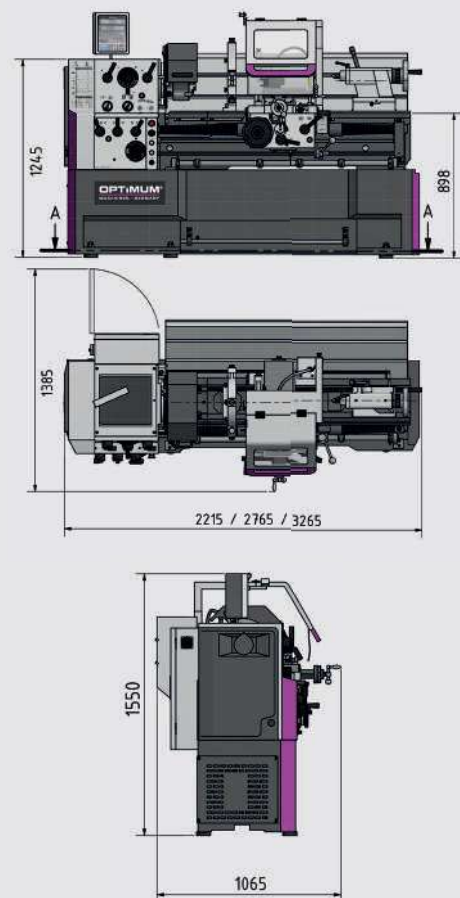


Technical specifications, accessories and dimensions

Model	TH 4610D	TH 4615D	TH 4620D
Article no.	3462110	3462120	3462130
Output			
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	MT6		
Spindle holder	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 diameter over machine bed*	460 mm		
Swing over cross slide	270 mm		
Bed width	300 mm		
Swing without bed bridge	690 mm		
Turning length in bed bridge	240 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 feed rates)		
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	MT4		
Spindle sleeve diameter / stroke	Ø 60 mm / 130 mm		
Dimensions and weight			
Length	2 215 mm	2 765 mm	3 265 mm
Width x height	1 065 x 1 550 mm		
Net weight	1 645 kg	1 810 kg	1 965 kg

Accessories	Article 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	3441670
Lathe tool set HM 20 mm, 5-part, extension kit	3441617
› For information on lathe tool sets see page 225	
Clamping disc Ø 350 mm no. 6	3442980
Universal collet chuck device 5C	3441507
Collet kit 3 - 25 mm, 5C, 17-part	3441509
Levelling platen SE 3 (6 units required)	3381018
Collet chuck 5C - Camlock no. 6	3441556
Position stop with granular adjustment	3444022
› More accessories for lathes from page 214	

Dimensions



**Remember to order
a lathe chuck**

Contents of package

- › Steady rest passageway Ø 25 - Ø 178 mm
- › Follow rest passageway Ø 19 - Ø 114 mm
- › LED machine lamp
- › Reduction sleeve MT6 / MT4
- › Non-travelling centre MT4
- › Fixed, but temperature resistant centre MT4
- › Quick change tool holder 5-B
- › Tool holder 25 x 120 type D for square chisels 20 mm
- › Thread gauge
- › Interchangeable gear set
- › Gear wheels for threading gauge (metric)
- › Machine initially filled with premium grade oil
- › Operating tool

Lathe chuck	Article no.
OPTIMUM lathe chucks Ø 250 mm No. 6	
Three-jaw lathe chuck , centric	3442765
Four-jaw lathe chuck , centric	3442852
BISON lathe chuck Ø 250 mm No. 6	
Three-jaw lathe chuck , centric	3450330
Four-jaw lathe chuck , centric	3450380
› Information on lathe chucks from page 218	

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
- ▶ 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
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Clockwise/anti-clockwise 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 acc. to EN23125 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

Siemens inverter

Made in EU



> SINAMICS G120D

> More information: „Siemens SINAMICS G 120D Frequency inverters“ on page 186

Control cabinet



- > 24 Volt DC power supply
- > All contactors and relays by **SIEMENS**, Schneider or Eaton

Dig. Position display DPA 21



- > User-friendly membrane keyboard, splash water protected, sealed and dazzle free



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



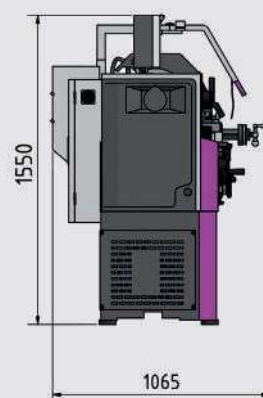
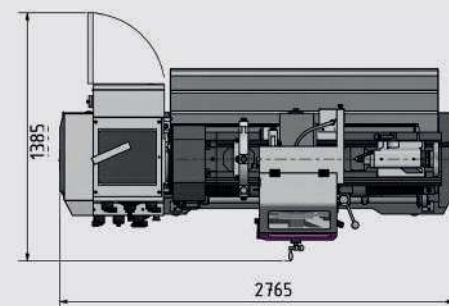
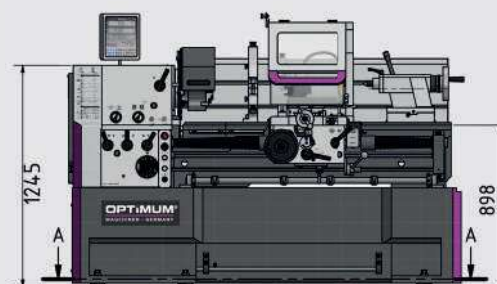
Technical specifications, accessories and dimensions

Model	TH 4615V
Article no.	3462125
Output	
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	MT7
Spindle holder	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 diameter over machine bed*	460 mm
Swing over cross slide	270 mm
Bed width	300 mm
Swing without bed bridge	690 mm
Turning length in bed bridge	240 mm
Speed range	
Spindle speed	30 - 2 000 rpm
Number of speeds	2 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 feed rates)
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	MT4
Spindle sleeve diameter / stroke	Ø 60 mm / 130 mm
Dimensions and weight	
Length x width x height	2 765 x 1 065 x 1 550 mm
Net weight	2 020 kg

Lathe chuck	Article no.
OPTIMUM lathe chucks Ø 315 mm No. 8	
Three-jaw lathe chuck, centric	3442768
Four-jaw lathe chuck, centric	3442856
Four-jaw lathe chuck, single	3442888
BISON lathe chuck Ø 315 mm No. 8	
Three-jaw lathe chuck, centric	3450335
Four-jaw lathe chuck, centric	3450385
› Information on lathe chucks from page 218	

Accessories	Article no.
Clamping disc Ø 450 mm no. 8	3442982
Travelling centre MT5	3440705
BISON co-travelling centre MT5	3451005
Position stop with granular adjustment	3444022
› More accessories for lathes from page 214	

Dimensions



Our recommendation

cleancraft
flexCAT 378 EOT-PRO
Article no. 7003380



**Remember to order
a lathe chuck**

Contents of package

- › Steady rest passageway Ø 25 - Ø 178 mm
- › Follow rest passageway Ø 19 - Ø 114 mm
- › LED machine lamp
- › Reduction sleeve MT7 / MT4
- › Non-travelling centre MT4
- › Fixed, but temperature resistant centre MT4
- › Quick change tool holder 5-B
- › Tool holder 25 x 120 type D for square chisels 20 mm
- › Thread gauge
- › Interchangeable gear set
- › Machine initially filled with premium grade oil
- › Operating tool

Precision feed and lead spindle lathes comply with strictest requirements in terms of technical equipment and precision.

Facts that impress in terms of quality, performance and price

- ▶ Machine bed and chassis made heavily ribbed cast material
- ▶ Single-part steel machine chassis
- ▶ High degrees of rigidity of the spindle bar housing thanks to strong ribbed 25GG cast material
- ▶ Precision slide
- ▶ Shafts on needle bearings, all components lubricated in oil bath
- ▶ Hardened and polished bed guides
- ▶ All electronic controls centrally accessible
- ▶ All feed gearwheels made of steel, hardened and polished
- ▶ 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
- ▶ Coolant system featuring separate coolant tank, fill level display and oil trap; easy and complete draining and cleaning as per DIN
- ▶ Complete feed and lead spindle cover
- ▶ Working area completely illuminated
- ▶ Hardened and polished spindle guarantees high degrees of accuracy and durability
- ▶ The powerful machining performance means that a high level of chip removal during roughing work is no problem
- ▶ Lockable chip guard moves with the bed slide with integrated position indicator and coolant hose, manually adjustable
- ▶ No interchangeable gears required
- ▶ With safety device to prevent simultaneous operation of thread cutting and pitch mechanism
- ▶ Electronically braked motor
- ▶ Electronic feed shut-off of Z axis
- ▶ Electrical position shut-off with quadruple positioning stop
- ▶ Three-jaw lathe chuck included in standard scope of delivery
- ▶ Quick change tool holder SWH 7-C
- ▶ Tool holder 32 x 130 type D for square chisels 25 mm

- ▶ **Digital position display DP700**
(More information see page 234)

TX 5216:

- ▶ Large spindle bore Ø 80 mm

TX 6222:

- ▶ Large spindle bore Ø 105 mm

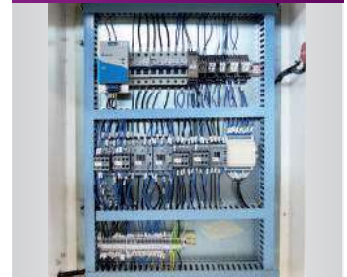
Touch panel



Centralised control

- ▶ Pitch deactivation using button
- ▶ Feed bar drive
- ▶ Rapid motion X and Y axis
- ▶ Machine lamp
- ▶ Coolant

Control cabinet



- ▶ 24 Volt DC power supply
- ▶ All contactors and relays by **SIEMENS** or **Schneider**

Back panel



- ▶ Easy to service thanks to removable rear panel

Energy chain



- ▶ for routing that is easy on the cable and hose material



Fig. TX 5216

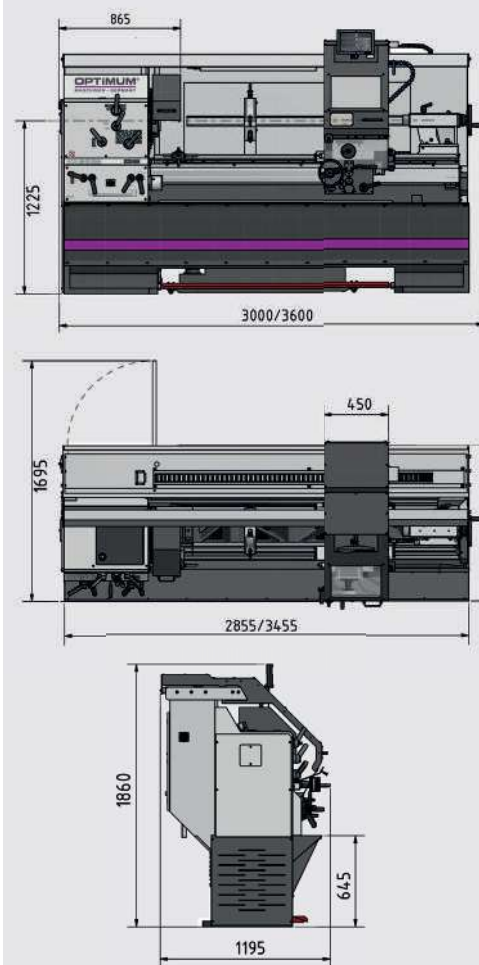


Technical specifications, accessories and dimensions

Model	TX 5216	TX6222
Article no.	3432440	3432460
Output		
Electrical connection	400 V / 3 Ph ~50 Hz	
Total rated value	6.1 kW	8.5 kW
Coolant pump motor	100 W	
Spindle		
Drive motor	5.5 kW	7.5 kW
Spindle taper	MT7	Ø 113 mm (Taper 1:20)
Spindle holder	Camlock DIN ISO 702-2 No. 8	
Spindle bore, bar passage diameter	Ø 80 mm	Ø 105 mm
Quick change tool holder	SWH 7-C	
Work area		
Centre height	260 mm	310 mm
Centre width	1 600 mm	2 200 mm
Swing diameter over machine bed*	520 mm	620 mm
Swing over cross slide	324 mm	424 mm
Bed width	350 mm	
Speed range		
Spindle speed	30 - 1 500 rpm	40 - 1 650 rpm
Number of speeds	12 speeds	
Travel		
Top slide travel	170 mm	
Cross slide travel	350 mm	
Feeds and pitches		
Longitudinal feed within the range	0.05 - 1.5 mm/rev (55 feeds)	
Cross feed within	0.025 - 0.75 mm/rev (55 feeds)	
Metric pitch	0.5 - 15 mm/rev (55 pitches)	
Pitch - inch in range	60 - 2 turns/inch (55 pitches)	
Diametral pitch in range	0.25 - 7.5 mm x π (55 thread)	
Modular thread in range	120 - 4 turns/π (55 pitch)	
Tailstock		
Tailstock seat	MT5	
Tailstock spindle sleeve diameter / stroke	Ø 72 mm/ 180 mm	
Dimensions and weight		
Length x width x height (mm)	3 016 x 1 270 x 2 217	3 550 x 1 200 x 1 830
Net weight	2 470 kg	2 800 kg

Accessories	Article no.
TX 5216	
Follow rest passageway Ø 15 - Ø 125 mm	3438020
Steady rest passageway Ø 10 - Ø 185 mm	3438023
Steady rest passageway Ø 160 - Ø 285 mm	3438024
Lathe tool set HM 20 mm (see page 225)	3441670
Lathe tool set HM 20 mm, extension kit (see page 225)	3441617
TX 6222	
Follow rest passageway Ø 15 - Ø 125 mm	3438030
Steady rest passageway Ø 10 - Ø 185 mm	3438033
Steady rest passageway Ø 160 - Ø 285 mm	3438034
Lathe tool set HM 25 mm, extension kit (see page 226)	3441672
Lathe tool set HM 25 mm (see page 226)	3441623
Accessories	
Clamping disc Ø 450 mm no. 8	3442982
BISON co-travelling centre MT5	3451005
Vibration damping machine base SE 85 (6 units required)	3352982
➤ More accessories for lathes from page 214	

Dimensions



Follow this for the video presentation of our OPTIMUM lathe TX 5216



Fig.:
Fixed steady



Fig.:
Travelling steady

Contents of package

- Three-jaw lathe chuck Ø 315 mm no. 8
 - Non-travelling centre MT5 long
 - Fixed centre MT5 short
 - Quick change tool holder SWH 7-C
 - Tool holder for square chisels 32 x 130 type D for 25 mm square chisels
 - Machine initially filled with premium grade oil
 - Operating tool
- TX 5216:**
- Reduction sleeve MT7 - MT5
- TX 6222:**
- Reduction sleeve Ø 113 mm / MT5

Precision feed and lead spindle lathe with electronically controlled drive and digital position display **NEWALL DP 700**

Facts that impress in terms of quality, performance and price

- ▶ Machine bed and chassis made heavily ribbed cast material
- ▶ Single-part steel machine chassis
- ▶ High degrees of rigidity of the spindle bar housing thanks to strong ribbed 25GG cast material
- ▶ Precision slide
- ▶ shafts on needle bearings, all components lubricated in oil bath
- ▶ Hardened and polished bed guides
- ▶ All electronic controls centrally accessible
- ▶ All feed gearwheels made of steel, hardened and polished
- ▶ 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
- ▶ Coolant system featuring separate coolant tank, fill level display and oil trap; easy and complete draining and cleaning as per DIN
- ▶ Complete feed and lead spindle cover
- ▶ Working area completely illuminated
- ▶ Easy to service thanks to removable rear panel
- ▶ Hardened and polished spindle guarantees high degrees of accuracy and durability
- ▶ The powerful machining performance means that a high level of chip removal during roughing work is no problem
- ▶ Energy chain for material-friendly cable and hose guiding
- ▶ Lockable chip guard moves with the bed slide with integrated position indicator and coolant hose, manually adjustable
- ▶ No interchangeable gears required
- ▶ With safety device to prevent simultaneous operation of thread cutting and pitch mechanism
- ▶ Electronically braked motor
- ▶ Electronic feed shut-off of Z axis
- ▶ Electrical position shut-off with quadruple positioning stop
- ▶ Three-jaw lathe chuck included in standard scope of delivery
- ▶ Quick change tool holder SWH 7-C
- ▶ Tool holder 32 x 130 type D for square chisels 25 mm

Dig. Position display DPA 700



- › Intuitive and user-friendly user interface
- (More information see page 234)

Siemens inverter

Made in EU



- › **SINAMICS G120D**
- › More information: „Siemens SINAMICS G 120D Frequency inverters“ on page 186

Control cabinet



- › 24 Volt DC power supply
- › All contactors und relays by **SIEMENS** or **Schneider**

Touch panel



Centralised control

- › Pitch deactivation using button
- › Feed bar drive
- › Rapid motion X and Y axis
- › Machine lamp
- › Coolant

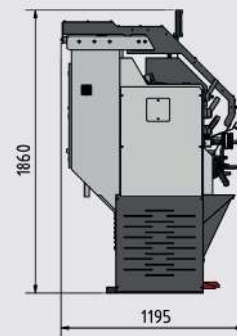
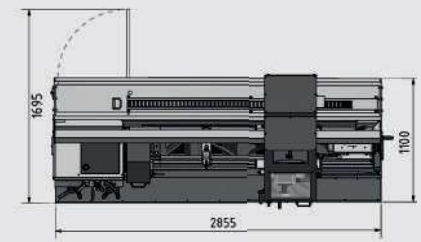
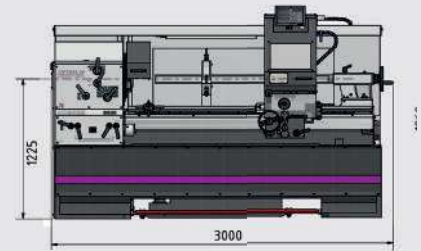




Technical specifications, accessories and dimensions

Model	TX 5216V
Article no.	3432445
Output	
Electrical connection	400 V / 3 Ph ~50 Hz
Total rated value	5.5 kW
Coolant pump motor	100 W
Spindle	
Drive motor	5.5 kW
Spindle taper	MT7
Spindle holder	Camlock DIN ISO 702-2 No. 8
Spindle bore, bar passage diameter	Ø 80 mm
Quick change tool holder	SWH 7-C
Work area	
Centre height	260 mm
Centre width	1 600 mm
Swing diameter over machine bed*	520 mm
Swing over cross slide	324 mm
Bed width	350 mm
Speed range	
Spindle speed	45 - 1 800 rpm
Number of speeds	2 x 3 speeds
Travel	
Top slide travel	170 mm
Cross slide travel	350 mm
Feeds and pitches	
Longitudinal feed within the range	0.05 - 1.5 mm/rev (55 feeds)
Cross feed within	0.025 - 0.75 mm/rev (55 feeds)
Metric pitch	0.5 - 15 mm/rev (55 pitches)
Pitch - inch in range	60 - 2 turns/inch (55 pitches)
Diametral pitch in range	0.25 - 7.5 mm x π (55 thread)
Modular thread in range	120 - 4 turns/ π (55 pitch)
Tailstock	
Tailstock seat	MT5
Tailstock spindle sleeve diameter / stroke	Ø 72 mm/ 180 mm
Dimensions and weight	
Length x width x height	3,016 x 1,195 x 1,860 mm
Net weight	2 470 kg

Dimensions



YouTube
Follow this for the video presentation of our OPTIMUM lathe TX 5216



Fig.:
Fixed steady



Fig.:
Travelling steady

Accessories	Article no.
TX 5216	
Follow rest passageway Ø 15 - Ø 125 mm	3438020
Steady rest passageway Ø 10 - Ø 185 mm	3438023
Steady rest passageway Ø 160 - Ø 285 mm	3438024
Lathe tool set HM 20 mm (see page 225)	3441670
Lathe tool set HM 20 mm, extension kit (see page 226)	3441617
Accessories	
Clamping disc Ø 450 mm no. 8	3442982
Travelling centre MT5	3440705
BISON co-travelling centre MT5	3451005
Vibration dampers machine base SE 85 (6 units required)	3352982
› More accessories for lathes from page 214	

Contents of package

- › Three-jaw lathe chuck Ø 315 mm no. 8
- › Machine lamp
- › Reduction sleeve MT7 / MT5
- › Non-travelling centre MT5 long
- › Fixed centre MT5 short
- › Quick change tool holder SWH 7-C
- › Tool holder for square chisels 32 x 130 type D for 25 mm square chisels
- › 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

- ▶ 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
- ▶ 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, ground and borne on 2 re-adjustable precision taper rollers
- ▶ Gears and shafts tempered and ground, running in oil bath on precision bearings
- ▶ Clear-cut selector lever for switching the feed speeds
- ▶ Closed design of the quick shift feed gear
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Clockwise/anti-clockwise rotation switchable on bed slide, switchable via switching spindle
- ▶ Central lubrication in bed slide
- ▶ Leading spindle cover
- ▶ Emergency stop push button, motor circuit breaker, lockable main switch
- ▶ Emergency stop device with foot pedal
- ▶ Safety hand wheels with release function acc. to EN23125 in the X and Z axis
- ▶ 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
- ▶ LED machine lamp in chip guard
- ▶ Energy chain for material-friendly cable and hose guiding
- ▶ Scale on thread gauge adjustable

Control cabinet



- › 24 Volt DC power supply
- › All contactors and relays by SIEMENS or Schneider

Quick change tool holder



- › SWH 7-C
- › 1 tool holder 32 x 150 type D
- › Play-free and repetition-accurate clamping of the change holder

Dig. Position display DPA 21



- › User-friendly membrane keyboard, splash water protected, sealed and dazzle free

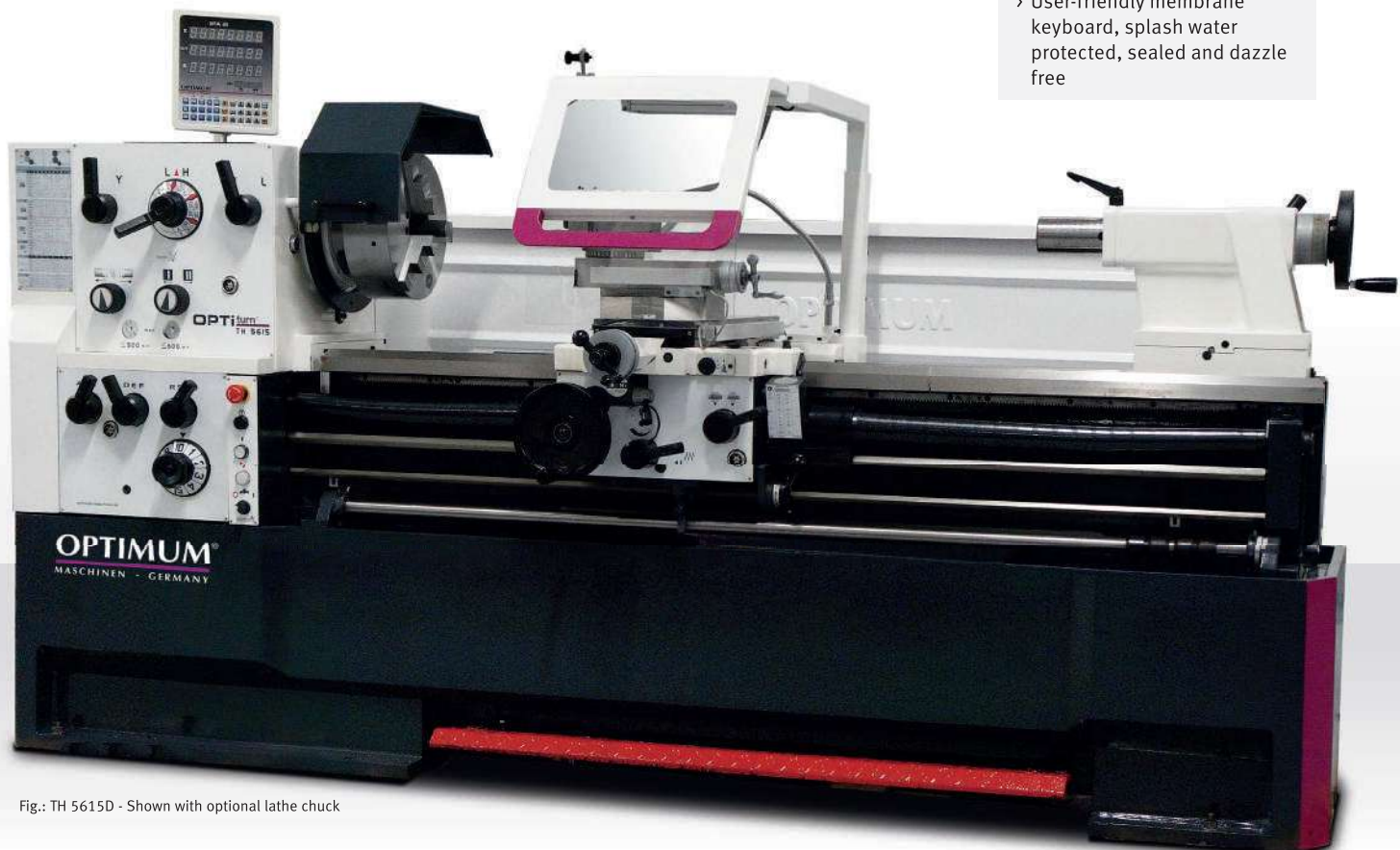


Fig.: TH 5615D - Shown with optional lathe chuck

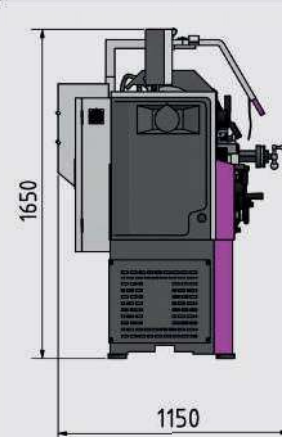
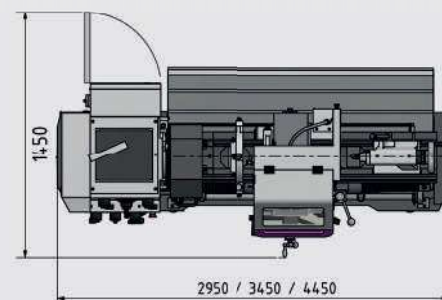
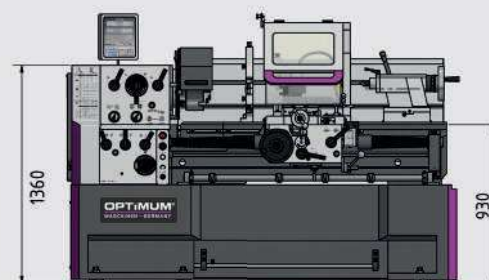


Technical specifications, accessories and dimensions

Model	TH 5615D	TH 5620D	TH 5630D
Article no.	3462160	3462170	3462180
Output			
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	MT7		
Spindle holder	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 diameter over machine bed*	560 mm		
Swing over cross slide	355 mm		
Bed width	350 mm		
Swing without bed bridge	790 mm		
Turning length in bed bridge	170 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	MT5		
Spindle sleeve diameter / stroke	Ø 75 mm/180 mm		
Dimensions and weight			
Length	2 950 mm	3 450 mm	4 450 mm
width x height	1 150 x 1 650 mm		
Net weight	2 300 kg	2 720 kg	3 000 kg

Lathe chuck	Article no.
OPTIMUM three-jaw lathe chuck Ø 315 mm no. 8, centric	3442768
OPTIMUM Four-jaw lathe chuck Ø 315 mm no. 8, centric	3442856
OPTIMUM Four-jaw lathe chuck Ø 315 mm no. 8, individual	3442888
BISON three-jaw lathe chuck Ø 315 mm no. 8, centric	3450335
BISON Four-jaw lathe chuck Ø 315 mm no. 8, centric	3450385
Accessories	Article no.
Clamping disc Ø 450 mm no. 8	3442982
Travelling centre MT5	3440705
BISON co-travelling centre MT5	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 227)	3441674
Vibration dampers machine base SE 85 (6 units required TH5615/5620) (8 units required TH5630)	3352982
Position stop with granular adjustment	3444022

Dimensions



Our recommendation

cleancraft
flexCAT 378 EOT-PRO
Article no. 7003380



**Remember to order
a lathe chuck**

Contents of package

- › Steady rest passageway Ø 19 - Ø 165 mm
- › Follow rest passageway Ø 16 - Ø 95 mm
- › LED machine lamp
- › Reduction sleeve MT7 / MT5
- › Non-travelling centre MT5
- › Fixed, but temperature resistant centre MT5
- › Quick change tool holder 7-C
- › Tool holder 32 x 150 type D for square chisels 25 mm
- › Thread gauge
- › Gear wheels for threading gauge (metric)
- › Interchangeable gear set
- › Machine initially filled with premium grade oil
- › Operating tool

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
- ▶ All guides adjustable using cleats
- ▶ Spindle collet Camlock DIN ISO 702-2 no. 8
- ▶ Precision slide
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ Adjustment range top slide $\pm 90^\circ$
- ▶ Guaranteed concentricity of spindle nose better than 0.015 mm
- ▶ Gearwheels smooth running, tempered, ground and 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
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Clockwise/anti-clockwise rotation switchable on bed slide, switchable via switching spindle
- ▶ Central lubrication in bed slide
- ▶ Leading spindle cover
- ▶ Emergency stop push button, motor circuit breaker, lockable main switch
- ▶ Emergency stop device with foot pedal
- ▶ Safety hand wheels with release function acc. to EN23125 in the X and Z axis
- ▶ 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
- ▶ LED machine lamp in chip guard
- ▶ Two speeds
- ▶ Spindle bore/bar passage $\varnothing 105$ mm
- ▶ Siemens Sinamics frequency inverter / Safety Integrated
- ▶ 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 and relays by SIEMENS or Schneider

Siemens inverter

Made in EU



- › **SINAMICS G120D**
- › More information: „Siemens SINAMICS G 120D Frequency inverters“ on page 186

Dig. Position display DPA 21



- › User-friendly membrane keyboard, splash water protected, sealed and dazzle free

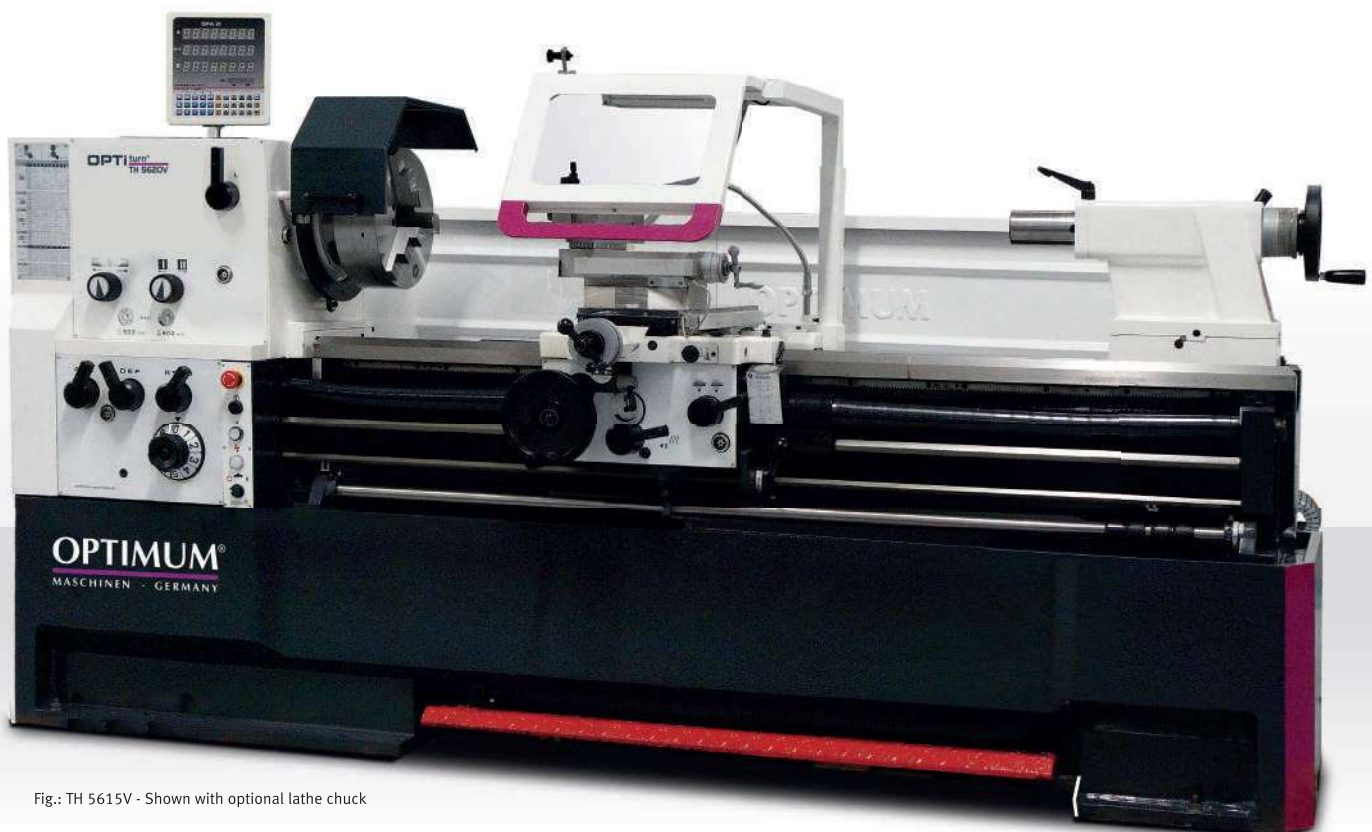


Fig.: TH 5615V - Shown with optional lathe chuck



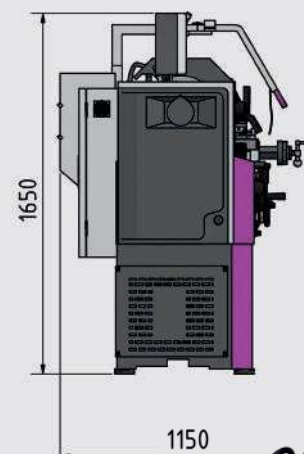
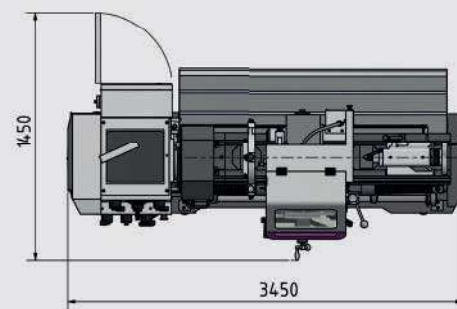
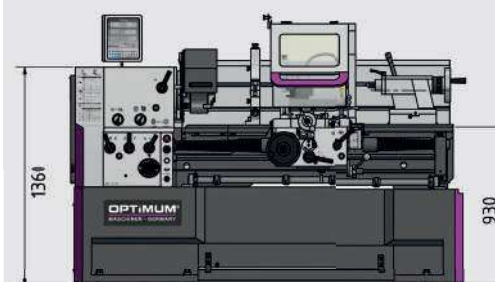
Technical specifications, accessories and dimensions

Model	TH 5620V
Article no.	3462175
Output	
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	Ø 113 mm (taper 1:20)
Spindle holder	Camlock DIN ISO 702-2 No. 8
Spindle bore, bar passage diameter	Ø 105 mm
Quick change tool holder	SWH 7-C
Work area	
Centre height	280 mm
Centre width	1 910 mm
Swing diameter over machine bed*	560 mm
Swing over cross slide	355 mm
Bed width	350 mm
Swing without bed bridge	790 mm
Turning length in bed bridge	170 mm
Speed range	
Spindle speed	25 - 1 600 rpm
Number of speeds	2 speeds; electronically controlled
Travel	
Top slide travel	130 mm
Cross slide travel	316 mm
Feeds and pitches	
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)
Tailstock	
Tailstock seat	MT5
Spindle sleeve diameter / stroke	Ø 75 mm/180 mm
Dimensions and weight	
Length x width x height	3,450 x 1,150 x 1,650 mm
Net weight	2 720 kg

Lathe chuck	Article 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 on lathe chucks from page 218	

Accessories	Article no.
Clamping disc Ø 450 mm no. 8	3442982
Travelling centre MT5	3440705
BISON co-travelling centre MT5	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 227)	3441674
Position stop with granular adjustment	3444023

Dimensions



Our recommendation

cleancraft
flexCAT 378 EOT-PRO
Article no. 7003380



**Remember to order
a lathe chuck**

Contents of package

- › Steady rest passageway Ø 19 - Ø 165 mm
- › Follow rest passageway Ø 16 - Ø 95 mm
- › LED machine lamp
- › Reduction sleeve Ø 113 mm / MT5
- › Non-travelling centre MT5
- › Fixed, but temperature resistant centre MT5
- › Quick change tool holder 7-C
- › Tool holder 32 x 150 type D for square chisels 25 mm
- › Thread gauge
- › Gear wheels for threading gauge (metric)
- › Interchangeable gear set
- › Machine initially filled with premium grade oil
- › Operating tool

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

- ▶ Tempered and polished z-axis guideway
- ▶ Spindle collet Camlock DIN ISO 702-2 no. 8
- ▶ All guides adjustable using cleats
- ▶ Precision slide
- ▶ Adjustment range top slide $\pm 90^\circ$
- ▶ Guaranteed concentricity of spindle nose better than 0.015 mm
- ▶ Gearwheels smooth running, tempered, ground and 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
- ▶ Safety hand wheels with release function in the X axis
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ Safety limit switch with positively opening contacts
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Clockwise/anti-clockwise rotation switchable on bed slide, switchable via switching spindle
- ▶ Central lubrication in bed slide
- ▶ Coolant system featuring separate coolant tank, fill level display and oil trap; easy and complete draining and cleaning as per DIN
- ▶ Leading spindle cover
- ▶ Emergency stop push button, motor circuit breaker, lockable main switch
- ▶ Tailstock adjustable ± 10 mm for turning spheres
- ▶ Tailstock spindle sleeve and hand wheel with adjustable fine scaling
- ▶ Tailstock crank for position change
- ▶ Tailstock spindle sleeve with two adjustable transmission ratios 1/4 or 1/1 rev
- ▶ LED machine lamp
- ▶ Emergency stop device with foot pedal
- ▶ Electrical motor brake with fast emergency stop – in normal operations, fast stop without post-run
- ▶ Energy chain for material-friendly cable and hose guiding
- ▶ Quick change tool holder SWH 9-D
- ▶ Tool holder 41 x 180 type D for square chisels 32 mm

Control cabinet



- › 24 Volt DC power supply
- › All contactors and relays by SIEMENS or Schneider

Flat and longitudinal feed



- › Fast feed - pushbutton and selector lever for activating and deactivating rapid motion in transverse and longitudinal directions for an even more rational work approach. Does not switch off the entire machine when running into the limit switch

Dig. Position display DPA 21



- › User-friendly membrane keyboard, splash water protected, sealed and dazzle free



Fig.: TH 6630D



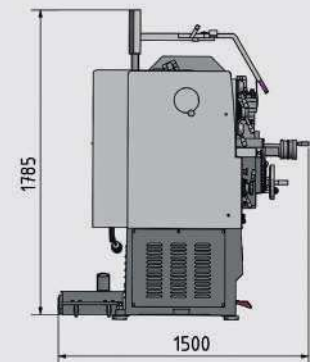
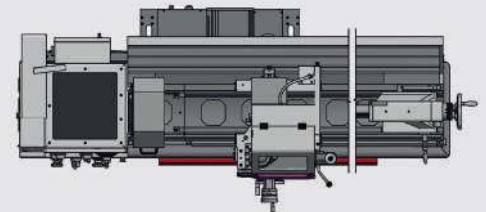
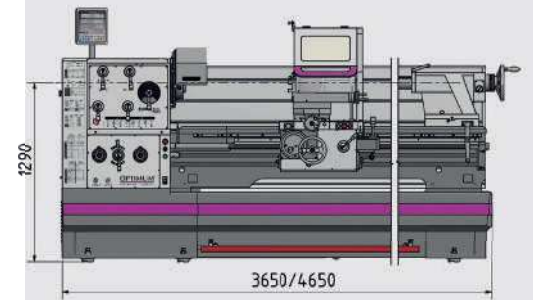
Technical specifications, accessories and dimensions

Model	TH 6620D	TH 6630D
Article no.	3462210	3462220
Output		
Electrical connection	400 V / 3 Ph ~50 Hz	
Total rated value	10 kW	
Coolant pump motor	150 W	
Spindle		
Drive motor	9 kW	
Spindle taper	Ø 113 mm (taper 1:20)	
Spindle holder	Camlock DIN ISO 702-2 No. 8	
Spindle bore, bar passage diameter	Ø 105 mm	
Quick change tool holder	SWH 9-D	
Work area		
Centre height	330 mm	
Centre width	2 050 mm	3 050 mm
Swing diameter over machine bed*	660 mm	
Swing over cross slide	440 mm	
Bed width	400 mm	
Swing without bed bridge	900 mm	
Turning length in bed bridge	250 mm	
Load bearing capacity	1.4 t/m	
Speed range		
Spindle speed	25 - 1 600 rpm	
Number of speeds	16 speeds	
Travel		
Top slide travel	230 mm	
Cross slide travel	368 mm	
Feeds and pitches		
Feed motor output	550 W	
Rapid traverse	3.8 m /min. max. 5 min. (30 min. break)	
Longitudinal feed within the range	0.044 - 1.48 mm/rev (25 feeds)	
Cross feed within	0.022 - 0.74 mm/rev (25 feeds)	
Pitch - metric in range	0.45 - 120 mm/rev (54 pitches)	
Pitch - inch in range	80 - 7/16 turns/inch (60 pitches)	
Diametral pitch in range	7/8 - 160 turns/π (42 pitch)	
Modular thread in range	0.25 - 60 mm x π (46 thread)	
Tailstock		
Tailstock seat	MT5	
Tailstock- sleeve diameter/ sleeve travel	90 mm / 235 mm	
Dimensions and weight		
Length	3 650 mm	4 650 mm
width x height	1 500 x 1 785 mm	
Net weight	3,345 kg	3 730 kg

Lathe chuck Ø 315 mm No. 8	Article no.
OPTIMUM three-jaw lathe chuck, centric	3442768
OPTIMUM Four-jaw lathe chuck, centric	3442856
OPTIMUM Four-jaw lathe chuck, single	3442888
BISON Three-jaw lathe chuck, centric	3450335
BISON Four-jaw lathe chuck, centric	3450385

Accessories	Article no.
Travelling centre MT5	3440705
BISON co-travelling centre MT5 (2-row SKF angular contact bearings)	3451005
Lathe tool set HM 25 mm (see page 226)	3441672
Lathe tool set HM 25 mm, extension kit (see page 226)	3441623
Vibration dampers machine base SE 85 (6 units (TH 6620) or 8 units (TH 6630) are required)	3352982
» More accessories for lathes from page 214	

Dimensions



Our recommendation

cleancraft
flexCAT 378 EOT-PRO
Article no. 7003380



**Remember to order
a lathe chuck**

Contents of package

- » Steady rest passageway Ø 20 - Ø 190 mm
- » Follow rest passage Ø 20 - Ø 130 mm
- » LED machine lamp
- » Reduction sleeve Ø 113 mm / MT5
- » Non-travelling centre MT5
- » Fixed, but temperature resistant centre MT5
- » Travelling centre MT5
- » Quick change tool holder 9-D
- » Tool holder 41 x 180 type D for square chisels 32 mm
- » Interchangeable gear set
- » Quality oil included
- » Operating tool

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

- ▶ Tempered and polished z-axis guideway
- ▶ Spindle collet Camlock DIN ISO 702-2 no. 8
- ▶ All guides adjustable using cleats
- ▶ Precision slide
- ▶ Adjustment range top slide $\pm 90^\circ$
- ▶ Guaranteed concentricity of spindle nose better than 0.015 mm
- ▶ Gearwheels smooth running, tempered, ground and 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
- ▶ Safety hand wheels with release function in the X axis
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ Safety limit switch with positively opening contacts
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Clockwise/anti-clockwise rotation switchable on bed slide, switchable via switching spindle
- ▶ Central lubrication in bed slide
- ▶ Coolant system featuring separate coolant tank, fill level display and oil trap; easy and complete draining and cleaning as per DIN
- ▶ Leading spindle cover
- ▶ Emergency stop push button, motor circuit breaker, lockable main switch
- ▶ Tailstock adjustable ± 10 mm for turning spheres
- ▶ Tailstock spindle sleeve and hand wheel with adjustable fine scaling
- ▶ Tailstock crank for position change
- ▶ Tailstock spindle sleeve with two adjustable transmission ratios 1/4 or 1/1 rev
- ▶ LED machine lamp
- ▶ Emergency stop device with foot pedal
- ▶ Electrical motor brake with fast emergency stop – in normal operations, fast stop without post-run
- ▶ Electrical system with Siemens and Schneider components
- ▶ Energy chain for material-friendly cable and hose guiding
- ▶ Quick change tool holder SWH 9-D
- ▶ Tool holder 41 x 180 type D for square chisels 32 mm

Control cabinet



- › 24 Volt DC power supply
- › All contactors and relays by SIEMENS or Schneider

Flat and longitudinal feed



- › Fast feed - pushbutton and selector lever for activating and deactivating rapid motion in transverse and longitudinal directions for an even more rational work approach. Does not switch off the entire machine when running into the limit switch

Dig. Position display DPA 21



- › User-friendly membrane keyboard, splash water protected, sealed and dazzle free



Fig.: TH 8030D



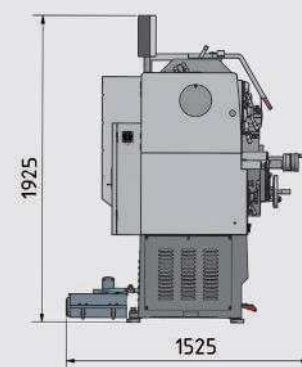
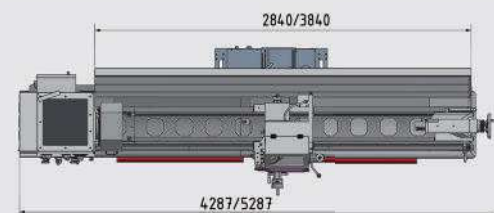
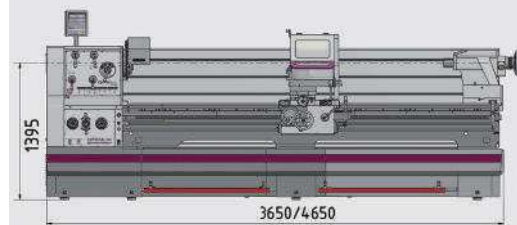
Technical specifications, accessories and dimensions

Model	TH 8020D	TH 8030D
Article no.	3462230	3462240
Output		
Electrical connection	400 V / 3 Ph ~50 Hz	
Total rated value	12 kW	
Coolant pump motor	150 W	
Spindle		
Drive motor	11 kW	
Spindle taper	Ø 113 mm (taper 1:20)	
Spindle holder	Camlock DIN ISO 702-2 No. 8	
Spindle bore, bar passage diameter	Ø 105 mm	
Quick change tool holder	SWH 9-D	
Work area		
Centre height	400 mm	
Centre width	2 050 mm	3 050 mm
Swing diameter over machine bed*	800 mm	
Swing over cross slide	570 mm	
Bed width	400 mm	
Swing without bed bridge	1 035 mm	
Turning length in bed bridge	250 mm	
Load bearing capacity	1.4 t/m	
Speed range		
Spindle speed	25 - 1 600 rpm	
Number of speeds	16 speeds	
Travel		
Top slide travel	230 mm	
Cross slide travel	368 mm	
Feeds and pitches		
Feed motor output	550 W	
Rapid traverse	3.8 m /min. max. 5 min. (30 min. break)	
Longitudinal feed within the range	0.044 - 1.48 mm/rev (25 feeds)	
Cross feed within	0.022 - 0.74 mm/rev (25 feeds)	
Pitch - metric in range	0.45 - 120 mm/rev (54 pitches)	
Pitch - inch in range	80 - 7/16 turns/inch (60 pitches)	
Diametral pitch in range	7/8 - 160 turns/π (42 pitch)	
Modular thread in range	0.25 - 60 mm x π (46 thread)	
Tailstock		
Tailstock seat	MT5	
Tailstock- sleeve diameter/ sleeve travel	90 mm / 235 mm	
Dimensions and weight		
Length	4 287 mm	5 287 mm
width x height	1 525 x 1 925 mm	
Net weight	3 455 kg	3 820 kg

Lathe chuck Ø 315 mm No. 8	Article no.
OPTIMUM three-jaw lathe chuck , centric	3442768
OPTIMUM Four-jaw lathe chuck , centric	3442856
OPTIMUM Four-jaw lathe chuck , single	3442888
BISON Three-jaw lathe chuck , centric	3450335
BISON Four-jaw lathe chuck , centric	3450385

Accessories	Article no.
Travelling centre MT5	3440705
BISON co-travelling centre MT5 (2-row SKF angular contact bearings)	3451005
Lathe tool set HM 25 mm (see page 226)	3441672
Lathe tool set HM 25 mm, extension kit (see page 226)	3441623
Vibration dampers machine base SE 85 (8 units are required)	3352982
› More accessories for lathes from page 214	

Dimensions



Our recommendation

cleancraft
flexCAT 378 EOT-PRO
Article no. 7003380



**Remember to order
a lathe chuck**

Contents of package

- › Steady rest passageway Ø 20 - Ø 185 mm
- › Follow rest passage Ø 20 - Ø 125 mm
- › LED machine lamp
- › Reduction sleeve Ø 113 mm / MT5
- › Non-travelling centre MT5
- › Fixed, but temperature resistant centre MT5
- › Travelling centre MT5
- › Quick change tool holder 9-D
- › Tool holder 41 x 180 type D for square chisels 32 mm
- › Interchangeable gear set
- › Quality oil included
- › Operating tool