

LATHES



Cast machine base

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Steel machine base

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Bench-top models

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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
- ▶ All guides adjustable using cleats
- ▶ Adjustment range top slide $\pm 90^\circ$
- ▶ Guaranteed concentricity of spindle nose better than 0.015 mm
- ▶ Shafts, gears and main spindle run in oil bath
- ▶ Gearwheels smooth running, tempered and ground borne on 2 re-adjustable precision taper rollers
- ▶ Clear-cut selector lever for switching the feed speeds
- ▶ Closed design of the quick shift feed gear
- ▶ Gears and shafts tempered and ground, running in oil bath on precision bearings
- ▶ Hand wheels decoupled and approved in line with EN 23125
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Right-handed/left-handed rotation switchable on bed slide, switchable via switching spindle
- ▶ Central lubrication in bed slide
- ▶ 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 button, motor circuit breaker, lockable main switch
- ▶ Emergency stop device with foot pedal
- ▶ Safety hand wheels with release function in the X axis
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ 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
- ▶ Fast feed - Pushbutton and selector lever for enabling 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
- ▶ Safety limit switch with positively opening contacts
- ▶ Electrical motor brake with fast emergency stop – in normal operations, fast stop without post-run
- ▶ Electrical system with Siemens components
- ▶ Energy chain for material-friendly cable and hose guiding
- ▶ Quick change tool holder SWH 9-D
- ▶ 1 tool holder 41 x 180 type D for square chisels 32 mm

Digital position display DPA 21

- › Clear reduction of manufacturing times
- › Glass scales

Control Cabinet

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



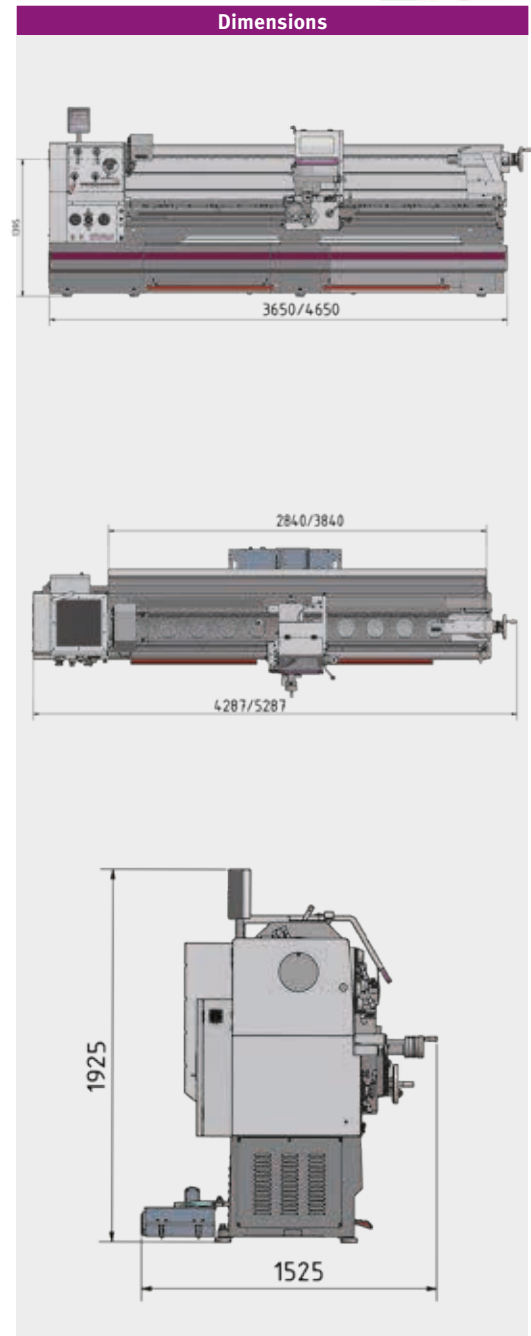
Fig.: TH 8030D



Technical specifications, accessories and dimensions

Model	TH 8020D	TH 8030D
Article no.	3462230	3462240
Technical specifications		
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 seat	Camlock DIN ISO 702-2 No. 8	
Spindle bore, bar passage diameter	Ø 105 mm	
Quick change tool holder height	SWH 9-D	
Work area		
Centre height	400 mm	
Centre width	2 050 mm	3 050 mm
Swing Ø over machine bed	800 mm	
Swing in the bed bridge	1 035 mm	
Turning length in bed bridge	250 mm	
Swing over cross slide	570 mm	
Bed width	400 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	MT 5	
Tailstock quill diameter/stroke	90 mm/235 mm	
Dimensions		
Length	4 287 mm	5 287 mm
width x height	1 525 x 1 925 mm	
Weight	3 455 kg	3 820 kg

Lathe chuck	Art 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	Art no.
Travelling centre MT 5	3440705
BISON co-travelling centre MT 5 (2-row SKF angular contact bearings)	3451005
Lathe tool set HM 25 mm, 5-part (see page 192)	3441672
Lathe tool set HM 25 mm, 5-part, extension kit (see page 192)	3441623
Vibration-damping machine base SE 3 (6 pcs. required)	3381018
Vibration damper SE 85 (6 pcs. needed)	3352982
› More accessories for lathes from page 184	



**Remember to order
a lathe chuck**

Scope of supply

- › Steady rest passageway max. Ø 150 mm
- › Follow rest passageway max. Ø 130 mm
- › LED machine lamp
- › Reduction sleeve Ø 113 mm / MT 5
- › One fixed and one alloyed centre MT 5
- › Quick change tool holder 9-D
- › Tool holder 41 x 180 type D for square chisels 32 mm
- › Replaceable 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
- ▶ Precision slide
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ All guides adjustable using cleats
- ▶ Gears and shafts running in oil bath
- ▶ Adjustment range top slide $\pm 90^\circ$
- ▶ Guaranteed concentricity of spindle nose better than 0.015 mm
- ▶ Main spindle runs in oil bath
- ▶ Gearwheels smooth running, tempered and ground borne on 2 re-adjustable precision taper rollers
- ▶ Clear-cut selector lever for switching the feed speeds
- ▶ Closed design of the quick shift feed gear
- ▶ Gears and shafts tempered and ground, running in oil bath on precision bearings
- ▶ Hand wheels decoupled and approved in line with EN 23125
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Right-handed/left-handed rotation switchable on bed slide, switchable via switching spindle
- ▶ Central lubrication in bed slide
- ▶ 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 button, motor circuit breaker, lockable main switch
- ▶ Emergency stop device with foot pedal
- ▶ Safety hand wheels with release function in the X axis
- ▶ 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
- ▶ Fast feed - Pushbutton and selector lever for enabling 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
- ▶ Safety limit switch with positively opening contacts
- ▶ Electrical motor brake with fast emergency stop – in normal operations, fast stop without post-run
- ▶ Electrical system with Siemens components
- ▶ Energy chain for material-friendly cable and hose guiding
- ▶ Quick change tool holder SWH 9-D
- ▶ 1 tool holder 41 x 180 type D for square chisels 32 mm

Digital position display DPA 21

- › Clear reduction of manufacturing times
- › Glass scales

Control Cabinet

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



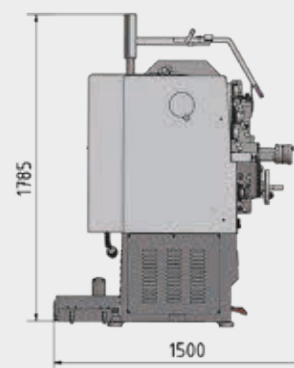
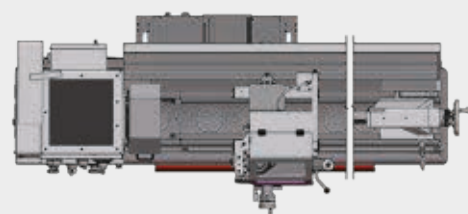
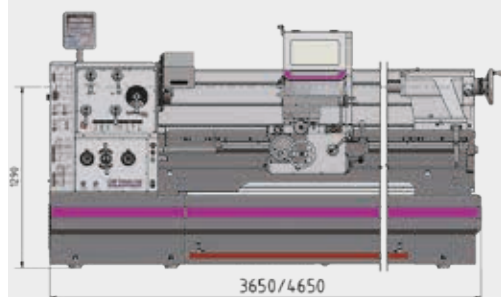
Fig.: TH 6630D

Technical specifications, accessories and dimensions

Model	TH 6620D	TH 6630D
Article no.	3462210	3462220
Technical specifications		
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 seat	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 Ø over machine bed	660 mm	
Swing in the bed bridge	900 mm	
Turning length in bed bridge	250 mm	
Swing over cross slide	440 mm	
Bed width	400 mm	
Load bearing capacity	1.4 t/m	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	MT 5	
Tailstock quill diameter/stroke	90 mm/235 mm	
Dimensions		
Length	3 650 mm	4 650 mm
width x height	1 500 x 1 785 mm	
Weight	3,345 kg	3 730 kg

Lathe chuck		Art 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		Art no.
Travelling centre MT 5		3440705
BISON co-travelling centre MT 5 (2-row SKF angular contact bearings)		3451005
Lathe tool set HM 25 mm, 5-part (see page 192)		3441672
Lathe tool set HM 25 mm, 5-part, extension kit (see page 192)		3441623
Vibration-damping machine base SE 3 (6 pcs. required)		3381018
Vibration damper SE 85 (6 pcs. needed)		3352982
› More accessories for lathes from page 184		

Dimensions



**Remember to order
a lathe chuck**

Scope of supply

- › Steady rest passageway max. Ø 150 mm
- › Follow rest passageway max. Ø 130 mm
- › LED machine lamp
- › Reduction sleeve Ø 113 mm / MT 5
- › One fixed and one alloyed centre MT 5
- › Quick change tool holder 9-D
- › Tool holder 41 x 180 type D for square chisels 32 mm
- › Replaceable gear set
- › Quality oil included
- › Operating tool

Precision feed and lead spindle lathes comply 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 pronounced ribbing made of 25GG cast material
- ▶ All feed gearwheels made of steel, hardened and polished
- ▶ shafts on needle bearings, all components lubricated in oil bath
- ▶ 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
- ▶ Easy to service thanks to removable rear panel
- ▶ 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
- ▶ Decoupled hand wheels approved in line with EN 23125
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ No interchangeable gears required
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ With safety device to prevent simultaneous operation of thread cutting and pitch mechanism
- ▶ Hardened and polished bed guides

- ▶ Electronically braked motor
- ▶ Electronic feed shut-off of Z axis
- ▶ All electronic controls centrally accessible
- ▶ Working area completely illuminated
- ▶ External coolant tank with filling level display and oil separator
- ▶ Complete feed and lead spindle cover
- ▶ 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

(For more information, see „NEWALL - DP700“ on page 248)

TX 5216:

Large spindle bore Ø 80 mm

TX 6222:

Large spindle bore Ø 105 mm

Control Cabinet

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



Touch panel

- › **Centralised operation**
- › Pitch deactivation using button
- › Feed bar drive
- › Rapid motion X and Y axis
- › Machine lamp
- › Cooling agent

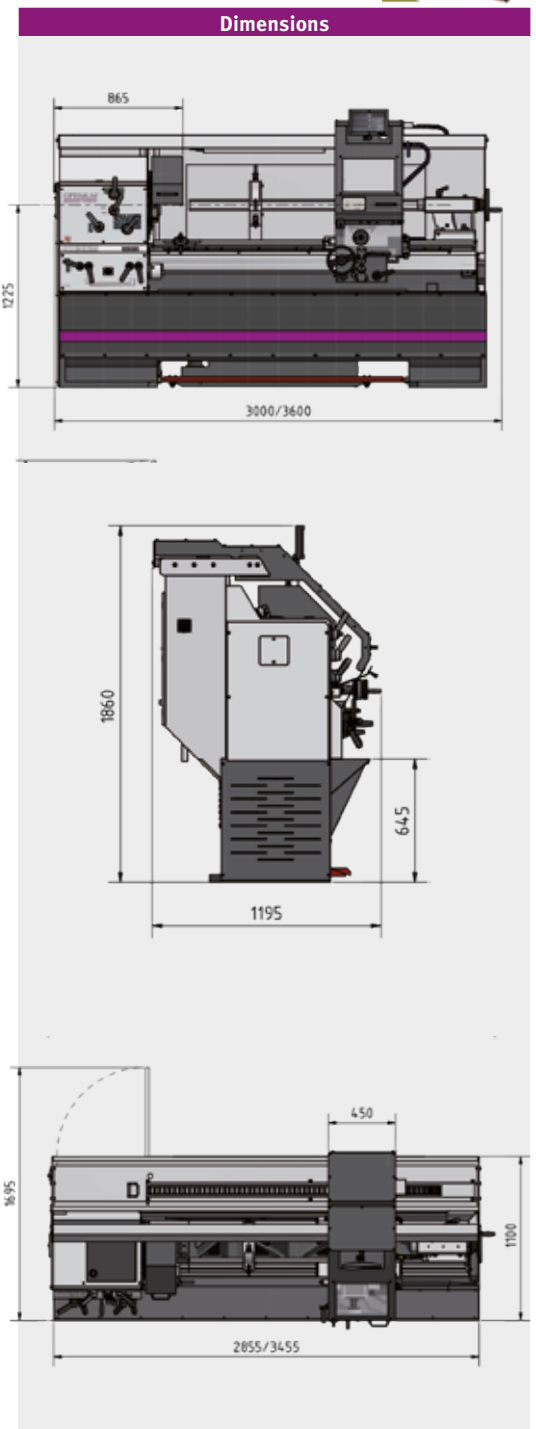


Fig. TX 5216

Technical specifications, accessories and dimensions

Model	TX 5216	TX6222
Article no.	3432440	3432460
Technical specifications		
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	MT 7	Ø 113 mm (taper 1:20)
Spindle seat	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	
Technical specifications		
Centre height	260 mm	310 mm
Centre width	1 600 mm	2 220 mm
Swing Ø 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	7/8 - 160 Gg/π (42 gears)	
Modular thread in range	0.25 - 7.5 mm x π (55 thread)	
Tailstock		
Tailstock seat	MT 5	
Tailstock quill diameter/stroke	Ø 72 mm/ 180 mm	
Dimensions		
Length	3 000 mm	3 600 mm
width x height	1 195 x 1 860 mm	1 194 x 1 860 mm
Weight	2 470 kg	2 800 kg

Accessories	Art no.
TX5216	
Follow rest passageway 15 - 125 mm	3438020
Steady rest passageway 10 - 185 mm	3438023
Steady rest passageway 160 - 285 mm	3438024
Lathe tool set HM 20 mm (see as of Page 192)	3441670
Lathe tool set HM 20 mm, extension kit (see page 192)	3441617
TX6222	
Follow rest passageway 15 - 125 mm	3438030
Steady rest passageway 10 - 185 mm	3438033
Steady rest passageway 160 - 285 mm	3438034
Lathe tool set HM 25 mm, extension kit (see page 192)	3441672
Lathe tool set HM 25 mm (see page 192)	3441623
Accessories	
Clamping disc Ø 450 mm no. 8	3442982
Travelling centre MT 5	3440705
BISON co-travelling centre MT 5	3451005
Vibration damping machine base SE 3 (6 pcs. required)	3381018
> More accessories for lathes from page 184	



Scope of supply

- > Three-jaw lathe chuck Ø 315 mm no. 8
- > Fixed centre MT 5 long
- > Fixed centre MT 5 short
- > Operating tool
- > Machine initially filled with premium grade oil
- > Quick change tool holder SWH 7-C
- > Tool holder for square chisels 32 x 130 type D for 25 mm square chisels

TX 5216:

- > Reduction sleeve MT 7 / MT 5

TX 6222:

- > Reduction sleeve Ø 113 mm/MT 5

Precision feed and lead spindle lathes with digital position display **NEWALL DP 700** and quick change tool holder. TZ 4V with electronically controlled drive

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
- ▶ Replacement gears also optionally available for imperial and modular thread
- ▶ 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 und relays by Siemens or Schneider
- ▶ Safety hand wheels with release function in the X and Z axis
- ▶ Chip tray pulls out to front
- ▶ Quick change tool holder SWH 5-B
- ▶ Tool holder 25 x 120 type D for square chisels 20 mm
- ▶ **Digital position display NEWALL DP 700**

TZ 4:

- ▶ Reduction of the main spindle braking time thanks to electrically braked motor
- ▶ Motor circuit switch

TZ 4V

- ▶ Reduction of the main spindle braking time thanks to energy recuperation
- ▶ All contactors und relays by Siemens or Eaton

TZ 4V - Siemens Inverter SINAMICS G120D

made in EU



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

Control panel

- › **Centralised operation**
- › For switching
- › Lighting
- › Coolant for TZ 4 for shifting two-speed motor
- › Foil keypad, easily cleanable



Bed geometry



- › Flat angle
- › Higher force absorption

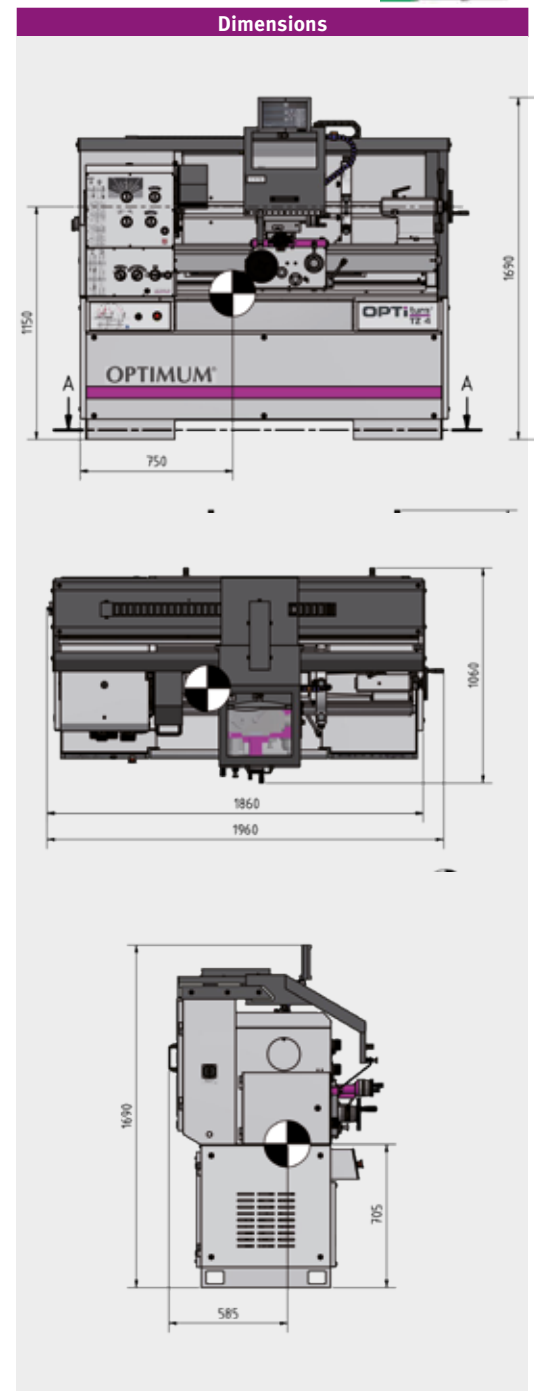


Fig.: TZ 4 - Shown with optional lathe chuck

Technical specifications, accessories and dimensions

Model	TZ 4	TZ 4V**
Article no.	3432240	3432245
Technical specifications		
Electrical connection	400 V / 3 Ph ~50 Hz	
Total rated value	5 kW	6 kW
Coolant pump motor	125 Watts	
Spindle		
Drive motor	3 kW/4.5 kW	5.5 kW
Spindle taper	MT 6	
Spindle seat	DIN ISO 702-1 No. 5	
Spindle bore, bar passage diameter	Ø 52 mm	
Quick change tool holder	SWH 5-B	
Technical specifications		
Centre height	200 mm	
Centre width	800 mm	
Swing Ø over machine bed	400 mm	
Swing over cross slide	245 mm	
Bed width	260 mm	
Speed range		
Spindle speed	45 - 1 800 rpm	50 - 3 000 rpm
Number of speeds	16 speeds	2 speeds. 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 (Replaceable gear set accessory art. no. 3444160)	80 - 1 turns/inch (42 pitch)	
Modular thread in range	0.1 - 7 mm x π (44 thread)	
Diametral pitch in range (Replaceable gear set accessory art. no. 3444160)	3 - 200 turns/π (33 pitch)	
Tailstock		
Tailstock seat	MT 3	
Spindle sleeve diameter / stroke	Ø 50 mm / 110 mm	
Dimensions		
Length x width x height	1 960 x 1 060 x 1 690 mm	
Weight	1 250 kg	

Lathe chuck TZ 4	Article no.
BISON four-jaw lathe chuck Ø 250 mm no. 5 cast Centrically clamping (chuck flange 3450218 required)	3450216
Lathe chuck TZ 4V	Article no.
BISON four-jaw lathe chuck Ø 250 mm no. 5 steel Centrically clamping (chuck flange 3450218 required)	3450217
Lathe chucks and accessories	Article no.
Chuck flange for lathe chuck Ø 250 mm no. 5 (for lathe chuck 3450216/3450217)	3450218
BISON three-jaw lathe chuck Ø 200 mm no. 5 cast Centrically clamping (chuck flange 3450212 required)	3450210
Chuck flange lathe chuck Ø 200 mm no. 5 (lathe chuck 3450210)	3450212
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 192)	3441623
Interchangeable gear set for imperial and modular thread	3444160
Levelling platen SE 55 (8 pcs. required)	3352981



Remember to order a lathe chuck

Scope of supply

- › Steady rest passageway Ø 10 - 130 mm
- › Follow rest passageway Ø 10 - 100 mm
- › Reduction sleeve MT 3 and MT 6
- › Fixed centre MT 3
- › Quick change tool holder 5-B
- › Tool holder 25 x 120 type D for square chisels 20mm
- › Replaceable gear set for metric thread
- › Machine initially filled with premium grade oil
- › Operating tool
- › More accessories for lathes from page 184

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

**The lathe (frequency converter) complies with the DIN EN 55011 standard: class C3 - Note for operation with frequency converter on page 253

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

Facts that impress in terms of quality, performance and price

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

Control Cabinet

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



Siemens Inverter SINAMICS G120D

made in EU



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

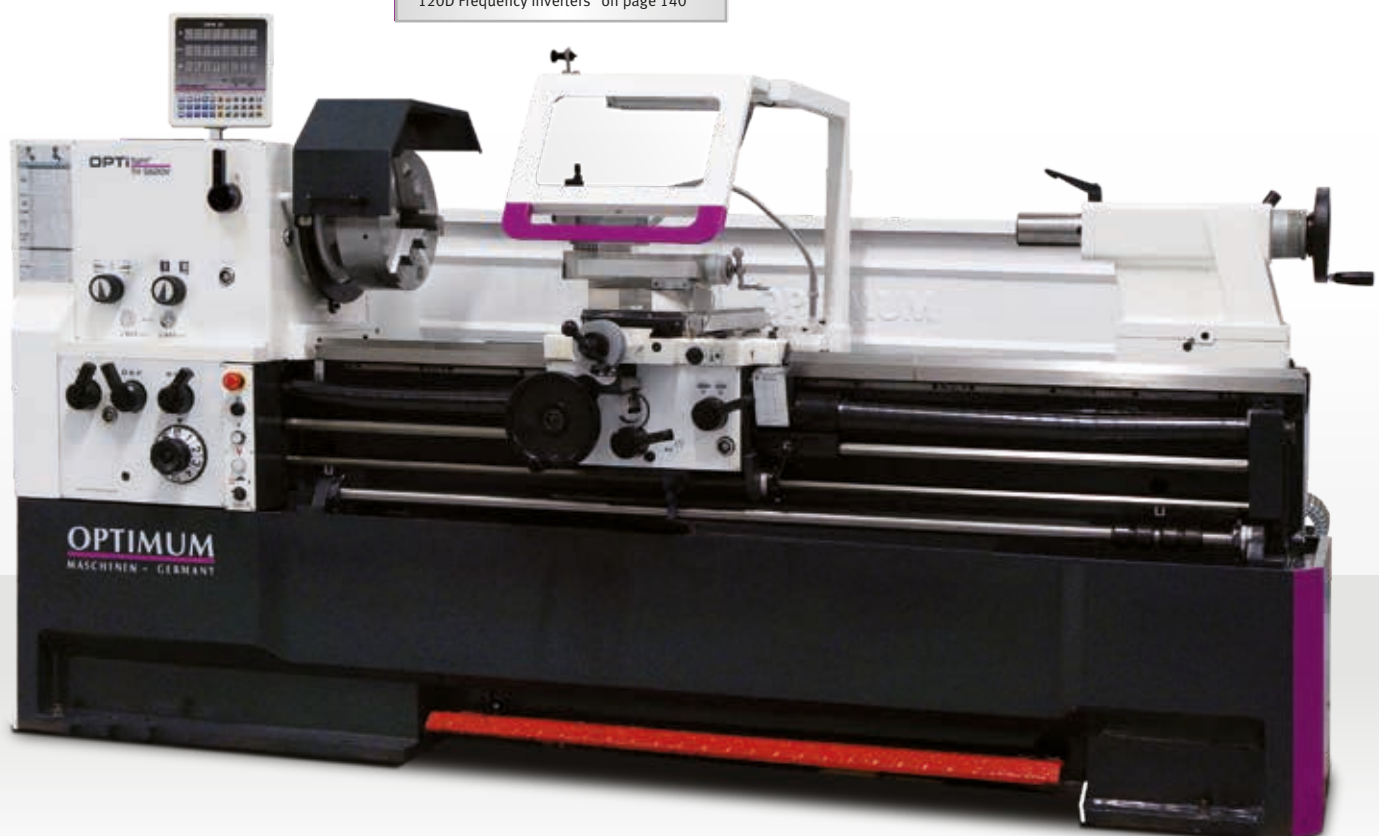


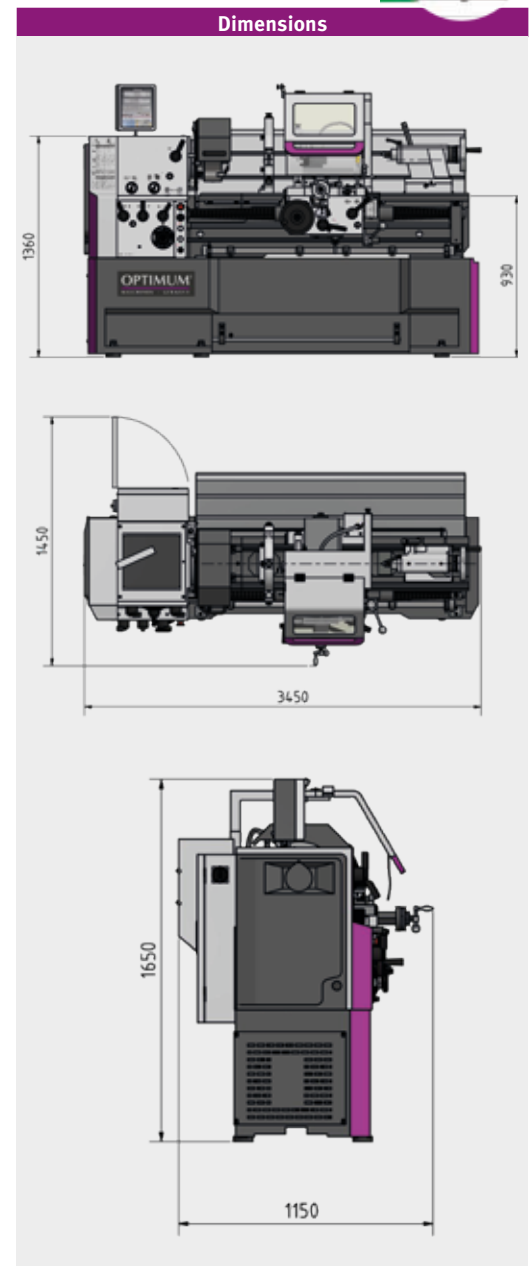
Fig.: TH 5615V - Shown with optional lathe chuck

Technical specifications, accessories and dimensions

Model	TH 5620V
Article no.	3462175
Technical specifications	
Electrical connection	400 V / 3 Ph ~50 Hz
Total rated value	8.5 kW
Coolant pump motor	125 Watts
Spindle	
Drive motor	7.5 kW
Spindle taper	Ø 113 mm (taper 1:20)
Spindle seat	Camlock DIN ISO 702-2 No. 8
Spindle bore, bar passage diameter	Ø 105 mm
Quick change tool holder	SWH 7-C
Work area	
Centre height	280 mm
Centre width	1 910 mm
Swing Ø over machine bed	560 mm
Swing in the bed bridge	790 mm
Turning length in bed bridge	170 mm
Swing over cross slide	355 mm
Bed width	350 mm
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	MT 5
Spindle sleeve diameter / stroke	Ø 75 mm / 180 mm
Dimensions	
Length x width x height	3 340 x 1 150 x 1 650 mm
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 about lathe chucks from page 184	

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



**Remember to order
a lathe chuck**

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

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

**The lathe (frequency converter) complies with the DIN EN 55011 standard: class C3 - Note for operation with frequency converter on page 253

Heavy loading 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 and ground borne on 2 re-adjustable precision taper rollers
- ▶ Clear-cut selector lever for switching the feed speeds
- ▶ Closed design of the quick shift feed gear
- ▶ Gears and shafts tempered and ground, running in oil bath on precision bearings
- ▶ Hand wheels decoupled and approved in line with EN 23125
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Right-handed/left-handed rotation switchable on bed slide, switchable via switching spindle
- ▶ Central lubrication in bed slide
- ▶ Leading spindle cover
- ▶ emergency stop button, motor circuit breaker, lockable main switch
- ▶ Emergency stop device with foot pedal
- ▶ Safety hand wheels with release function in the X and Z axis
- ▶ Tailstock adjustable ± 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
- ▶ Electrical system with Siemens components
- ▶ Energy chain for material-friendly cable and hose guiding
- ▶ Scale on thread gauge adjustable
- ▶ Quick change tool holder SWH 7-C
- ▶ 1 tool holder 32 x 150 type D for square chisels 25 mm

Control Cabinet

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



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

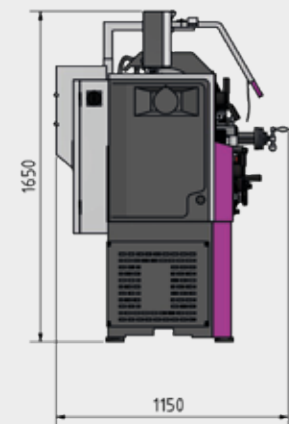
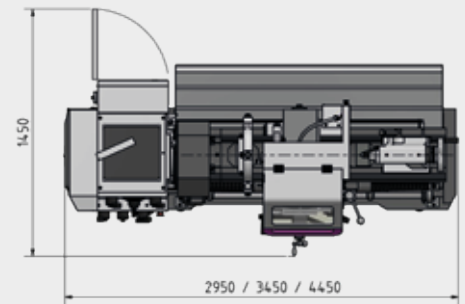
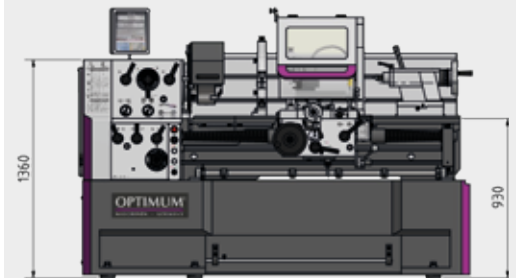
Technical specifications, accessories and dimensions

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

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

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

Dimensions



**Remember to order
a lathe chuck**

Scope of supply

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

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

Facts that impress in terms of quality, performance and price

- ▶ Tempered and polished z-axis guideway
- ▶ Precision slide
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ Quadruple tool holder
- ▶ All guides adjustable using cleats
- ▶ Shafts, gears and main spindle run in oil bath
- ▶ Adjustment range top slide $\pm 90^\circ$
- ▶ Guaranteed concentricity of spindle nose better than 0.015 mm
- ▶ Gearwheels smooth running, tempered and ground borne on 2 re-adjustable precision taper rollers
- ▶ Quick-switching feed gear with closed design, gears and shafts tempered and ground, running in oil bath on precision bearings
- ▶ Hand wheels decoupled and approved in line with EN 23125
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Right-handed/left-handed rotation switchable on bed slide, switchable via switching spindle
- ▶ Mechanical longitudinal feed switch-off of bed slide with four configurable eccentrics
- ▶ Leading spindle cover
- ▶ Emergency stop device with foot pedal
- ▶ Safety hand wheels with release function in the X and Z axis
- ▶ Scale on thread gauge adjustable
- ▶ Central lubrication in bed slide
- ▶ Tailstock adjustable ± 10 mm for turning spheres
- ▶ Tailstock spindle sleeve and handwheel with adjustable fine scaling 0.025 mm
- ▶ Fast, easy adjustment without tools thanks to clamping lever
- ▶ Grey cast iron prism bed with strong ribbing, induction tempered and precision ground
- ▶ Coolant system featuring separate coolant tank, fill level display and oil trap; easy and complete draining and cleaning as per DIN
- ▶ Generously dimensioned chip guard with integrated LED machine lamp
- ▶ Quick change tool holder SWH 5-B
- ▶ Tool holder 25 x 120 type D for square chisels 20 mm
- ▶ Digital position display DPA 21 with speed display
- ▶ Lines routed in energy chain

Control Cabinet

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



Siemens Inverter SINAMICS G120D

made in EU



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



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

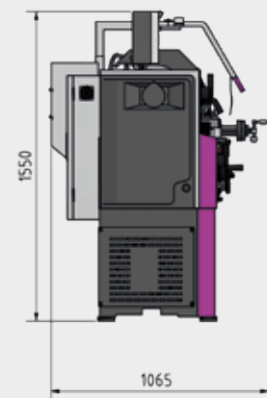
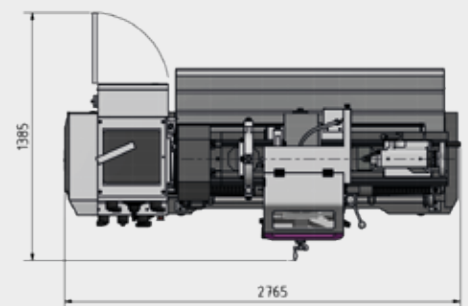
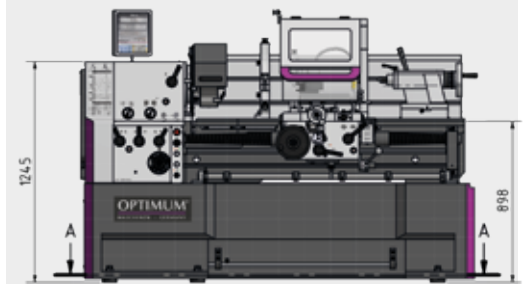
Technical specifications, accessories and dimensions

Model	TH 4615V
Article no.	3462125
Technical specifications	
Electrical connection	400 V / 3 Ph ~50 Hz
Total rated value	8.5 kW
Coolant pump motor	125 Watts
Spindle	
Drive motor	7.5 kW
Spindle taper	MT 7
Spindle seat	Camlock DIN ISO 702-2 No. 8
Spindle bore, bar passage diameter	Ø 80 mm
Quick change tool holder	SWH 5-B
Work area	
Centre height	230 mm
Centre width	1 560 mm
Swing Ø over machine bed	460 mm
Swing in the bed bridge	690 mm
Turning length in bed bridge	240 mm
Swing over cross slide	270 mm
Bed width	300 mm
Speed range	
Spindle speed	30 - 2 000 rpm
Number of speeds	Electronically controlled
Travel	
Top slide travel	125 mm
Cross slide travel	285 mm
Feeds and pitches	
Longitudinal feed within the range	0.031 - 1.7 mm/rev (42 feeds)
Cross feed within	0.014 - 0.784 mm/rev (42 feeds)
Pitch - metric in range	0.1 - 14 mm/rev (41 pitches)
Pitch - inch in range	112 - 2 turns/inch (41 pitches)
Diametral pitch in range	4 - 112 turns/π (50 thread)
Modular thread in range	0.1 - 7 mm x π (34 thread)
Tailstock	
Tailstock seat	MT 4
Spindle sleeve diameter / stroke	Ø 60 mm / 130 mm
Dimensions	
Length x width x height	2 765 x 1 065 x 1 550 mm
Weight	2 020 kg

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

Accessories	Art no.
Clamping disc Ø 450 mm no. 8	3442982
Travelling centre MT 5	3440705
BISON co-travelling centre MT 5	3451005
Spare tool holder 40 x 160 type H for round	3384326
Spare tool holder 32 x 150 Type D square	3384308
Lathe tool set HM 32 mm, 5-part (see page 193)	3441674
Position stop with granular adjustment	3444022
› More accessories for lathes from page 188	

Dimensions



**Remember to order
a lathe chuck**

Scope of supply

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

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

**The lathe (frequency converter) complies with the DIN EN 55011 standard: class C3 - Note for operation with frequency converter on page 253

Precision leading and feed spindle lathes – unique in terms of precision and control.

With DPA 21 digital position display and quick change tool holder.

Facts that impress in terms of quality, performance and price

- ▶ Tempered and polished z-axis guideway
- ▶ Precision slide
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ Quadruple tool holder
- ▶ All guides adjustable using cleats
- ▶ Shafts, gears and main spindle run in oil bath
- ▶ Adjustment range top slide $\pm 90^\circ$
- ▶ Guaranteed concentricity of spindle nose better than 0.015 mm
- ▶ Gearwheels smooth running, tempered and ground borne on 2 re-adjustable precision taper rollers
- ▶ Quick-switching feed gear with closed design, gears and shafts tempered and ground, running in oil bath on precision bearings
- ▶ Hand wheels decoupled and approved in line with EN 23125
- ▶ Two-channel CW/CCW switch approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Right-handed/left-handed rotation switchable on bed slide, switchable via switching spindle
- ▶ Mechanical longitudinal feed switch-off of bed slide with four configurable eccentrics
- ▶ Leading spindle cover
- ▶ Emergency stop device with foot pedal
- ▶ Safety hand wheels with release function in the X and Z axis
- ▶ Scale on thread gauge adjustable
- ▶ Central lubrication in bed slide
- ▶ Tailstock adjustable ± 10 mm for turning spheres
- ▶ Tailstock spindle sleeve and handwheel with adjustable fine scaling 0.025 mm
- ▶ Fast, easy adjustment without tools thanks to clamping lever
- ▶ Grey cast iron prism bed with strong ribbing, induction tempered and precision ground
- ▶ Coolant system featuring separate coolant tank, fill level display and oil trap; easy and complete draining and cleaning as per DIN
- ▶ Generously dimensioned chip guard with integrated LED machine lamp
- ▶ Quick change tool holder SWH 5-B
- ▶ Tool holder 25 x 120 type D for square chisels 250 mm
- ▶ Digital position display DPA 21 with speed display

As of TH 4615:

- ▶ Lines routed in energy chain

Control Cabinet

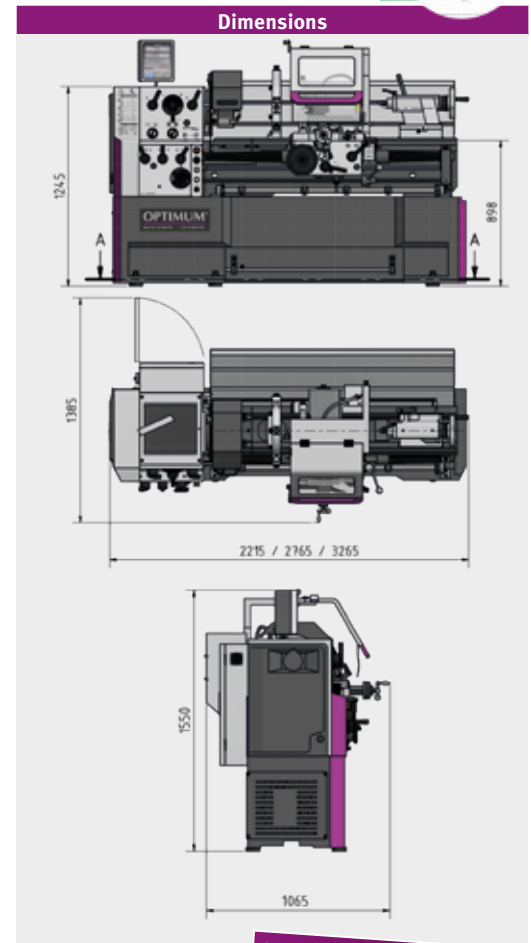
- > 24 Volt DC Power Supply
- > All contactors and relays by Siemens or Schneider



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

Technical specifications, accessories and dimensions

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



**Remember to order
a lathe chuck**

Scope of supply

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

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

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

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

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
- ▶ Quadruple tool holder
- ▶ 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
- ▶ 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
- ▶ 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
- ▶ Right-handed/left-handed rotation switchable on bed slide, switchable via switching spindle
- ▶ Central lubrication in bed slide
- ▶ Chassis and machine bed single-piece cast meehanite
- ▶ Leading spindle cover
- ▶ Emergency stop device with foot pedal
- ▶ Safety hand wheels with release function 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
- ▶ Siemens Sinamics frequency inverter / Safety Integrated
- ▶ Quick change tool holder 5-B
- ▶ Tool holder 20 x 100 type D for square chisels 18 mm

Control Cabinet

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



Siemens Inverter SINAMICS G120D

made in EU



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

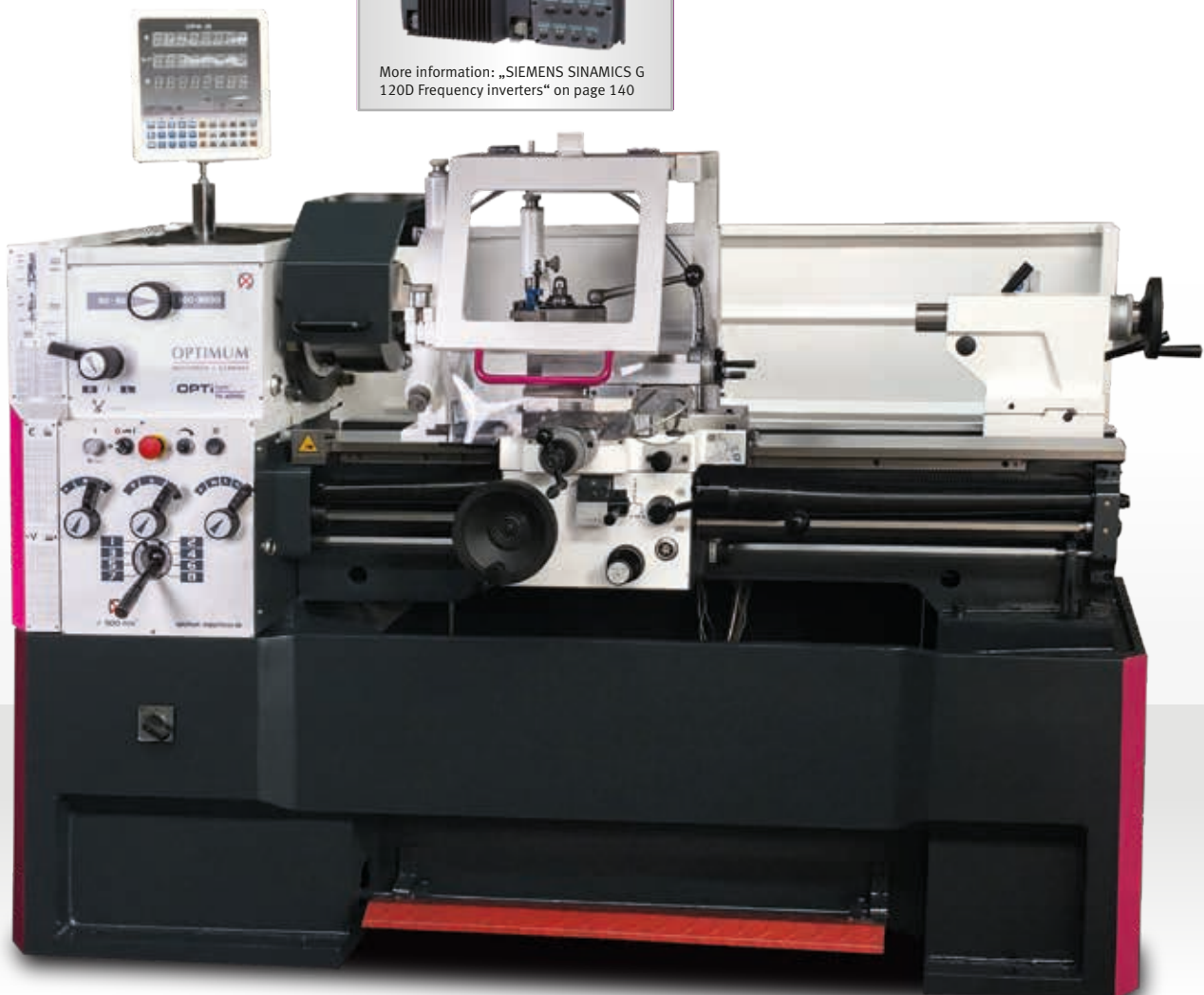


Fig.: TH 4210V - Shown with optional lathe chuck

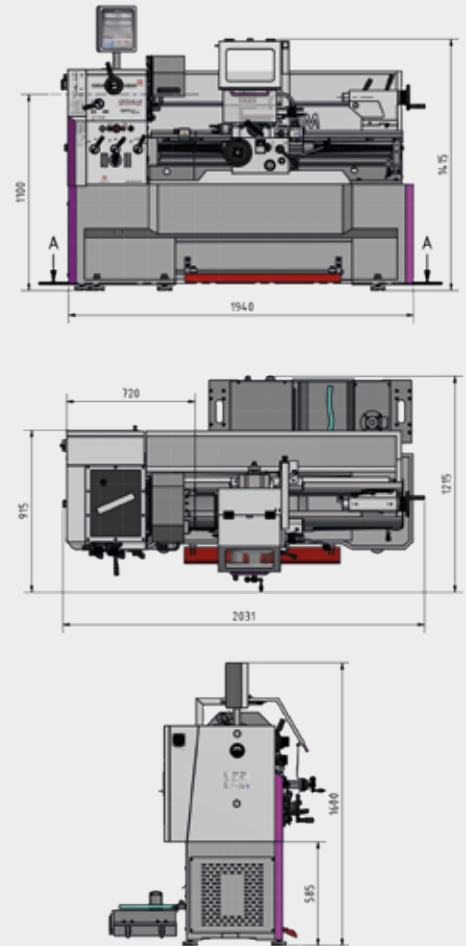
Technical specifications, accessories and dimensions

Model	TH 4210V
Article no.	3462060
Technical specifications	
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	MT 6
Spindle seat	Camlock DIN ISO 702-2 No. 6
Spindle bore, bar passage diameter	Ø 52 mm
Quick change tool holder height	25 mm
Work area	
Centre height	210 mm
Centre width	1 000 mm
Swing Ø over machine bed	420 mm
Swing in the bed bridge	590 mm
Turning length in bed bridge	260 mm
Swing over cross slide	250 mm
Bed width	250 mm
Speed range	
Spindle speed	30 - 3 000 rpm
Number of speeds	2 speeds. 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	MT 4
Tailstock spindle sleeve diameter / stroke	Ø 50 mm / 120 mm
Dimensions	
Length x width x height	2 031 x 915 (coolant tank 1 215) x 1 415 (DPA 1 600) mm
Weight	1 160 kg

Accessories	Art 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 (see page 192)	3441672
Lathe tool set HM 25 mm, 5-part Extension kit (see page 192)	3441623
Lathe tool set HM 20 mm, 5-part (see page 192)	3441670
Lathe tool set HM 20 mm, 5-part, Extension kit (see page 192)	3441617
Vibration damper SE 2 (6 pcs. needed)	3381016
Vibration damper SE 85 (6 pcs. needed)	3352982
Clamping block set 20-05	3440654
› More accessories for lathes from page 188	



Dimensions



Remember to order a lathe chuck

Scope of supply

- › Steady rest passageway Ø 15 - 145 mm
- › Follow rest passageway Ø 10 - 75 mm
- › LED machine lamp
- › Reduction sleeve MT 6 - MT 4
- › Fixed centre MT 4
- › Replaceable gear set
- › Position stop with granular adjustment
- › Machine initially filled with premium grade oil
- › Operating tool
- › Quick change tool holder 5-B
- › Tool holder 25 x 120 type D for square chisels 20 mm

Lathe chuck	Art no.
OPTIMUM lathe chucks	
Three-jaw lathe chuck Ø 250 mm no. 6, centric	3442765
Four-jaw lathe chuck Ø 250 mm no. 6, centric	3442852
Four-jaw lathe chuck Ø 250 mm no. 6, individual	3442884
BISON lathe chucks	
Three-jaw lathe chuck Ø 250 mm no. 6, centric	3450330
Four-jaw lathe chuck Ø 250 mm no. 6, centric	3450380
Three-jaw lathe check Ø 250 mm no. 6, steel	3450530
Four-jaw lathe chuck Ø 250 mm no. 6, steel	3450580
› Information about lathe chucks from page 184	

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

**The lathe (frequency converter) complies with the DIN EN 55011 standard: class C3 - Note for operation with frequency converter on page 253

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

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
- ▶ Quadruple tool holder
- ▶ 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
- ▶ 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
- ▶ 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
- ▶ Right-handed/left-handed rotation switchable on bed slide, switchable via switching spindle
- ▶ Central lubrication in bed slide
- ▶ Chassis and machine bed single-piece cast meehanite
- ▶ Leading spindle cover
- ▶ Emergency stop device with foot pedal
- ▶ Safety hand wheels with release function 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:
- ▶ **TH 4210D / TH 4215D:**
- ▶ **Digital position display DPA21**
 - › User-friendly membrane keyboard, splash water protected, sealed and dazzle free
 - › Sensor supplied for acquiring spindle speeds
 - › Glass scales

Control Cabinet

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



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

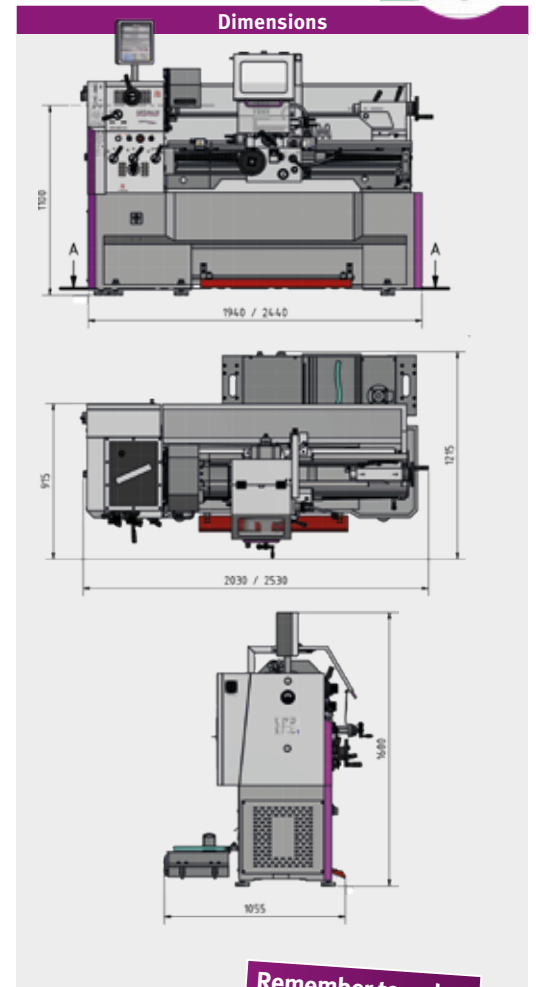
Technical specifications, accessories and dimensions

Model	TH 4210	
Article no.	3462050	
	9,990.00	
Model	TH 4210D	TH 4215D
Article no.	3462055	3462070

Technical specifications		
Electrical connection	400 V / 3 Ph ~ 50 Hz	
Total rated value	4.6 kW	
Coolant pump motor	100 W	
Spindle		
Drive motor	4.5 kW	
Spindle taper	MT 6	
Spindle seat	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 Ø over machine bed	420 mm	
Swing in the bed bridge	590 mm	
Turning length in bed bridge	260 mm	
Swing over cross slide	250 mm	
Bed width	250 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	MT 4	
Tailstock spindle sleeve diameter / stroke	Ø 50 mm / 120 mm	
Dimensions		
Length	1 940 mm	2,440 mm
Width x height	915 x 1 375 (DPA 1 600) mm	
Weight	1 160 kg	1 340 kg

Lathe chuck	Art no.
OPTIMUM cast lathe chucks	
Three-jaw lathe chuck Ø 250 mm no. 6, centric	3442765
Four-jaw lathe chuck Ø 250 mm no. 6, centric	3442852
Four-jaw lathe chuck Ø 250 mm no. 6, individual	3442884
BISON lathe chucks	
Three-jaw lathe chuck Ø 250 mm no. 6, cast	3450330
Centre clamping	
Four-jaw lathe chuck Ø 250 mm no. 6, cast	3450380
Centre clamping	
Three-jaw lathe check Ø 250 mm no. 6, steel	3450530
Centre clamping	
Four-jaw lathe chuck Ø 250 mm no. 6, steel	3450580
Centre clamping	
› Information about lathe chucks from page 188	

Accessories	Art 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	3384324
chisels	
Lathe tool set HM 20 mm, 5-part (see page 192)	3441670
Lathe tool set HM 20 mm, 5-part (see page 192)	3441617
Vibration damper SE 2 (6 pcs. needed)	3381016
Vibration damper SE 85 (6 pcs. needed)	3352982
Clamping block set 20-05	3440654
Universal collet chuck device 5C	3441507
› More accessories for lathes from page 184	



**Remember to order
a lathe chuck**

Scope of supply

- › Steady rest passageway Ø 15 - 145 mm
- › Follow rest passageway Ø 10 - 75 mm
- › LED machine lamp
- › Reduction sleeve MT 6 - MT 4
- › One fixed and one alloyed centre MT 4
- › Replaceable gear set
- › Gear wheels for threading gauge (metric)
- › Position stop with granular adjustment
- › Machine initially filled with premium grade oil
- › Operating tool
- › Quad tool holder max. 20 mm

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
- ▶ Quadruple tool holder
- ▶ 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
- ▶ 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
- ▶ DC 24 Volt electrical system
- ▶ Lockable main switch
- ▶ Right-handed/left-handed rotation switchable on bed slide
- ▶ Safety hand wheels with release function 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 4010D / TH 4010V:

▶ Digital position display DPA21

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

TH 4010V:

- ▶ Siemens Sinamics frequency inverter / Safety Integrated
- ▶ Quick change tool holder 3-E
- ▶ Tool holder 20 x 100 type D for square chisels

Control Cabinet

- › 24 Volt DC Power Supply
- › All contactors und relays by Siemens or Schneider
- TH 4010V by Eaton



TH 4010V: Siemens Inverter SINAMICS G120D

made in EU



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



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

Technical specifications, accessories and dimensions

Model	TH 4010	TH 4010D	TH 4010V**
Article no.	3402070	3402080	3402085
Technical specifications			
Electrical connection	400 V / 3 Ph ~50 Hz		
Spindle			
Drive motor	1.5/2.4 kW	4 kW	
Spindle taper	MT 6		
Spindle seat	Camlock DIN ISO 702-2 No. 5		
Spindle bore, bar passage diameter	Ø 52 mm		
Quadruple tool holder mounting height	max. 16 mm		
Technical specifications			
Centre height	205 mm		
Centre width	1 000 mm		
Swing Ø over machine bed	410 mm		
Swing in the bed bridge	540 mm		
Turning length in bed bridge	165 mm		
Bed width	206 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	MT 3		
Tailstock- sleeve diameter/ sleeve travel	Ø 45 mm / 130 mm		
Dimensions			
Length x width x height	1 920 x 740 x 1 222 / 1 555 mm		
Net weight	775 kg	780 kg	

Lathe chuck	Art 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 about lathe chucks from page 184	

Accessories	Art 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 (see page 190)	3441604
Lathe tool set 16 mm, 5-part (see page 190)	3441668
Lathe tool set 16 mm, 5-part "Made in Germany" (see page 190)	3441216
Lathe tool set 16 mm, 5-part (see page 190)	3441610
Collet chuck 5C	3441555
Collet kit 3 - 25 mm, 5C, 17-part	3441509
Vibration-damping machine base SE 2 (6 pcs. required)	3381016
› More accessories for lathes from page 188	

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

**The lathe (frequency converter) complies with the DIN EN 55011 standard: class C2 - Note for operation with frequency converter on page 253

Dimensions

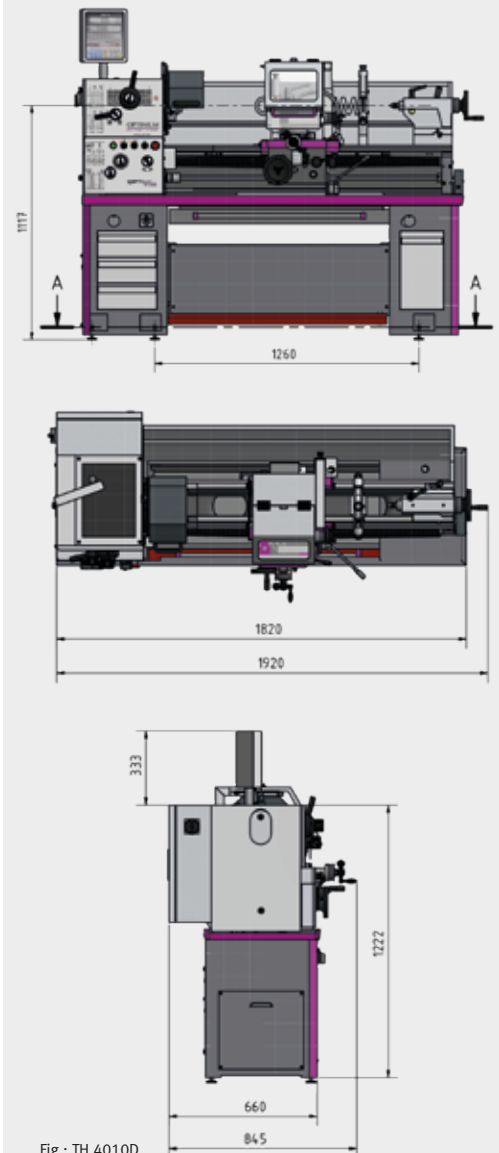


Fig.: TH 4010D

**Remember to order
a lathe chuck**

Scope of supply

- › Steady rest passageway Ø 5 - 85 mm
- › Follow rest passageway Ø 5 - 65 mm
- › LED machine lamp
- › Reduction sleeve MT 6 - MT 3
- › Fixed centres MT 3
- › Fixed centre MT 3, alloyed
- › Travelling centre MT 3
- › Position stop with granular adjustment
- › 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 lathe impresses with 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 guideways
- ▶ Spindle collet Camlock DIN ISO 702-2 no. 5
- ▶ Guaranteed concentricity of spindle nose better than 0.015 mm
- ▶ Gears and shafts tempered and ground, running in oil bath on precision bearings
- ▶ Tailstock with tempered and ground spindle sleeve
- ▶ DC 24 Volt electrical system
- ▶ All pitch gears made of steel, hardened and polished, shafts on needle bearings, all components lubricated in an oil bath
- ▶ Right-handed/left-handed rotation switchable on bed slide
- ▶ Safety hand wheels with release function in the X and Z axis
- ▶ Emergency stop device
- ▶ Perfectly concentric main spindle guarantees high load capacity thanks to use of precision taper roller bearings
- ▶ Chip compartment folds out for easy chip removal from front
- ▶ Machine chassis with rugged steel design
- ▶ Coolant pump with coolant tank and fill level display Tank removable for easy cleaning
- ▶ With safety device to prevent simultaneous operation of thread cutting and pitch mechanism
- ▶ Hand wheels decoupled and approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ LED machine lamp in chip guard
- ▶ Motor electrically braked
- ▶ Three-jaw chuck Ø 200 mm, no. 5 included in standard scope of delivery
- ▶ User-friendly membrane keyboard
- ▶ Two-channel CW/CCW switch approved in line with EN 23125

TM 4010D

Digital position display DPA21

Control Cabinet

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



Fig.: TM 4010D

Technical specifications, accessories and dimensions

Model	TM 4010	TM 4010D
Article no.	3403040	3403045
Machine data		
Electrical connection	400 V / 3 Ph ~50 Hz	
Total rated value	2.3 kW	
Coolant pump motor	100 Watts	
Spindle		
Drive motor	2.2 kW	
Spindle taper	MT 6	
Spindle seat	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 over cross slide	400 mm	
Swing in the bed bridge	250 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	MT 4	
Spindle sleeve diameter / stroke	Ø 50 mm / 110 mm	
Dimensions		
Length x width x height	1 935 / 780 / 1 740 mm	
Weight	500 kg	

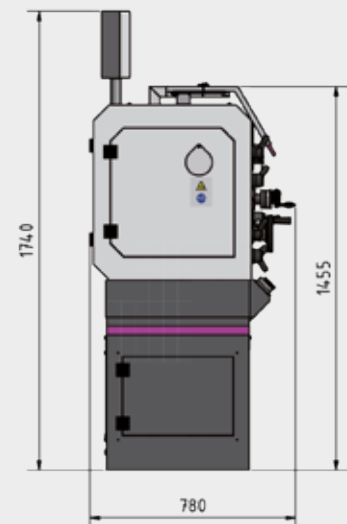
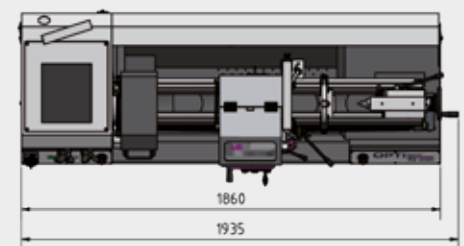
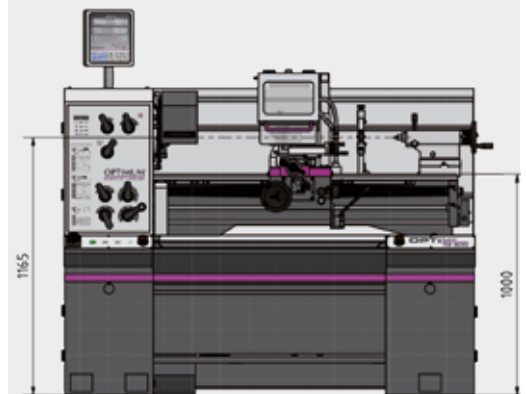
Lathe chuck	Art no.
BISON three-jaw lathe chuck Ø 200 mm no. 5 Centrically clamping (chuck flange 3450212 required)	3450210
BISON four-jaw lathe chuck Ø 250 mm no. 5 Centrically clamping (chuck flange 3450218 required)	3450216
› Information about lathe chucks from page 184	

Accessories	Art 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 (see page 190)	3441604
Lathe tool set 16 mm, 5-part (see page 190)	3441668
Lathe tool set 16 mm, 5-part "Made in Germany" (see page 190)	3441216
Lathe tool set 16 mm, 5-part (see page 190)	3441610
Clamping disc Ø 320 mm no. 5	3442979
Vibration-damping machine base SE 2 (6 pcs. required)	3381016
Levelling platen SE 85 (6 pcs. required)	3352982
Position stop with granular adjustment	3441523
› More accessories for lathes from page 188	

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



Dimensions



Scope of supply

- › Three-jaw lathe chuck Ø 200 mm, no. 5
- › Quick change tool holder 3-E
- › Fixed steady 7 - 102 mm
- › Travelling steady 10 - 60 mm
- › Reduction sleeve MT 3 - MT 6
- › Fixed centre MT 4
- › Machine initially filled with premium grade oil
- › Operating tool

Preface

Drilling

Milling

Turning

Saws

Grinding

Polishing

Lamps

Measuring

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
- ▶ Spindle collet Camlock DIN ISO 702-2 no. 5
- ▶ Precision slide
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ Quadruple tool holder
- ▶ 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
- ▶ Right-handed/left-handed 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
- ▶ Prism bed with strong ribbing, induction tempered and precision ground
- ▶ Machine chassis with tool compartments on both sides
- ▶ Emergency stop device with foot pedal
- ▶ Pull-out chip drawer with guide rails
- ▶ LED machine lamp integrated in chip guard

TH 3610D

▶ Digital position display DPA 21

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

Control Cabinet

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



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

Technical specifications, accessories and dimensions

Model	TH 3610	TH 3610D
Article no.	3402050	3402060
Technical specifications		
Electrical connection	400 V / 3 Ph ~50 Hz	
Drive motor	1.5 kW	
Spindle		
Spindle taper	MT 6	
Spindle seat	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 Ø over machine bed	356 mm	
Swing in the bed bridge	516 mm	
Turning length in bed bridge	160 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	MT 3	
Tailstock spindle sleeve diameter / stroke	Ø 42 mm / 120 mm	
Dimensions		
Length x width x height	1 930 x 725 x 1 350 / 1 620 mm	
Weight	610 kg	

Lathe chuck	Art 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 about lathe chucks from page 184	

Accessories	Art 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 (see page 190)	3441604
Lathe tool set 16 mm, 5-part (see page 190)	3441668
Lathe tool set 16 mm, 5-part "Made in Germany" (see page 190)	3441216
Lathe tool set 16 mm, 5-part (see page 190)	3441610
Collet chuck 5C	3441555
Collet kit 3 - 25 mm, 5C, 17-part	3441509
Vibration damping machine base SE 2 (6 pcs. required)	3381016
Levelling platen SE 85 (6 pcs. required)	3352982
Position stop with granular adjustment	3441523
› More accessories for lathes from page 188	

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



Dimensions

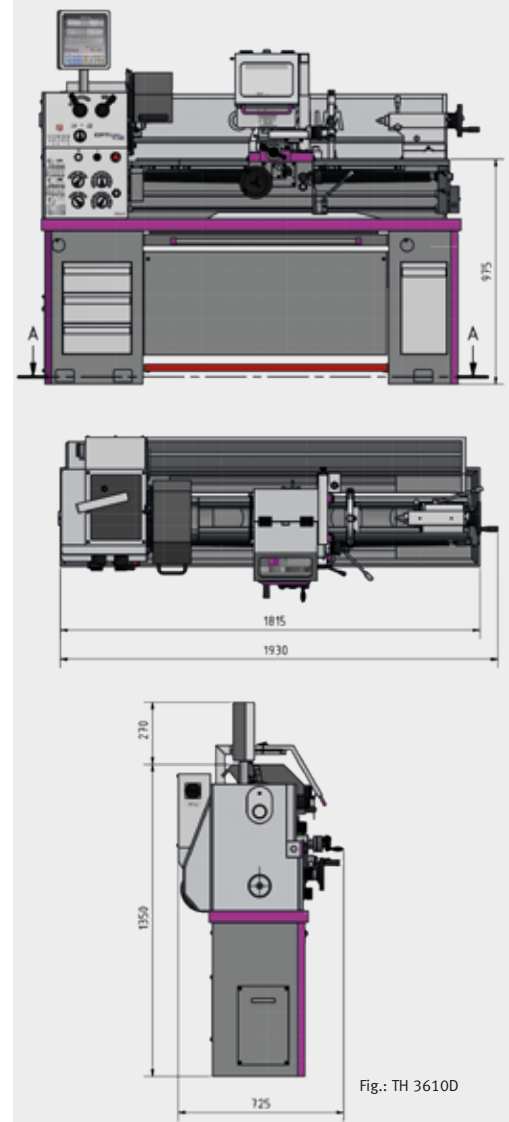


Fig.: TH 3610D

**Remember to order
a lathe chuck**

Scope of supply

- › Steady rest passageway max. Ø 100 mm
- › Follow rest passageway max. Ø 95 mm
- › LED machine lamp
- › Reduction sleeve MT 6 - MT 3
- › One fixed and one alloyed centre MT 3
- › Quadruple tool holder
- › Replaceable gear set
- › Machine chassis
- › Machine initially filled with premium grade oil
- › Operating tool

Preface

Drilling

Milling

Turning

Saws

Grinding

Polishing

Lamps

Measuring

Fully equipped leading and feed spindle lathes.

TH 3309D with digital position display DPA 21, TH 3309V with brushless motor for continuously variable speed control and digital position display DPA 21

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
- ▶ Precision slide
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.02 mm
- ▶ Quadruple tool holder
- ▶ All guides adjustable using cleats
- ▶ Main spindle runs in oil bath
- ▶ Gearwheels smooth running, tempered and ground
- ▶ Adjustment range top slide $\pm 90^\circ$
- ▶ Guaranteed concentricity of spindle nose better than 0.015 mm
- ▶ 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
- ▶ DC 24-Volt electric system with two-channel safety circuit as per EN 23125
- ▶ Chuck protection approved in line with EN 23125
- ▶ Switch with lifecycle calculation, approved in line with EN ISO 13849
- ▶ Lockable main switch
- ▶ Right-handed/left-handed 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
- ▶ Prism bed with strong ribbing, induction tempered and precision ground
- ▶ Machine chassis with tool compartment on right-hand side (left side with 3 covers (no compartments))
- ▶ Pull-out chip drawer with guide rails
- ▶ Emergency stop device with foot pedal
- ▶ LED machine lamp integrated in chip guard

TH 3309D / TH 3309V

Digital position display DPA 21

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

TH 3309V

- ▶ Smooth action and powerful brushless drive
- ▶ Speed change easily adjustable via potentiometer

Control Cabinet

- › 24 Volt DC Power Supply
- › All contactors and relays by Siemens or Schneider - TH 3309V by Eaton



TU 3309V Powerful brushless drive



- › Particularly smooth action
- › Virtually constant torque over the entire speed range
- › Extremely powerful

Siemens Inverter SINAMICS G110M



- › Integrated engineering
- › Highest energy efficiency and
- › Comfortable operation



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	3402045
Technical specifications			
Electrical connection	400 V/3 Ph	230 V/1 Ph	
Drive motor	1.5 kW	2.2 kW	
Spindle			
Spindle taper	MT 5		
Spindle seat	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 Ø over machine bed	330 mm ⁽¹⁾		
Swing in the bed bridge	448 mm		
Turning length in bed bridge	196 mm		
Swing over cross slide	208 mm		
Speed range			
Spindle speed	70 - 2 000 rpm	15 - 2 250 rpm	
Number of speeds	16 speeds	8 speed, electrically 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 turns/inch (34 pitches)		
Tailstock			
Tailstock seat	MT 3		
Tailstock- sleeve diameter/ sleeve travel	Ø 32 mm/110 mm		
Dimensions			
Length x width x height	1 685 x 745 x 1 320 / 1 590 mm		
Weight	430 kg		

Lathe chuck	Art 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 about lathe chucks from page 184	

Accessories	Art no.
Quick change tool holder SWH 3-E	3384303
Factory assembly SWH 3-E	9000400
Lathe tool set 16 mm, 5-part "Made in Germany" (see page 190)	3441216
Lathe tool set 16 mm, 5-part (see page 190)	3441610
Collet chuck 5 C	3441554
› More accessories for lathes from page 188	

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

**The lathe (frequency converter) complies with the DIN EN 55011 standard: class C2 - Note for operation with frequency converter on page 253

Dimensions

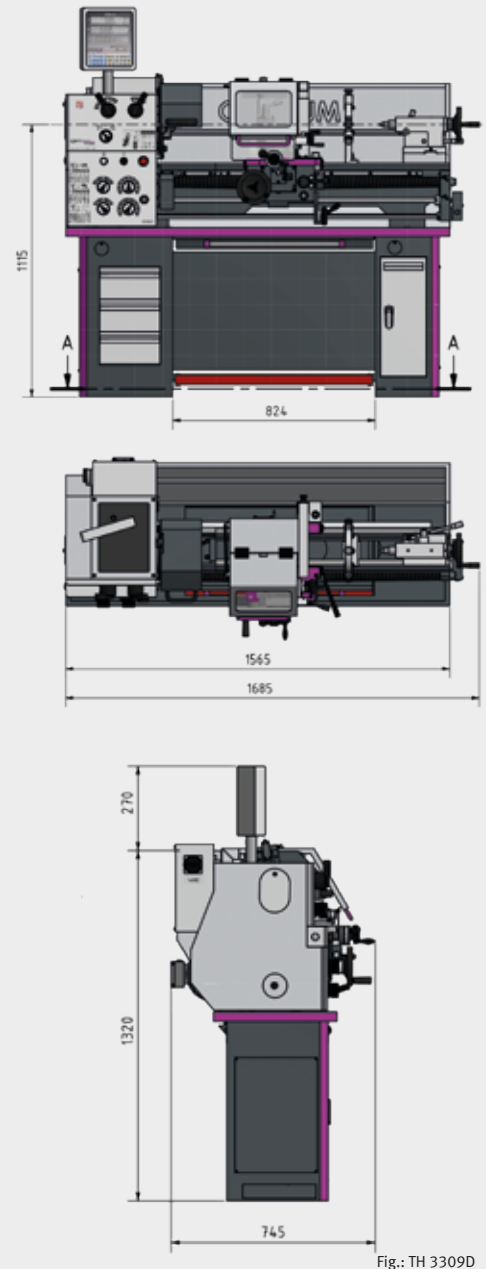


Fig.: TH 3309D

Remember to order a lathe chuck

Scope of supply

- › Steady rest passageway Ø 19 - 70 mm
- › Follow rest passageway Ø 16 - 50 mm
- › LED machine lamp
- › Reduction sleeve MT 5 - MT 3
- › Two fixed centres MT 3
- › Quadruplicate tool holder 16 mm
- › Replaceable gear set
- › Machine chassis
- › Machine initially filled with premium grade oil
- › Operating tool

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Leading and feed spindle lathes with longitudinal and cross feed.

TU 3008G with gearbox.

TU 3008V with brushless motor for continuously variable speed control

Facts that impress in terms of quality, performance and price

- ▶ Precision workmanship
- ▶ Ribbed grey cast steel prism bed with strong ribbing, induction tempered and precision ground
- ▶ Tempered and polished z-axis guideway
- ▶ Free moving feed gear with rounded gear wheels running in an oil bath
- ▶ Guaranteed concentricity of spindle nose better than 0.009 mm
- ▶ Concentricity at chuck better than 0.04 mm
- ▶ Quadruple tool holder
- ▶ All guides adjustable using cleats
- ▶ Right-handed/left-handed rotation switchable via control panel
- ▶ Tempered main spindle borne on adjustable precision taper roller bearings
- ▶ Tapered roller bearings in P5 quality
- ▶ Tempered spindle nose
- ▶ Large spindle bore Ø 38 mm
- ▶ Leading spindle for thread tapping or automatic longitudinal turning
- ▶ Leading and feed spindles borne on two sintered bearings
- ▶ Automatic longitudinal/cross feeds
- ▶ Feed and lead spindle cover
- ▶ Tailstock adjustable ± 5 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
- ▶ Handwheels on slide with adjustable fine scaling 0.04 / 0.01 mm
- ▶ Interchangeable gears in standard scope of delivery for thread tapping
- ▶ Emergency stop button

TU 3008

- ▶ V-belt

TU 3008G

- ▶ Gearbox

TU 3008V

- ▶ V-belt and brushless drive
- ▶ Smooth action, powerful, brushless DC drive with excellent control characteristics
- ▶ High-precision steel chuck for higher speeds
- ▶ Digital speed display

TU 3008V

Powerful brushless drive



- › Particularly smooth action
- › Virtually constant torque over the entire speed range
- › Extremely powerful

X-, Z- and Z0-axis



- › Prepared for mounting of measuring system on X, Z and Z0 axis



Fig.: TU 3008V with optional chassis

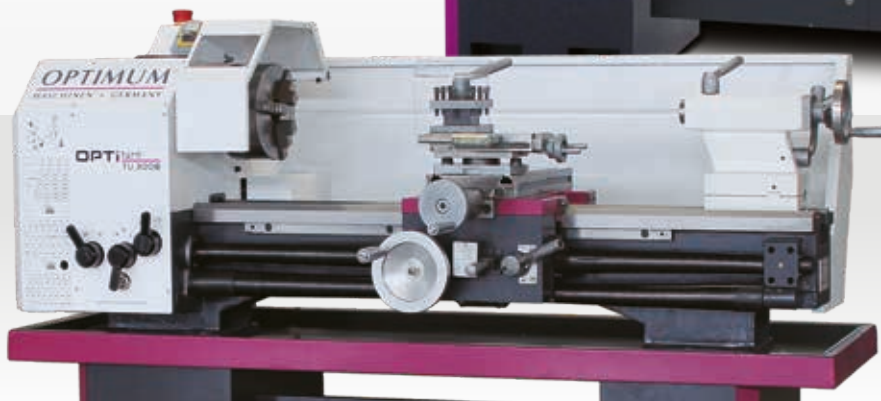


Fig.: TU 3008

Accessories

Machine chassis

Art. no. 3440409

Vibration dampers machine base SE 1

(6 pcs. needed)

Art. no. 3381012

Levelling platen SE 55

(6 pcs. needed)

Art. no. 3352981

Technical specifications, accessories and dimensions

Model	TU 3008	TU 3008G	TU 3008V**
Article no.	3427200	3427210	3427205
Technical specifications			
Electrical connection	400 V / 3 Ph ~50 Hz		230 V / 1 Ph
Drive motor	1.1 kW	1.5 kW	
Spindle			
Spindle taper	MT 5		
Spindle seat	Camlock DIN ISO 702-2 No. 4		
Spindle bore, bar passage diameter	Ø 38 mm		
Quadruple tool holder mounting height	25 mm		
Work area			
Centre height	158 mm		
Centre width	800 mm	720 mm	800 mm
Swing Ø over machine bed	310 mm		
Swing over cross slide	190 mm		
Bed width	180 mm		
Speed range			
Spindle speed TU 3008	150 - 2 000 rpm / 6 speeds		
Spindle speed TU 3008G	165 - 2 400 rpm 6 speeds		
Spindle speed TU 3008V	30 - 3 000 rpm 5 speeds, electronically controlled		
Travel			
Top slide travel	65 mm		
Cross slide travel	150 mm		
Feeds and pitches			
Longitudinal feed within the range	0.085 - 0.832 mm/rev (9 feeds)		
Cross feed within	0.01 - 0.1 mm/rev (9 feeds)		
Pitch - metric in range	0.2 - 3.5 mm/rev (18 pitches)		
Pitch - inch in range	56 - 8 turns/inch (21 pitches)		
Tailstock			
Tailstock seat	MT 3		
Tailstock quill diameter/stroke	Ø 38 mm / 70 mm		
Dimensions			
Length x width x height	1 525 x 705 x 575 mm		
Weight	226 kg	261 kg	243 kg

Lathe chuck	Art no.
OPTIMUM Four-jaw lathe chuck Ø 160 mm no. 4, centric clamping	3442840
BISON Four-jaw lathe chuck Ø 160 mm no. 4, centric clamping	3450355
› Information about lathe chucks from page 184	

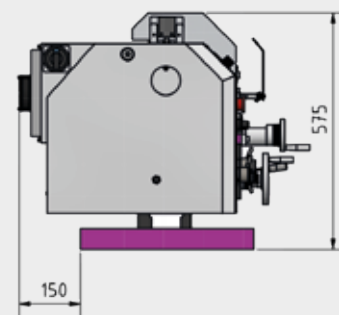
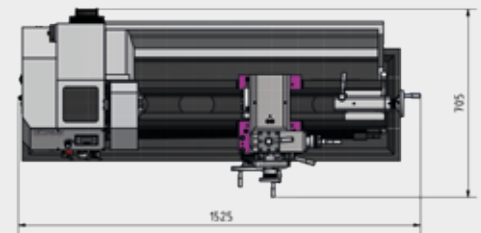
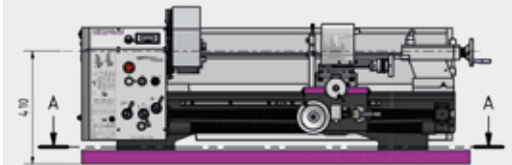
Accessories	Art no.
Follow rest passageway max. Ø 6 - 60 mm	3441460
Steady rest passageway Ø 6 - 60 mm	3441461
Quick change tool holder SWH 1-A	3384301
Factory assembly SWH 1-A	9000400
Spare tool holder 20 x 90 type D for square chisels	3384302
Spare tool holder 20 x 85 type H for round chisels	3384321
Lathe tool set 16 mm, 11-part (see page 190)	3441604
Lathe tool set 16 mm, 5-part (see page 190)	3441668
Lathe tool set 16 mm, 5-part (see page 190)	3441610
Lathe tool set 16 mm, 5-part "Made in Germany"	3441216
Collet kit 3 - 25 mm, 5C, 17-part	3441509
Collet chuck 5C - Camlock no. 4	3441554
Clamping block set 16-05	3440653
› More accessories for lathes from page 188	

*Important information on „General notes on operating our machines“ on page 253

**The lathe (frequency converter) complies with the DIN EN 55011 standard: class C3



Dimensions



Scope of supply

- › Three-jaw lathe chuck Ø 160 mm, centre clamping
- › Fixed centre MT 3 and MT 5
- › Splashguard
- › Chip tray
- › Quadruplicate tool holder 25 mm
- › Replaceable gear set
- › Operating tool

Accessories

Accessories	Art no.
Digital position display DRO 5 incl. 3 magnetic sensors	3383975
Magnetic strip length 1 100 mm	3383978
Assembly kit (holders for the X / Y and Z axis/set of screws)	3383985
Factory assembly	9000420
› Information about position on page 252	



Leading spindle lathes with feed gear for demanding users.

TU 2807V with brushless motor for continuously variable speed control

Facts that impress in terms of quality, performance and price

- ▶ Precision workmanship
- ▶ Powerful motor, low-maintenance motor
- ▶ Ribbed grey cast steel prism bed with strong ribbing, induction tempered and precision ground
- ▶ Free moving feed gear with rounded gear wheels running in an oil bath
- ▶ Tempered and polished z-axis guideway
- ▶ Guaranteed concentricity of spindle nose better than 0.009 mm
- ▶ Concentricity at chuck better than 0.04 mm
- ▶ Automatic longitudinal/leading spindle drive
- ▶ Leading spindle for thread tapping or automatic longitudinal turning
- ▶ Quadruple tool holder
- ▶ All guides adjustable using cleats
- ▶ Right-handed/left-handed rotation switchable via control panel
- ▶ Tempered main spindle borne on adjustable precision taper roller bearings
- ▶ Tapered roller bearings in P5 quality
- ▶ Tempered spindle nose with Ø 26 mm spindle bore
- ▶ Roll-milled trapezoidal spindles
- ▶ Chip guard on top slide
- ▶ Top slide displaceable on cross slide
- ▶ Tailstock adjustable ± 5 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
- ▶ Leading spindle borne on two sintered bearings
- ▶ Interchangeable gears in standard scope of delivery for thread tapping
- ▶ Handwheels on slide with adjustable fine scaling 0.04 / 0.01 mm
- ▶ Thrust bearings
- ▶ Three-jaw lathe chuck included in standard scope of delivery
- ▶ Emergency stop button
- ▶ Fully equipped; the user can immediately start productive work after commissioning

TU 2807V

- ▶ Smooth action, powerful, brushless DC drive with excellent control characteristics
- ▶ High-precision steel chuck for higher speeds
- ▶ Speed change easily adjustable via potentiometer
- ▶ Digital speed display

TU 2807V

Powerful brushless drive



- › Particularly smooth action
- › Virtually constant torque over the entire speed range
- › Extremely powerful

Accessories

Machine chassis

Art. no. 3440409

Vibration dampers machine base SE 1

(6 pcs. needed)

Art. no. 3381012

Levelling platen SE 55

(6 pcs. needed)

Art. no. 3352981

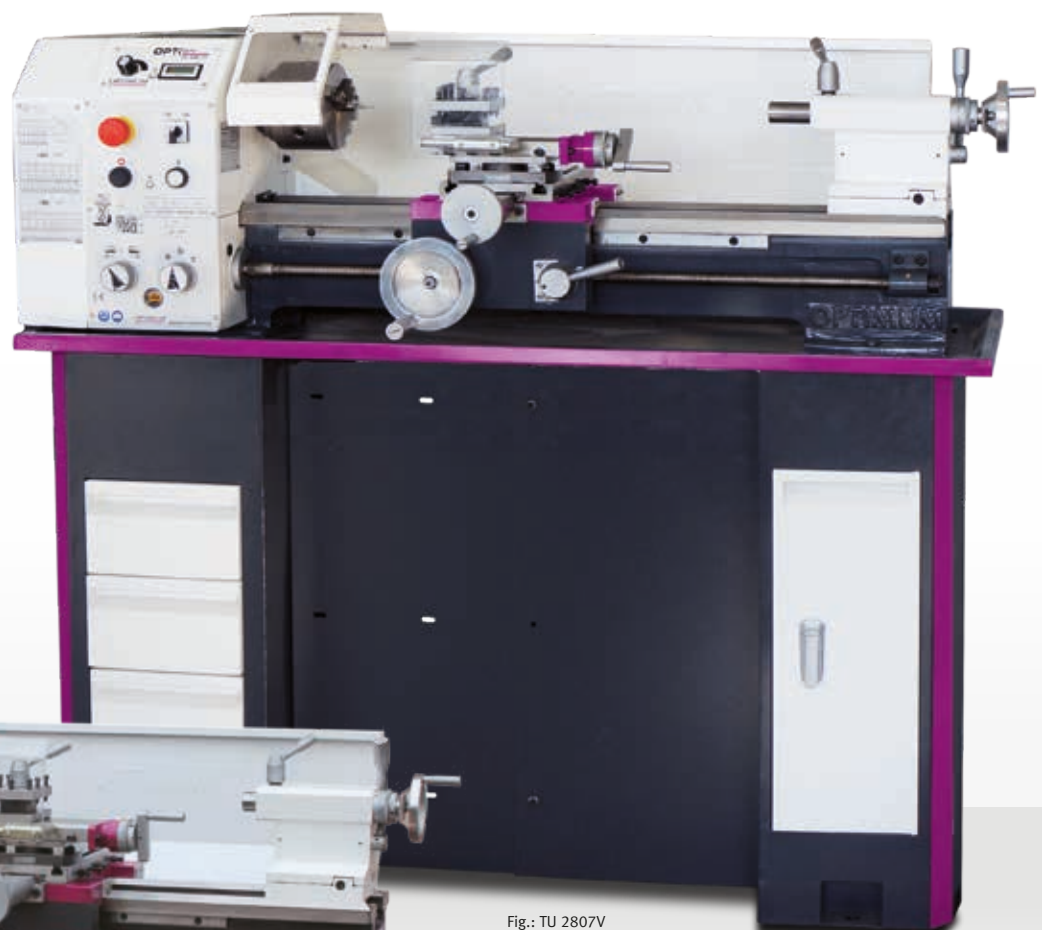


Fig.: TU 2807V

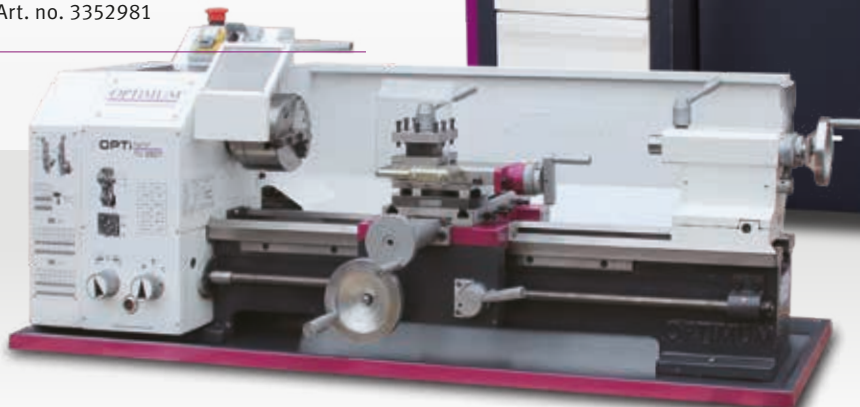


Fig.: TU 2807

Technical specifications, accessories and dimensions

Model	TU 2807	TU 2807V**
Article no. (230 V)	3427001	3427006
Article no. (400 V)	3427003	-
Technical specifications		
Electrical connection	230 V / 1 Ph ~ 50 Hz 400 V / 3 Ph ~50 Hz	230 V / 1 Ph ~ 50 Hz
Drive motor	850 W	1.5 kW
Spindle		
Spindle taper	MT 4	
Spindle seat	Short taper	
Spindle bore, bar passage diameter	Ø 26 mm	
Quadruple tool holder height	max. 13.5 mm	
Work area		
Centre height	140 mm	
Centre width	700 mm	
Swing Ø over machine bed	266 mm	
Swing over cross slide	170 mm	
Bed width	180 mm	
Speed range		
Spindle speed	150 - 2 000 rpm	30 - 4 000 rpm
Number of speeds	6 speeds	4 speeds Electronically controlled
Travel		
Top slide travel	60 mm	
Cross slide travel	160 mm	
Feeds and pitches		
Longitudinal feed within the range	0.07 - 0.4 mm/rev (6 feeds)	
Pitch - metric in range	0.2 - 3.5 mm/rev (18 pitches)	
Pitch - inch in range	56 - 8 turns/inch (21 pitches)	
Tailstock		
Tailstock seat	MT 2	
Tailstock quill diameter/stroke	30 mm /85 mm	
Dimensions		
Length x width x height	1 370 x 640 x 535 mm	1 370 x 660 x 440 mm
Weight	180 kg	

Lathe chucks and accessories	Art no.
Four-jaw lathe chuck Ø 125 mm, individual clamping (Chuck flange 3441312 required)	3442874
Four-jaw lathe chuck Ø 125 mm, centre clamping (Chuck flange 3441312 required)	3442812
Chuck flange for lathe chuck Ø 125 mm (3442874/3442812)	3441312
Three-jaw lathe chuck Ø 160 mm, centre clamping (Chuck flange 3441413 required)	3442716
Four-jaw lathe chuck Ø 160 mm, centre clamping (Chuck flange 3441413 required)	3442816
Chuck flange for lathe chuck Ø 160 mm (3442716/3442816)	3441413
› Information about lathe chucks from page 184	

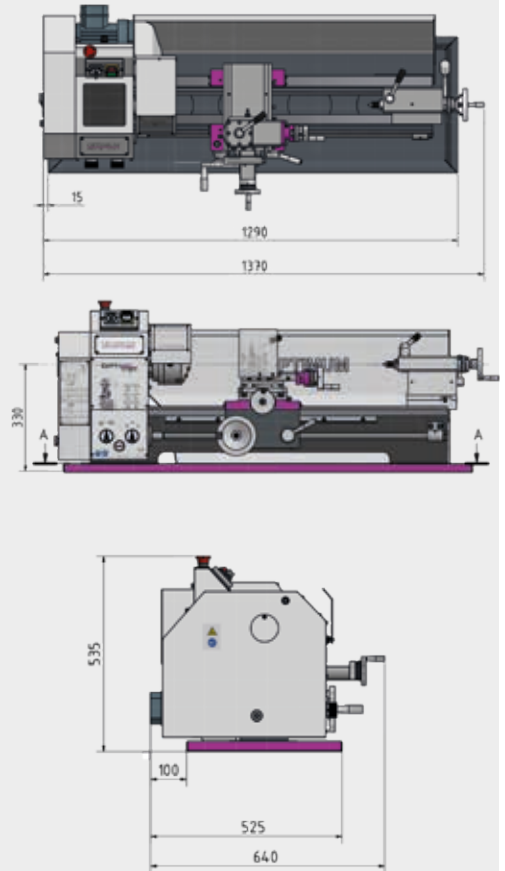
Accessories	Art no.
Steady rest passageway max. Ø 55 mm	3441415
Follow rest passageway max. Ø 56 mm	3441410
Quick change tool holder SWH 1-A	3384301
Factory assembly SWH 1-A	9000401
Spare tool holder 20 x 90 type D for square chisels	3384302
Spare tool holder 20 x 85 type H for round chisels	3384321
Lathe tool set 10 mm, 11-part (see page 189)	3441602
Lathe tool set 12 mm, 11-part (see page 189)	3441603
Lathe tool set 12 mm, 5-part "Made in Germany"	3441212
Collet kit ER 32, 3 - 20 mm	3441122
Collet chuck ER 25, cylindrical	3441305
Collet chuck ER 32, short taper	3441306
› More accessories for lathes from page 188	

*Important information on „General notes on operating our machines“ on page 253

**The lathe (frequency converter) complies with the DIN EN 55011 standard: class C3



Dimensions



Scope of supply

- › Three-jaw lathe chuck Ø 125 mm, centre clamping
- › Fixed centre MT 2 and MT 4
- › Splashguard
- › Chip tray
- › HSS lathe tools
- › Quadruplicate tool holder 13.5 mm
- › Replaceable gear set
- › Operating tool

Accessories	Art no.
Digital position display DRO 5 incl. 3 magnetic sensors	3383975
Magnetic strip length 1 100 mm	3383978
Factory assembly	9000420
› Information about position display on page 252	



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Leading spindle lathes with feed gear for demanding users.

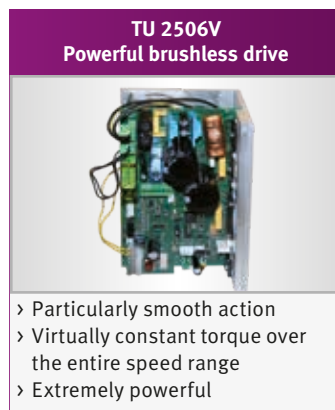
TU 2506V with brushless motor for continuously variable speed control

Facts that impress in terms of quality, performance and price

- ▶ Precision workmanship
- ▶ Powerful motor, low-maintenance motor
- ▶ Ribbed grey cast steel prism bed with strong ribbing, induction tempered and precision ground
- ▶ Tempered and polished z-axis guideway
- ▶ Guaranteed concentricity of spindle nose better than 0.009 mm
- ▶ Automatic longitudinal/leading spindle drive
- ▶ Roll-milled trapezoidal spindles
- ▶ Chip guard on top slide
- ▶ Top slide displaceable on cross slide
- ▶ Leading spindle for thread tapping or automatic longitudinal turning
- ▶ Quadruple tool holder
- ▶ All guides adjustable using cleats
- ▶ Concentricity at chuck better than 0.04 mm
- ▶ Right-handed/left-handed rotation switchable via control panel
- ▶ Tempered main spindle borne on adjustable precision taper roller bearings
- ▶ Tapered roller bearings in P5 quality
- ▶ Tempered spindle nose with $\varnothing$ 26 mm spindle bore
- ▶ Tailstock adjustable $\pm$ 5 mm for turning spheres
- ▶ Tailstock spindle sleeve and handwheel with adjustable fine scaling 0.02 mm
- ▶ Fast, easy adjustment of the tailstock without tools thanks to clamping lever
- ▶ Leading spindle borne on two sintered bearings
- ▶ Handwheels on slide with adjustable fine scaling 0.04 / 0.01 mm
- ▶ Thrust bearings
- ▶ Emergency stop button
- ▶ Three-jaw lathe chuck included in standard scope of delivery
- ▶ Interchangeable gears in standard scope of delivery for thread tapping
- ▶ Fully equipped; the user can immediately start productive work after commissioning

TU 2506 V

- ▶ Smooth action, powerful, brushless DC drive with excellent control characteristics
- ▶ High-precision steel chuck for higher speeds
- ▶ Speed change easily adjustable via potentiometer
- ▶ Digital speed display



Accessories

Machine chassis

Art. no. 3440409

Vibration dampers machine base SE 1

(6 pcs. needed)

Art. no. 3381012

Levelling platen SE 55

(6 pcs. needed)

Art. no. 3352981

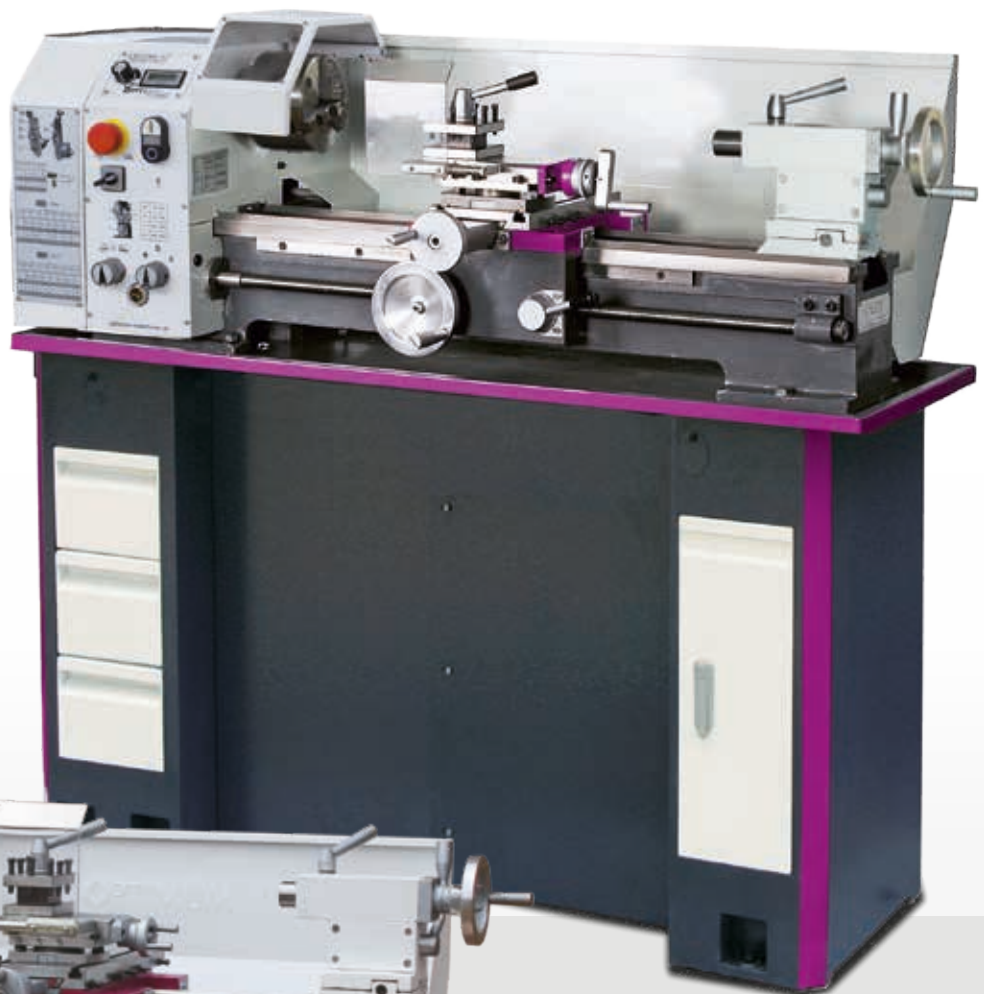


Fig.: TU 2506V

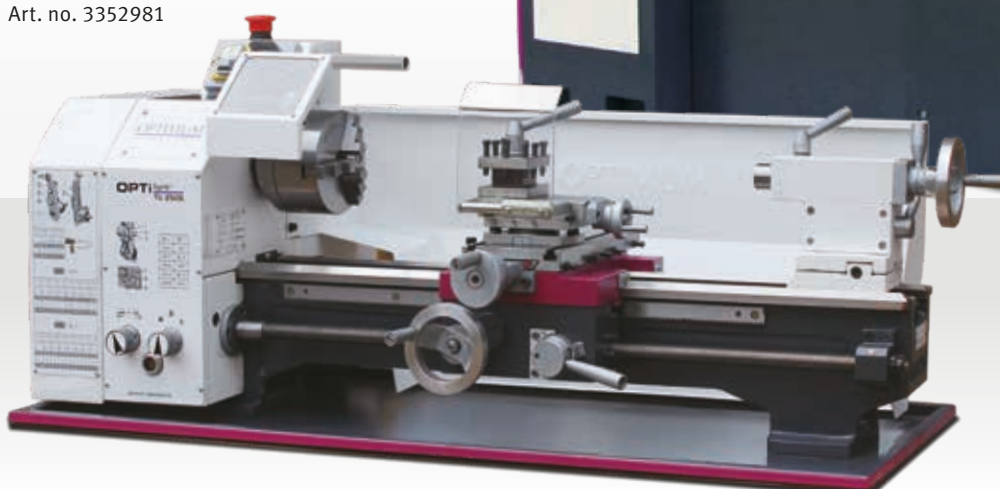


Fig.: TU 2506

Technical specifications, accessories and dimensions

Model	TU 2506	TU 2506V*
Article no. (230 V)	3425001	3425006
Article no. (400 V)	3425003	

Technical specifications		
Electrical connection	230 V / 1 Ph ~ 50 Hz	230 V / 1 Ph ~ 50 Hz
	400 V / 3 Ph ~50 Hz	
Drive motor	750 W	1.5 kW
Spindle		
Spindle taper	MT 4	
Spindle seat	Short taper	
Spindle bore, bar passage diameter	Ø 26 mm	
Quadruple tool holder mounting height	max. 13 mm	
Work area		
Centre height	125 mm	
Centre width	550 mm	
Swing Ø over machine bed	250 mm	
Bed width	135 mm	
Speed range		
Spindle speed	125 - 2 000 rpm	30 - 4 000 rpm 4 speeds
Number of speeds	6 speeds	Electronically controlled
Travel		
Top slide travel	70 mm	
Cross slide travel	110 mm	
Feeds and pitches		
Longitudinal feed within the range	0.07 - 0.4 mm/rev (6 feeds)	
Pitch - metric in range	0.2 - 4 mm/rev (21 pitches)	
Pitch - inch in range	56 - 8 turns/inch (21 pitches)	
Tailstock		
Tailstock seat	MT 2	
Tailstock quill diameter/stroke	30 mm / 65 mm	
Dimensions		
Length x width x height	1 250 x 585 x 475 mm	1 250 x 650 x 420 mm
Weight	125 kg	

Lathe chucks and accessories	Art no.
Four-jaw lathe chuck Ø 125 mm, individual clamping (Chuck flange 3441312 required)	3442874
Four-jaw lathe chuck Ø 125 mm, centre clamping (Chuck flange 3441312 required)	3442812
Chuck flange lathe chuck Ø 125 mm (lathe chuck 3442874/3442812)	3441312
Planar clamping disc Ø 240 mm	3441352
› Information about lathe chucks from page 184	

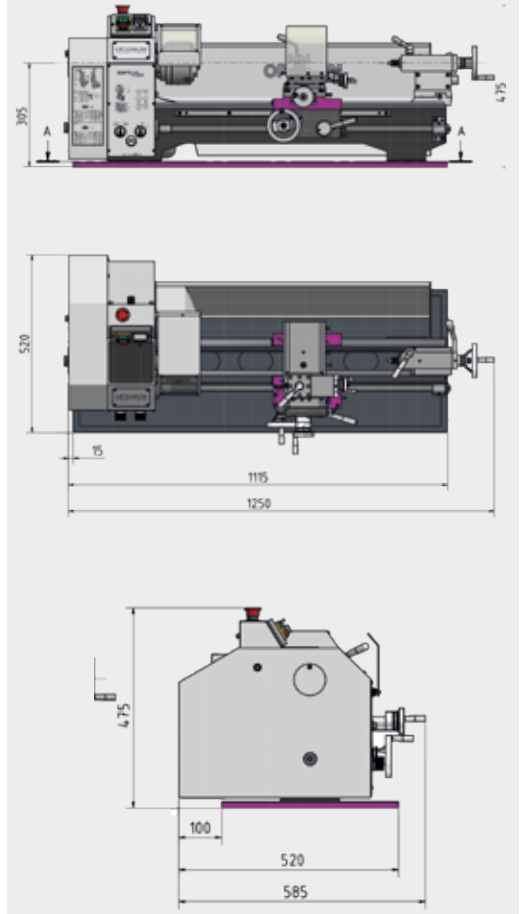
Accessories	Art no.
Steady rest passageway max. Ø 50 mm	3441315
Follow rest passageway max. Ø 34 mm	3441310
Quick change tool holder SWH 1-A	3384301
Factory assembly SWH 1-A	9000401
Spare tool holder 20 x 90 type D for square chisels	3384302
Spare tool holder 20 x 85 type H for round chisels	3384321
Lathe tool set 10 mm, 11-part (see page 189)	3441602
Lathe tool set 12 mm, 11-part (see page 189)	3441603
Lathe tool set 12 mm, 5-part "Made in Germany"	3441212
Collet kit ER 32, 3 - 20 mm	3441122
Collet chuck ER 25, cylindrical	3441305
Collet chuck ER 32, short taper	3441306
› More accessories for lathes from page 188	

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

**The lathe (frequency converter) complies with the DIN EN 55011 standard: class C3 - Note for operation with frequency converter on page 253



Dimensions



Scope of supply

- › Three-jaw lathe chuck Ø 125 mm,
- › Centre clamping
- › Fixed centre MT 2 and MT 4
- › Splashguard
- › Chip tray
- › HSS lathe tools
- › Quadruple tool holder
- › Replaceable gear set
- › Operating tool

Accessories	Art no.
Digital position display DRO 5 incl. 3 magnetic sensors	3383975
Magnetic strip length 1 100 mm	3383978
Factory assembly	9000420
› Information about position display on page 252	



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TU 2406V with electronic speed control

Facts that impress in terms of quality, performance and price

- ▶ Precision workmanship
- ▶ Tempered and polished z-axis guideway
- ▶ Guaranteed concentricity of spindle nose better than 0.009 mm
- ▶ Roll-milled trapezoidal spindles
- ▶ Leading spindle borne on two sintered bearings
- ▶ Two tapered roller bearings in P5 quality
- ▶ Precision slide
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.01 mm
- ▶ Quadruple tool holder
- ▶ All guides adjustable using cleats
- ▶ Chuck concentricity better than 0.05 mm
- ▶ Leading spindle for thread tapping or automatic longitudinal turning
- ▶ Right-handed/left-handed rotation switchable via control panel
- ▶ Tailstock adjustable ± 5 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
- ▶ Emergency stop button
- ▶ Thrust bearings
- ▶ Comprehensive range of accessories
- ▶ Three-jaw lathe chuck included in standard scope of delivery
- ▶ Lasting value

TU 2406 V

- ▶ Speed change easily adjustable via potentiometer
- ▶ Digital speed display
- ▶ EMC filter class C1

Accessories

Machine chassis

Art. no. 3440409

Vibration dampers machine base SE 1

(6 pcs. needed)

Art no. 3381012

Levelling platen SE 55

(6 pcs. needed)

Art no. 3352981

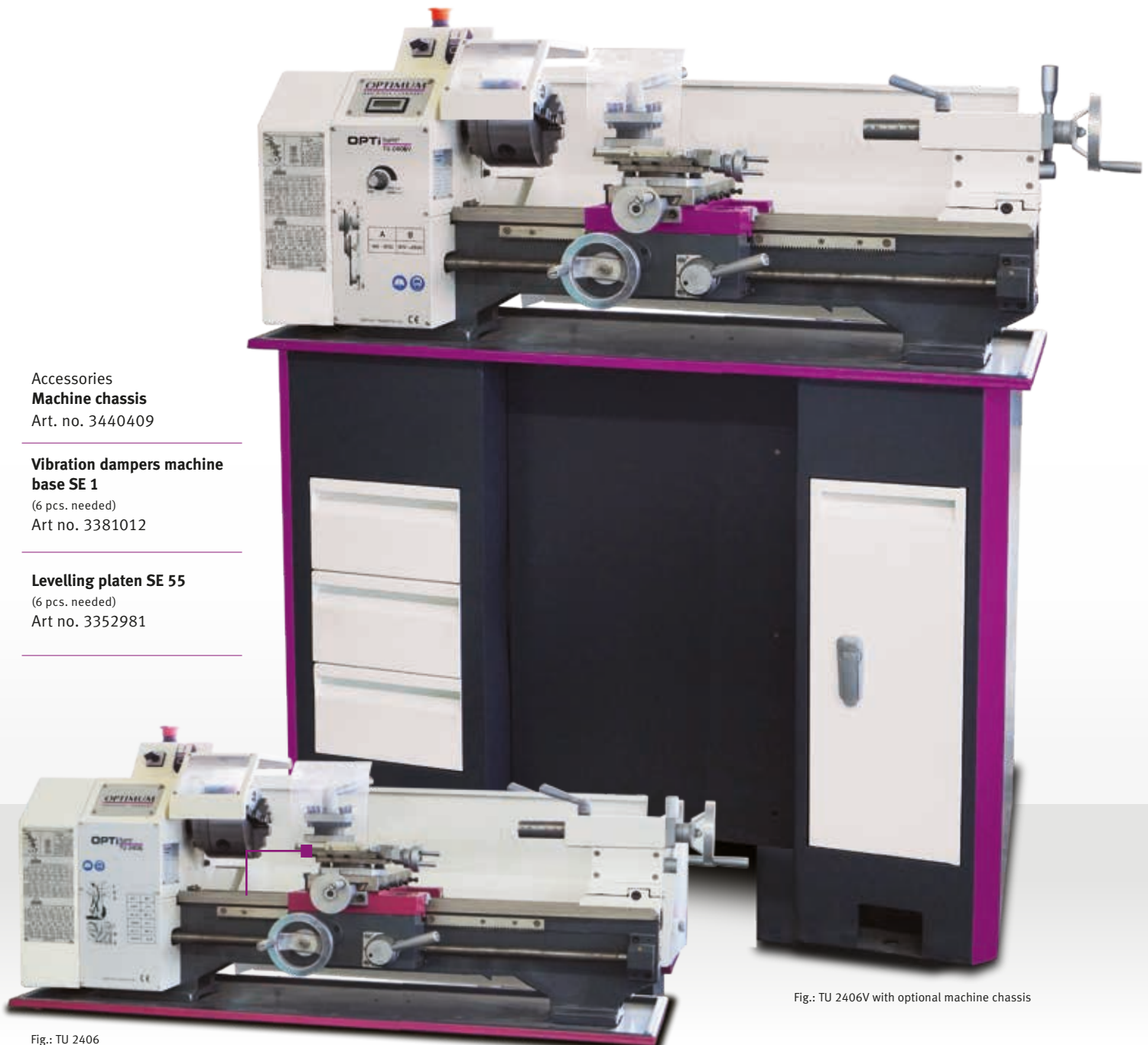


Fig.: TU 2406V with optional machine chassis

Fig.: TU 2406

Technical specifications, accessories and dimensions

Model	TU 2406	TU 2406V**
Article no. (230 V)	3420350	3420355
Article no. (400 V)	3420353	-
Technical specifications		
Electrical connection	230 V / 1 Ph ~ 50 Hz 400 V / 3 Ph ~50 Hz	230 V / 1 Ph ~ 50 Hz
Drive motor	750 W	1.1 kW
Spindle		
Spindle taper	MT 3	
Spindle seat	cylindrical Ø 52 mm	
Spindle bore, bar passage diameter	Ø 21 mm	
Quadruple tool holder mounting height	14 mm	
Work area		
Centre height	125 mm	
Centre width	550 mm	
Swing Ø over machine bed	250 mm	
Bed width	135 mm	
Speed range		
Spindle speed	125 - 2 000 rpm	150 - 2 500 rpm
Number of speeds	6 speeds	2-speed, electronic speed control
Travel		
Top slide travel	75 mm	
Cross slide travel	120 mm	
Pitches		
Pitch - metric in range	0.4 - 3.5 mm/rev (14 pitches)	
Pitch - inch in range	44 - 10 turns/inch (12 pitches)	
Tailstock		
Tailstock seat	MT 2	
Tailstock - quill stroke	70 mm	
Dimensions		
Length x width x height	1 090 x 594 x 484 mm	
Weight	125 kg	

Lathe chucks and accessories	Art no.
Four-jaw lathe chuck Ø 125 mm, centre clamping (Chuck flange 3440511 required)	3442812
Four-jaw lathe chuck Ø 125 mm, individual clamping (Chuck flange 3440511 required)	3442874
Chuck flange lathe chuck Ø 125 mm (lathe chuck 3442812/3442874)	3440511
Clamping disc Ø 220 mm	3440552
› Information about lathe chucks from page 184	

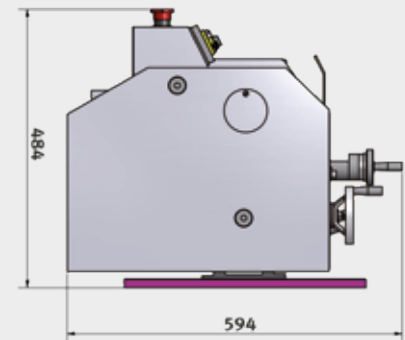
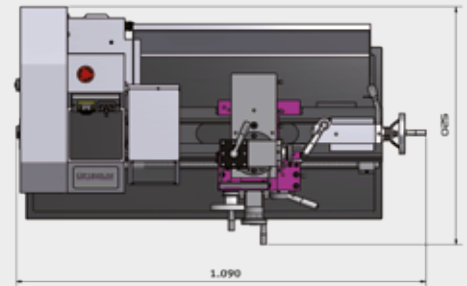
Accessories	Art no.
Steady rest passageway max. Ø 50 mm	3441315
Follow rest passageway max. Ø 34 mm	3441310
Quick change tool holder SWH 1-A	3384301
Factory assembly SWH 1-A	9000401
Spare tool holder 20 x 90 type D for square chisels	3384302
Spare tool holder 20 x 85 type H for round chisels	3384321
Lathe tool set 10 mm, 11-part (see page 189)	3441602
Lathe tool set 12 mm, 11-part (see page 189)	3441603
Lathe tool set 12 mm, 5-part (see page 189)	3441666
Lathe tool set 12 mm, 5-part "Made in Germany"	3441212
Information on „Lathe tool set“ from page 190	
Collet chuck ER 25, cylindrical	3440505
Collet chuck ER 32, short taper	3440506
› More accessories for lathes from page 188	

*Important information on „General notes on operating our machines“ on page 253

**The lathe (frequency converter) complies with the DIN EN 55011 standard: class C1 - Note for operation with frequency converter on page 253



Dimensions



Scope of supply

- › Three-jaw lathe chuck Ø 125 mm,
- › Centre clamping
- › Fixed centre MT 2 and MT 3
- › Splashguard
- › Chip tray
- › Quadruple tool holder
- › Replaceable gear set
- › Operating tool

Accessories	Art no.
Digital position display DRO 5 incl. 3 magnetic sensors	3383975
Magnetic strip length 1 100 mm	3383978
Factory assembly	9000420
› Information about position display on page 252	



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Lathes for DIY.

TU 2304V with electronic speed control

Facts that impress in terms of quality, performance and price

- ▶ Precision workmanship
- ▶ Grey cast iron prism bed with strong ribbing, aged for at least six months, induction tempered and precision ground
- ▶ Tempered and polished z-axis guideway
- ▶ Guaranteed concentricity of spindle nose better than 0.009 mm
- ▶ Roll-milled trapezoidal spindles
- ▶ Leading spindle borne on two sintered bearings
- ▶ All guides adjustable using cleats
- ▶ Precision slide
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.01 mm
- ▶ Quadruple tool holder
- ▶ Chuck concentricity better than 0.05 mm
- ▶ Leading spindle for thread tapping or automatic longitudinal turning
- ▶ Right-handed/left-handed rotation switchable via control panel
- ▶ Tailstock adjustable ± 5 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
- ▶ Emergency stop button
- ▶ Chuck protection
- ▶ Thrust bearings
- ▶ Interchangeable gear set for thread tapping
- ▶ Comprehensive range of accessories
- ▶ Three-jaw lathe chuck included in standard scope of delivery
- ▶ Lasting value

TU 2304 V

- ▶ Speed change easily adjustable via potentiometer
- ▶ Digital speed display
- ▶ EMC filter class C1



Accessories

Machine chassis

Art. no. 3440409

Vibration dampers machine base SE 1

(6 pcs. needed)

Art. no. 3381012

Levelling platen SE 55

(6 pcs. needed)

Art. no. 3352981

Fig. similar: TU 2304V with optional machine chassis

Technical specifications, accessories and dimensions

Model	TU 2304	TU 2304V**
Article no.	3420320	3420325
Technical specifications		
Electrical connection	230 V / 1 Ph ~50 Hz	
Drive motor	750 W	
Spindle		
Spindle taper	MT 3	
Spindle seat	cylindrical Ø 72 mm	
Spindle bore, bar passage diameter	Ø 20 mm	
Quadruple tool holder mounting height	14 mm	
Work area		
Centre height	115 mm	
Centre width	450 mm	
Swing Ø over machine bed	230 mm	
Bed width	135 mm	
Speed range		
Spindle speed	125 - 2 000 rpm	150 - 2 200 rpm
Number of speeds	6 speeds	2 speeds, electronically controlled
Travel		
Top slide travel	75 mm	
Cross slide travel	120 mm	
Pitches		
Pitch - metric in range	0.4 - 3.5 mm/rev (14 pitches)	
Pitch - inch in range	44 - 8 turns/inch (14 pitches)	
Tailstock		
Tailstock seat	MT 2	
Tailstock - quill stroke	70 mm	
Dimensions		
Length x width x height	965 x 585 x 510 mm	
Weight	111 kg	114 kg

Lathe chucks and accessories	Art no.
Three-jaw lathe chuck Ø 125 mm, centre clamping (Chuck flange 3440313 required)	3442712
Four-jaw lathe chuck Ø 125 mm, centre clamping (Chuck flange 3440313 required)	3442812
Four-jaw lathe chuck Ø 125 mm, individual clamping (Chuck flange 3440313 required)	3442874
Chuck flange for lathe chuck Ø 125 mm	3440313
› Information about lathe chucks from page 184	

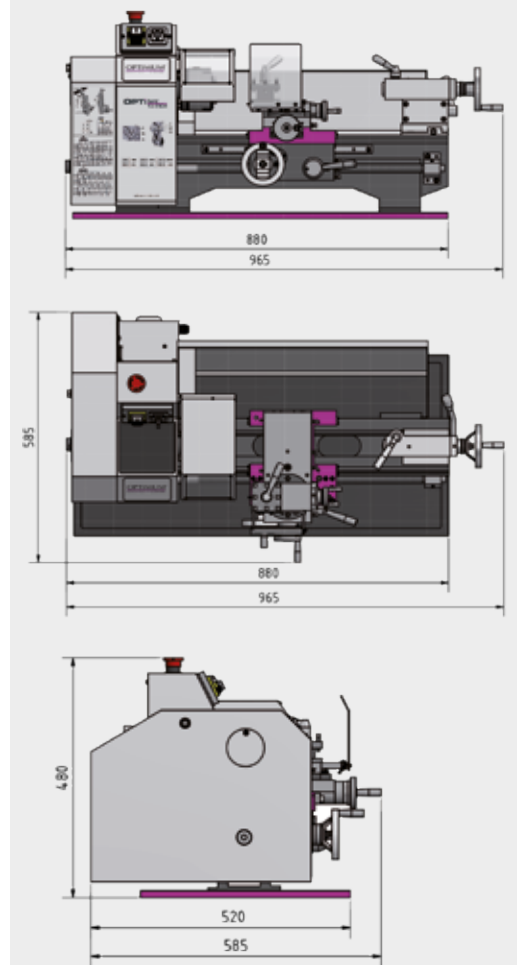
Accessories	Art no.
Steady rest passageway max. Ø 55 mm	3440361
Follow rest passageway max. Ø 34 mm	3440360
Quick change tool holder SWH 1-A	3384301
Factory assembly SWH 1-A	9000401
Spare tool holder 20 x 90 type D for square chisels	3384302
Spare tool holder 20 x 85 type H for round chisels	3384321
Lathe tool set 10 mm, 11-part (see page 189)	3441602
Lathe tool set 12 mm, 11-part (see page 189)	3441603
Lathe tool set 12 mm, 5-part "Made in Germany"	3441212
Information on „Lathe tool set“ from page 190	
Travelling centre MT 2	3440702
Collet chuck ER 25 Ø 72 mm	3440305
Clamping disc Ø 170 mm	3440295
› More accessories for lathes from page 188	

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

**The lathe (frequency converter) complies with the DIN EN 55011 standard: class C1 - Note for operation with frequency converter on page 253



Dimensions



Scope of supply

- › Three-jaw lathe chuck Ø 100 mm,
- › Centre clamping
- › Fixed centre MT 2 and MT 3
- › Splashguard
- › Chip tray
- › Quadruple tool holder
- › Replaceable gear set
- › Operating tool

Accessories	Art no.
Digital position display DRO 5 incl. 3 magnetic sensors	3383975
Magnetic strip length 1 100 mm	3383978
Factory assembly	9000420
› Information about position display on page 252	



Preface

Drilling

Milling

Turning

Saws

Grinding

Polishing

Lamps

Measuring

Modelbuilding lathe with electronic speed control and digital speed display

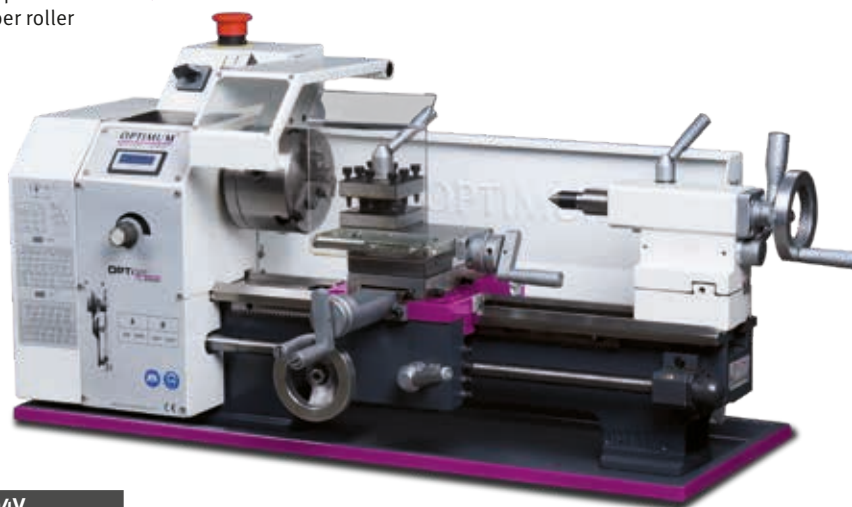
OPTIMUM
the original



Facts that impress in terms of quality, performance and price

- ▶ Precision workmanship
- ▶ Ribbed cast steel prism bed with strong ribbing, induction tempered and precision ground
- ▶ Tempered and polished z-axis guideway
- ▶ Tempered spindle nose (DIN 6350)
- ▶ Guaranteed concentricity of spindle nose better than 0.009 mm
- ▶ Automatic longitudinal/leading spindle drive
- ▶ Roll-milled trapezoidal thread on lead spindle
- ▶ Leading spindle borne on two sintered bearings
- ▶ Longitudinal, cross and top slides
- ▶ Right-handed/left-handed rotation switchable via control panel
- ▶ Tempered main spindle borne on adjustable precision taper roller bearings
- ▶ Tapered roller bearings in P5 quality
- ▶ Cylindrical centring mount
- ▶ Tempered spindle nose with Ø 21 mm spindle bore
- ▶ Lathe chuck concentricity better than 0.04 mm
- ▶ Tailstock adjustable for turning spheres

- ▶ Tailstock spindle sleeve and handwheel with adjustable fine scaling 0.02 mm
- ▶ Fast, easy adjustment without tools thanks to clamping lever
- ▶ Emergency stop button
- ▶ Chuck protection
- ▶ Thrust bearings
- ▶ Gearbox with interchangeable gearwheels
- ▶ Quadruple tool holder, rotating
- ▶ Interchangeable gear set as standard enables large thread tapping area
- ▶ Three-jaw lathe chuck included in standard scope of delivery
- ▶ EMC filter class C1



Model	TU 2004V
Article no.	3420310

Technical specifications	
Electrical connection	230 V / 1 Ph ~ 50 Hz
Drive motor	600 W
Spindle	
Spindle taper	MT 3
Spindle bore	Ø 21 mm
Spindle seat	cylindrical Ø 72 mm
Passageway three-jaw chuck	Ø 20 mm
Quadruple tool holder mounting height	12 mm
Work areas	
Centre height	100 mm
Centre width	300 mm
Max. turning diameter	200 mm*
Swing over cross slide	110 mm
Bed width	100 mm
Speed range	
Spindle speeds	150 - 2 500 rpm
Number of speeds	2 speeds. Electronic speed control
Travel	
Top slide travel	55 mm
Cross slide travel	75 mm
Feed and pitches	
Longitudinal feed within the range	0.1 - 0.2 mm/rev (2 feeds)
Pitch - metric in range	0.25 - 3 mm/rev (14 pitch)
Pitch - inch in range	44 - 8 turns/inch (12 pitches)
Tailstock	
Tailstock seat	MT 2
Tailstock - quill stroke	65 mm
Dimensions L x H x W	
Weight	830 x 425 x 360 mm 61 kg

Scope of supply
› Three-jaw lathe chuck Ø 100 mm, centre clamping
› Fixed centre MT 2 and MT 3
› Splashguard
› Chip tray
› Replaceable gear set
› Quadruple tool holder
› Operating tool

Lathe chuck	Art. no.
Four-jaw lathe chuck Ø 100 mm, centre clamping (Chuck flange 3440312 required)	3442810
Four-jaw lathe chuck Ø 100 mm, individual clamping (Chuck flange 3440312 required)	3442872
Chuck flange for lathe chuck Ø 100 mm (3442810/3442872)	3440312
Clamping disc Ø 170 mm	3440295
› Information about lathe chucks from page 184	

Accessories	Art. no.
Follow rest passageway max. Ø 40 mm	3440230
Steady rest passageway max. Ø 50 mm	3440231
Collet chuck ER 25 Ø 72 mm	3440305
Quick change tool holder SWH-AA	3384311
Factory assembly SWH-AA	9000401
Spare tool holder 12 x 50 type D for square chisels	3384312
Spare tool holder 12 x 50 type H for round chisels	3384320
Lathe tool set 10 mm, 11-part	3441602
Lathe tool set 10 mm, 5-part	3441664
Information on „Lathe tool set“ from page 190	
› More accessories for lathes from page 188	

The small-scale lathe with electronically controllable speed

OPTIMUM
the original



Facts that impress in terms of quality, performance and price

- ▶ Direct current motor
- ▶ Ribbed grey cast prism bed, induction tempered and ground
- ▶ Tempered and polished z-axis guideway
- ▶ Guaranteed concentricity of spindle nose better than 0.015 mm
- ▶ Chuck concentricity max. 0.05 mm
- ▶ Leading spindle for thread tapping or automatic longitudinal turning
- ▶ Longitudinal, cross and top slides
- ▶ Automatic longitudinal/leading spindle drive
- ▶ Large thread tapping area thanks to interchangeable gear set
- ▶ Three-jaw lathe chuck included in standard scope of delivery
- ▶ Fast and easy speed change through V-belt
- ▶ Safety switch in cover
- ▶ Right-handed/left-handed rotation switchable via control panel
- ▶ Chuck protection with microswitch
- ▶ Hand wheels with adjustable fine scaling 0.04 / 0.01 mm
- ▶ All guides adjustable without play using cleats
- ▶ Emergency stop button
- ▶ Low-voltage electronics
- ▶ EMC filter class C1



Model	TU 1503V
Article no.	3420260

Technical specifications	
Electrical connection	230 V / 1 Ph ~50 Hz
Drive motor	450 W
Spindle	
Spindle taper	MT 1
Spindle bore	Ø 11 mm
Spindle seat	cylindrical Ø 22 mm
Dual tool holder chuck height	12 mm
Work areas	
Centre height	75 mm
Centre width	265 mm
Max. turning diameter	150 mm*
Bed width	70 mm
Speed range	
Number of speeds	120 - 3 000 rpm
	Electronic speed control
Travel	
Top slide travel	40 mm
Cross slide travel	55 mm
Feed and pitch	
Longitudinal feed within the range	0.05 - 0.1 mm/rev (2 feeds)
Metric pitch	0.5 - 1.5 mm/rev (8 pitches)
Tailstock	
Tailstock seat	MT 1 short
Tailstock - quill stroke	30 mm
Dimensions L x W x H	
	570 x 340 x 300 mm
Weight	23 kg

Scope of supply

- › Three-jaw lathe chuck Ø 80 mm, centre clamping
- › Fixed centre MT 1
- › Splashguard
- › Chip tray
- › Replaceable gear set
- › Dual tool holder
- › Operating tool

Lathe chuck

Lathe chuck	Article no.
Three-jaw lathe chuck Ø 80 mm, single clamping	3440287
Four-jaw lathe chuck Ø 80 mm, individual clamping	3440286
Four-jaw lathe chuck Ø 80 mm, centre clamping	3442808
› Information about lathe chucks from page 184	

Accessories

Accessories	Article no.
Follow rest passageway max. Ø 45 mm	3440210
Steady rest passageway max. Ø 40 mm	3440211
Lathe tool set 8 mm, 5-part	3441662
Lathe tool set 8 mm, 11-part	3441601
Information on „Lathe tool set HM 8 mm“ on page 189	
Travelling centre MT 1	3440700
Collet chuck ER 16, Ø 22 mm, cylindrical	3440281
Collet kit ER 16, 1 - 10 mm, 12-part	3440282
› More accessories for lathes from page 188	

*Important information on „General notes on operating our machines“ on page 253

**The lathe (frequency converter) complies with the DIN EN 55011 standard: class C1 - Note for operation with frequency converter on page 253

Compatibility overview Accessories for lathes

Turning accessories		Article no.	TU 1503V	TU 2004V	TU 2304/V	TU 2406/V	TU 2506/V	TU 2807/V	TU 3008/G/V	TH 3309/D/V	TH 3610/D	TM 4010/D	TH 40	TH 42	TH 4210V	TH 46	TH 4615V	TH 56	TH 5620V	TZ 4/ TZ4V	TX 5216	TX 6222	TH 66	TH 80
SWH	SWH AA	3384311		●																				
	SWH 1 - A	3384301			●	●	●	●	●															
	SWH 3 - E	3384303								●	●	○	●											
	SWH 5 - B	3384305												●	●	●	●			●				
	SWH 7 - C	3384307																●	●		●	●		
	SWH 9 - D	3384309																					●	●
Lathe tool	HM 8 mm	3441662	●	●	●																			
	HM 10 mm	3441664			●	●	●	●	●															
	HM 12 mm	3441666			●	●	●	●	●															
	HM 12 mm	3441212			●	●	●	●	●															
	HM 16 mm	3441668								●	●	●	●											
	HM 16 mm	3441216								●	●	●	●											
	HM 16 mm	3441610								●	●	●	●											
	HM 20 mm	3441670												●	●	●	●	●	●	●	●			
	HM 20 mm	3441617												●	●	●	●	●	●	●	●			
	HM 25 mm	3441672																				●	●	●
	HM 25 mm	3441623																				●	●	●
	HM 32 mm	3441674																					●	●
Single lathe tool 12 mm	SSSC L1212J09	3441225			●	●	●	●	●															
	SCLC L1212J09	3441226			●	●	●	●	●															
Lathe tool	HM 8 mm	3441601	●	●	●																			
	HM 10 mm	3441602			●	●	●	●	●															
	HM 12 mm	3441603			●	●	●	●	●															
	HM 16 mm	3441604								●	●	●	●											
Inside lathe tool set	10 mm	3441640			●	●	●	●	●															
	12 mm	3441641			●	●	●	●	●	●	●	●	●											
	Set	3441650								●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Centring drill bit set		3203010			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Anti-vibration element	SE 1	3381012			●	●	●	●	●															
	SE 2	3381016			●	●	●	●	●	●	●	●	●											
	SE 3	3381018								●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Levelling platen	SE 55	3352981	●	●	●	●	●	●	●															
	SE 85	3352982								●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Clamping block	Set 16-05	3440653							●	●	●	●												
	Set 20-05	3440654										●	●	●	●	●	●	●	●	●	●	●		
	Set 25-05	3440655																					●	●
Twist drill HSS	MT 2	3051002		●	●	●	●	●																
	MT 3	3051003							●	●	●	○	●	○	○	○	○	○	○	○	○	○	○	○
Clamping disc	Ø 170 mm	3440295		●																				
	Ø 220 mm	3440552				●																		
	Ø 240 mm	3441352					●																	
	Ø 265 mm	3441452						●																
	Ø 300 mm No. 4	3442976							●	●														
	Ø 320 mm A2-5	3442979																		●				
	Ø 330 mm No. 5	3442978								●	●	●												
	Ø 350 mm No. 6	3442980												●	●	●								
	Ø 450 mm No. 8	3442982															●	●	●		●	●	●	●
Chuck flange	Ø 100 mm cyl.	3440312		●																				
	Ø 125 mm cyl.	3440313			●																			
	Ø 125 mm cyl.	3440511				●																		
	Ø 125 mm short	3441312					●	●																
	Ø 160 mm short	3441413						●																
BISON check flange	Ø 160 mm	3450245								●										●				

Turning accessories		Article no.	TU 1503V	TU 2004V	TU 2304/V	TU 2406/V	TU 2506/V	TU 2807/V	TU 3008/G/V	TH 3309/D/V	TH 3610/D	TM 4010/D	TH 40	TH 42	TH 4210V	TH 46	TH 4615V	TH 56	TH 5620V	TZ 4/TZ4V	TX 5216	TX 6222	TH 66	TH 80
Chuck flange	Ø 160 mm No. 4	3441512								•														
	Ø 200 mm No. 4	3441513								•														
	Ø 200 mm No. 5	3441514									•	•	•											
	Ø 200 mm No. 6	3444012												•	•	•								
	Ø 250 mm No. 6	3444013												•	•									
	Ø 315 mm No. 8	3444041															•	•	•		•	•	•	•
Collet chuck	ER16	3440281	•																					
	ER25	3440305		•	•																			
	ER25	3440505				•																		
	ER32	3440506				•																		
	ER25	3441305					•	•																
	ER32	3441306					•	•																
BISON collet chuck	16C	3450246																		•				
Collet chuck	5C - No. 4	3441554							•	•														
	5C - No. 5	3441555								•	•	•												
	5C - No. 6	3441556											•	•	•									
	5C - No. 8	3441558															•	•	•		•	•	•	•
Travelling centre	MT 2	3440702	•	•	•	•	•	•																
	MT 3	3440703							•	•	•		•							•				
	MT 4	3440704										•		•	•	•	•							
	MT 5	3440705															•	•			•	•	•	•
Travelling centre with replaceable tips	MT 2	3440732	•	•	•	•	•	•																
	MT 3	3440733							•	•	•		•							•	•	•	•	•
	MT 4	3440734										•		•	•	•	•							
BISON Travelling centre	MT 2	3451002	•	•	•	•	•																	
	MT 3	3451003						•	•	•	•								•					
	MT 4	3451004										•		•	•	•								
	MT 5	3451005															•	•		•	•	•	•	•
Collet kit	5C	3441509							•	•	•	•	•	•	•	•	•	•	•					
Collet kit	ER 16	3440282	•																					
	ER 25	3441109		•	•	•	•	•																
	ER 32	3441122		•	•	•	•	•																
Collet chuck device	5C	3441506							•															
	5C	3441507												•										
Position stop		3441522							•															
		3441523								•														
		3444022														•	•							
		3444023																•	•					
Fixed steady		3440211	•																					
		3440231		•																				
		3440361			•																			
		3440515				•																		
		3441315					•																	
		3441415						•																
		3441461							•															
Travelling steady		3440210	•																					
		3440230		•																				
		3440360			•																			
		3441310				•	•																	
		3441410						•																
		3441460							•															
Universal coolant unit	230 V	3352002	•	•	•	•	•	•	•	•	•													

This equipment table covers all recommended equipment options. Depending on the individual case, use of accessories can be meaningful beyond this.

OPTIMUM

Three-jaw lathe chuck

OPTIMUM Three-jaw lathe chuck centre clamping

► Cast lathe chuck

- › Cylindrical centring mount as per DIN 6350
- › Concentricity better than 0.05 mm
- › Chuck flange required
- › **Scope of delivery:** Chuck key, hard single-part outside clamping jaws

Ø 80 mm	3440287
Block jaw set, soft 1-part - 3 pcs.	3442902
Ø 100 mm	3442710
Block jaw set, soft 1-part - 3 pcs.	3442904
Ø 125 mm	3442712
Block jaw set, soft 1-part - 3 pcs.	3442906
Ø 160 mm	3442716
Block jaw set, soft 1-part - 3 pcs.	3442907



„Chuck flange“ on page 196

OPTIMUM

Four-jaw lathe chuck

OPTIMUM Four-jaw lathe chuck centre clamping

► Cast lathe chuck

- › Cylindrical centring mount as per DIN 6350
- › Concentricity better than 0.05 mm
- › Chuck flange required
- › **Scope of delivery:** Chuck key, hard single-part outside clamping jaws

Ø 80 mm	3442808
Block jaw set, soft 1-part - 4 pcs.	3442920
Ø 100 mm	3442810
Block jaw set, soft 1-part - 4 pcs.	3442922
Ø 125 mm	3442812
Block jaw set, soft 1-part - 4 pcs.	3442924
Ø 160 mm	3442816
Block jaw set, soft 1-part - 4 pcs.	3442926



OPTIMUM Four-jaw lathe chuck individual clamping

- › **Scope of delivery:** Chuck key, set of hard reversible jaws

Ø 80 mm	3440286
Ø 100 mm	3442872
Ø 125 mm	3442874



OPTIMUM

Data on the Lathe chucks, see page 187
„Chuck flange“ on page 196

OPTIMUM

Three-jaw lathe chuck Camlock

OPTIMUM Three-jaw lathe chuck Camlock centre clamping

► Cast lathe chuck

- › Camlock direct mount DIN 55029
- › **Scope of delivery:** Chuck key, hard single-part outside clamping jaws

Ø 160 mm Camlock DIN ISO 702-2 No. 4	3442761
Block jaw set, soft 1-part - 3 pcs.	3442907
Ø 200 mm Camlock DIN ISO 702-2 No. 4	3442762
Block jaw set, soft 1-part - 3 pcs.	3442910
Ø 200 mm Camlock DIN ISO 702-2 No. 5	3442764
Block jaw set, soft 1-part - 3 pcs.	3442910
Ø 200 mm Camlock DIN ISO 702-2 No. 6	3442763
Block jaw set, soft 1-part - 3 pcs.	3442910
Ø 250 mm Camlock DIN ISO 702-2 No. 6	3442765
Block jaw set, soft 1-part - 3 pcs.	3442912
Ø 315 mm Camlock DIN ISO 702-2 No. 8	3442768
Block jaw set, soft 1-part - 3 pcs.	3442916



OPTIMUM

Four-jaw lathe chuck Camlock

OPTIMUM Four-jaw lathe chuck Camlock centre clamping

► Cast lathe chuck

- › Camlock direct mount DIN 55029
- › **Scope of delivery:** Chuck key, hard single-part outside clamping jaws

Ø 160 mm Camlock DIN ISO 702-2 No. 4	3442840
Block jaw set, soft 1-part - 4 pcs.	3442926
Ø 200 mm Camlock DIN ISO 702-2 No. 4	3442843
Block jaw set, soft 1-part - 4 pcs.	3442927
Ø 200 mm Camlock DIN ISO 702-2 No. 5	3442845
Block jaw set, soft 1-part - 4 pcs.	3442927
Ø 200 mm Camlock DIN ISO 702-2 No. 6	3442846
Block jaw set, soft 1-part - 4 pcs.	3442928
Ø 250 mm Camlock DIN ISO 702-2 No. 6	3442852
Block jaw set, soft 1-part - 4 pcs.	3442935
Ø 315 mm Camlock DIN ISO 702-2 No. 8	3442856
Block jaw set, soft 1-part - 4 pcs.	3442938



OPTIMUM Four-jaw lathe chuck Camlock individual clamping

- › **Scope of delivery:** Chuck key, set of hard reversible jaws

Ø 200 mm Camlock DIN ISO 702-2 No. 4	3442879
Ø 200 mm Camlock DIN ISO 702-2 No. 5	3442880
Ø 250 mm Camlock DIN ISO 702-2 No. 6	3442884
Ø 315 mm Camlock DIN ISO 702-2 No. 8	3442888
Ø 400 mm Camlock DIN ISO 702-2 No. 8	3442890



Three-jaw lathe chuck

BISON Three-jaw lathe chuck centre clamping

► Lathe chuck body made of premium cast material

- › All work surfaces induction tempered and polished to ensure a high level of clamping and repetition accuracy
- › Uniform clamping forces
- › High concentricity (better than DIN 6386)
- › **Scope of delivery:** Chuck key, hard single-part outside clamping jaws

Ø 125 mm DIN 6350	3450230
Block jaw set, soft	3450410
Ø 160 mm DIN 6350	3450232
Block jaw set, soft	3450412



BISON Three-jaw lathe chuck centre clamping

► Lathe chuck body made of premium steel

- › **Scope of delivery:** Chuck key, hard single-part outside clamping jaws

Ø 250 mm Camlock DIN ISO 702-2 No. 6	3450530
Block jaw set, soft	3450426



Four-jaw lathe chuck

BISON Four-jaw lathe chuck centre clamping

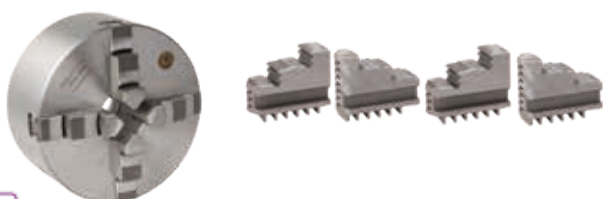
► Lathe chuck body made of premium cast material

- › All work surfaces induction tempered and polished
- › Uniform clamping forces
- › High concentricity (better than DIN 6386)
- › **Scope of delivery:** Chuck key, hard single-part outside clamping jaws

Ø 125 mm DIN 6350	3450234
Block jaw set, soft	3450420
Ø 160 mm DIN 6350	3450236
Block jaw set, soft	3450422

Chuck flange

Ø 125 mm for three- and four-jaw lathe chucks Ø 125 mm	3450240
Ø 160 mm for three- and four-jaw lathe chucks Ø 160 mm	3450241
Ø 200 mm for three- and four-jaw lathe chucks Ø 200 mm	3450212
Ø 250 mm for three- and four-jaw lathe chucks Ø 250 mm	3450218



„Technical data four-jaw lathe chuck“ on page 187
„Chuck flange“ on page 196



Three-jaw lathe chuck Camlock

BISON Three-jaw lathe chuck Camlock centre clamping

► Lathe chuck body made of premium cast material

- › All work surfaces induction tempered and polished
- › Camlock direct mount DIN 55029
- › High concentricity (better than DIN 6386)
- › Incl. chuck key, hard single-part outside clamping jaws

Ø 160 mm Camlock DIN ISO 702-2 No. 4	3450305
Block jaw set, soft	3450412
Ø 200 mm Camlock DIN ISO 702-2 No. 4	3450310
Block jaw set, soft	3450414
Ø 200 mm Camlock DIN ISO 702-2 No. 5	3450315
Block jaw set, soft	3450414
Ø 200 mm Camlock DIN ISO 702-2 No. 6	3450320
Block jaw set, soft	3450414
Ø 200 mm DIN 6350 A2-5	3450210
Block jaw set, soft	3450414
Ø 250 mm Camlock DIN ISO 702-2 No. 5	3450325
Block jaw set, soft	3450416
Ø 250 mm Camlock DIN ISO 702-2 No. 6	3450330
Block jaw set, soft	3450416
Ø 250 mm Camlock DIN ISO 702-2 No. 8	3450331
Block jaw set, soft	3450416
Ø 315 mm Camlock DIN ISO 702-2 No. 8	3450335
Block jaw set, soft	3450418



Four-jaw lathe chuck Camlock

BISON Four-jaw lathe chuck Camlock centre clamping

► Lathe chuck body made of premium cast material

- › Incl. chuck key, hard single-part outside clamping jaws

Ø 160 mm Camlock DIN ISO 702-2 No. 4	3450355
Block jaw set, soft	3450422
Ø 200 mm Camlock DIN ISO 702-2 No. 4	3450360
Block jaw set, soft	3450424
Ø 200 mm Camlock DIN ISO 702-2 No. 5	3450365
Block jaw set, soft	3450424
Ø 200 mm Camlock DIN ISO 702-2 No. 6	3450370
Block jaw set, soft	3450424
Ø 250 mm DIN 6350 for A2-5	3450216
Block jaw set, soft	3450426
Ø 250 mm Camlock DIN ISO 702-2 No. 5	3450375
Block jaw set, soft	3450426
Ø 250 mm Camlock DIN ISO 702-2 No. 6	3450380
Block jaw set, soft	3450426
Ø 250 mm Camlock DIN ISO 702-2 No. 8	3450381
Block jaw set, soft	3450426
Ø 315 mm Camlock DIN ISO 702-2 No. 8	3450385
Block jaw set, soft	3450428
Ø 400 mm Camlock DIN ISO 702-2 No. 8	3450390
Block jaw set, soft	3450430

BISON Four-jaw lathe chuck Camlock centre clamping

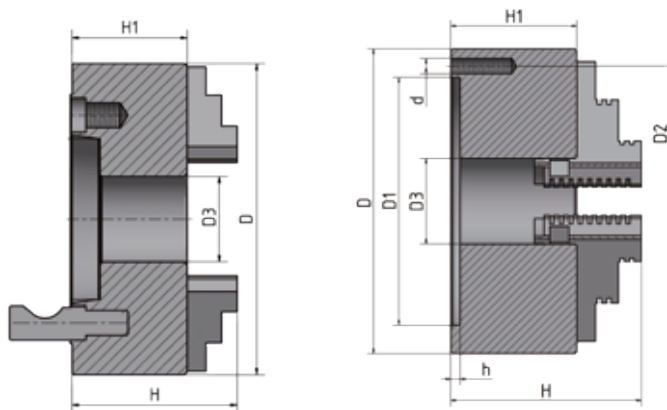
► Lathe chuck body made of premium steel

- › Incl. chuck key, hard single-part outside clamping jaws

Ø 250 mm Camlock DIN ISO 702-2 No. 6	3450580
Block jaw set, soft	3450426
Ø 250 mm DIN 6350 for A2-5	3450217
Block jaw set, soft	3450426

OPTIMUM

Three-jaw lathe chuck

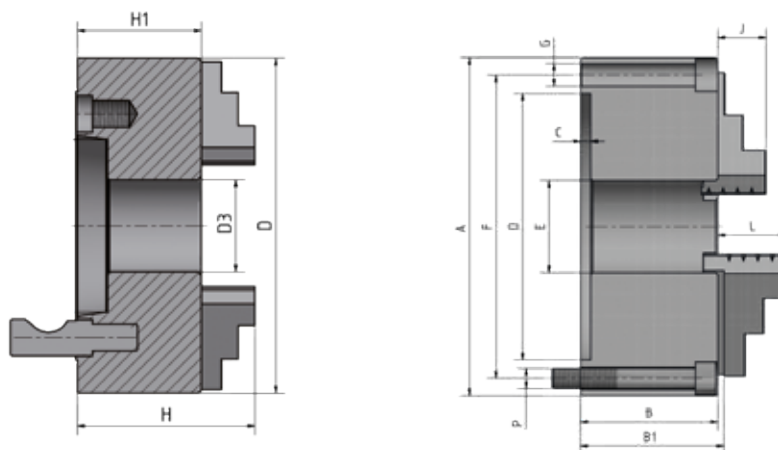


Chuck	Art. no.	D	D1	D2	D3	d	H	H1	h	Rotational speed (rpm)
Ø 80 mm	3440287	80	55	66	16	M6	66	50	3.5	4 000
Ø 100 mm	3442710	100	72	84	22	8M	75	55	3.5	4 200
Ø 125 mm	3442712	125	95	108	30	M8	84	58	4	3 800
Ø 160 mm	3442716	160	130	142	40	M8	95	65	5	3 000

Chuck	Camlock	Art. no.	D	D3	H	H1	Indexing circle	Rotational speed (rpm)
Ø 160 mm	No.4	3442761	160	40	101	71	82.6	3 000
Ø 200 mm	No.4	3442762	200	50	124	86	82.6	3 000
Ø 200 mm	No.5	3442764	200	52	124	86	104.8	3 000
Ø 200 mm	No.6	3442763	200	65	128	86	133.4	3 000
Ø 250 mm	No.6	3442765	250	70	140	98	133.4	2 400
Ø 315 mm	No.8	3442768	315	105	180	102.5	171.4	1 800



Three-jaw lathe chuck



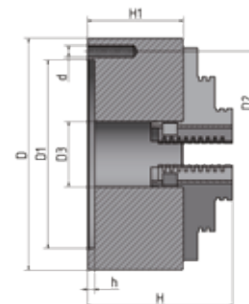
Chuck	Camlock	Art. no.	D	D3	H1	H	Indexing circle	Rotational speed (rpm)
Ø 160 mm	No.4	3450305	160	42	81.5	124.5	82.6	3 600
Ø 200 mm	No.4	3450310	200	56	107	136	82.6	3 000
Ø 200 mm	No.5	3450315	200	56	107	136	104.8	3 000
Ø 200 mm	No.6	3450320	200	55	91	136	133.4	3 000
Ø 250 mm	No.5	3450325	250	76	103.5	156.5	104.8	2 500
Ø 250 mm	No.6	3450330	250	76	103.5	156.5	133.4	2 500
Ø 250 mm	No.8	3450331	250	76	103.5	156.5	171.4	2 500
Ø 315 mm	No.8	3450335	315	103	117.7	174.7	171.4	2 000

Chuck	Art. no.	B	B1	C	D	E	F	G	J	L	kg	Rotational speed (rpm)
Ø 125 mm	3450230	56	60.8	4	95	32	108	3 x M8	20	40	5	4 000
Ø 160 mm	3450232	64.5	69.3	4	125	42	140	3 x M10	32	43	10	3 600

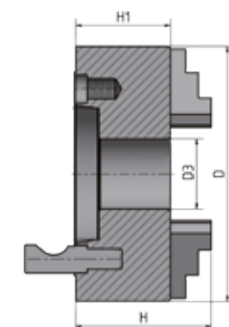
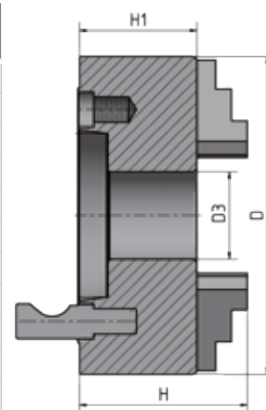
OPTIMUM

Four-jaw lathe chuck

Chuck	Art. no.	D	D1	D2	D3	d	H	H1	h	Rotational speed (rpm)
centre clamping										
Ø 80 mm	3442808	80	55	66	16	M6	66	50	3.5	4 300
Ø 100 mm	3442810	100	72	84	22	M8	75	55	3.5	3 400
Ø 125 mm	3442812	125	95	108	30	M8	84	58	4	2 750
Ø 160 mm	3442816	160	130	142	45	M8	95	65	5	2 150
individual clamping										
Ø 80 mm	3440286	80	55	66	22	M6	59	42	4	4 800
Ø 100 mm	3442872	100	72	84	25	M8	75	54	4	3 500
Ø 125 mm	3442874	125	95	108	30	M8	78	58	6	3 000

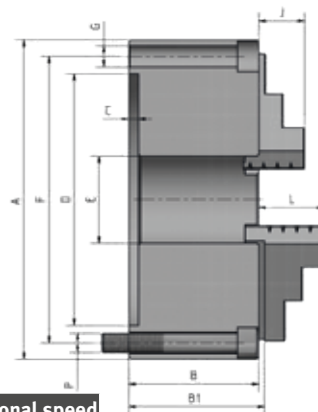


Chuck	Camlock	Art. no.	D	D3	H	H1	Indexing circle	Rotational speed (rpm)
Camlock centre clamping								
Ø 160 mm	No.4	3442840	160	40	95	71	82.6	2 150
Ø 200 mm	No.4	3442843	200	55	109	86	82.6	3 000
Ø 200 mm	No.5	3442845	200	52	109	86	104.8	3 000
Ø 200 mm	No.6	3442846	200	65	109	86	133.4	3 000
Ø 250 mm	No.6	3442852	250	70	120	98	133.4	2 400
Ø 315 mm	No.8	3442856	315	100	142.5	102.5	171.4	1 800
Camlock individual clamping								
Ø 200 mm	No.4	3442879	200	56	107	75	82.6	2 100
Ø 200 mm	No.5	3442880	200	56	107	75	104.8	2 100
Ø 250 mm	No.6	3442884	250	100	120	80	133.4	1 600
Ø 315 mm	No.8	3442888	315	95	134	100	171.4	1 200
Ø 400 mm	No.8	3442890	400	125	148	101	171.4	1 000



Four-jaw lathe chuck

Chuck	Camlock	Art. no.	D	D3	H1	H	Indexing circle	Rotational speed (rpm)
centre clamping								
Ø 160 mm	No.4	3450355	160	42	81.5	124.5	82.6	3 600
Ø 200 mm	No.4	3450360	200	55	91	136	82.6	3 000
Ø 200 mm	No.5	3450365	200	55	91	136	104.8	3 000
Ø 200 mm	No.6	3450370	200	55	91	136	133.4	3 000
Ø 250 mm	No.5	3450375	250	76	103.5	156.5	104.8	2 500
Ø 250 mm	No.6	3450380	250	76	103.5	156.5	133.4	2 500
Ø 250 mm	No.8	3450381	250	76	103.5	156.5	171.4	2 500
Ø 315 mm	No.8	3450385	315	103	117.7	174.7	171.4	2 000
Ø 400 mm	No.8	3450390	400	136	128.5	207.5	171.4	1 600



Chuck	Art. no.	B	B1	C	D H7	E	F	G	J	L	kg	Rotational speed (rpm)
Ø 125 mm	3450234	56	60.8	4	95	32	108	3 x M8	20	40	5	4 000
Ø 160 mm	3450236	64.5	69.3	4	125	42	140	3 x M10	32	43	10	3 600
Ø 250 mm	3450216	75	79.8	4	160	55	176	6 x M10	29	45	17.5	2 500
Ø 250 mm	3450217	75	79.8	4	160	55	176	6 x M10	29	45	17.5	3 500



Quick change tool holder

Quick change tool holder

- › Repetition accuracy 0.01 mm · angle scale on tool holder head
- › 40 different angle settings · Height adjustment via star knob
- › Tool holder head and tool holder with profile ground gears
- › Play-free and repetition-accurate clamping of the change holder
- › For self-assembly!

Quick change tool holder set SWH AA

3384311

- › Tool holder head AA
- › 3 pcs. tool holder 12 x 50 type D for square chisels
- › 1 pc. tool holder 12 x 50 type H for round chisels

Spare tool holder 12 x 50 Type D for square chisels

3384312

Spare tool holder 12 x 50 Type H for round chisels

3384320

Quick change tool holder set SWH 1-A

3384301

- › Tool holder head A
- › 3 pcs. tool holder 20 x 90 type D for square chisels
- › 1 pc. tool holder 20 x 85 type H for round chisels

Spare tool holder 20 x 90 type D for square chisels

3384302

Spare tool holder 20 x 85 type H for round chisels

3384321

Quick change tool holder set SWH 3-E

3384303

- › Tool holder head E
- › 3 pcs. tool holder 20 x 100 type D for square chisels
- › 1 pc. tool holder 30 x 100 type H for round chisels

Spare tool holder 20 x 100 type D for square chisels

3384304

Spare tool holder 30 x 100 type H for round chisels

3384322

Quick change tool holder set SWH 5-B

3384305

- › Tool holder head B
- › 3 pcs. tool holder 25 x 120 type D for square chisels
- › 1 pc. tool holder 32 x 130 type H for round chisels

Spare tool holder 25 x 120 type D for square chisels

3384306

Spare tool holder 32 x 130 type H for round chisels

3384324

Quick change tool holder set SWH 7-C

3384307

- › Tool holder head C
- › 3 pcs. tool holder 32 x 150 type D for square chisels
- › 1 pc. tool holder 40 x 160 type H for round chisels

Spare tool holder 32 x 150 type D for square chisels

3384308

Spare tool holder 40 x 160 type H for round chisels

3384326

Quick change tool holder set SWH 9-D

3384309

- › Tool holder head D
- › 3 pcs. tool holder 40 x 180 type D for square chisels
- › 1 pc. tool holder 63 x 180 type H for round chisels

Spare tool holder 40 x 180 type D for square chisels

3384332

Spare tool holder 63 x 180 type H for round chisels

3384333

Factory assembly and adjustment SWH

9000400

- › Only with orders for new machines



Tool holder head



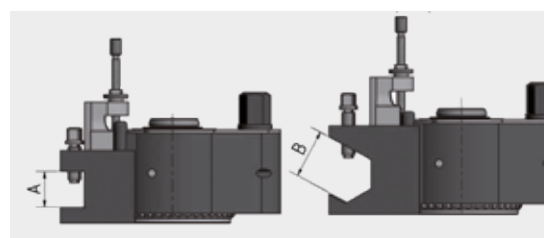
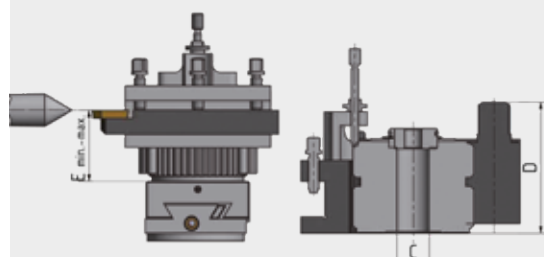
Tool holder type D
for square chisels



Tool holder type H
for round chisels



Tool holder head dimensions



Tool holder head dimensions			SWH AA	SWH 1-A	SWH 3-E	SWH 5-B	SWH 7-C	SWH 9-D
Turning diameter		mm	120 - 220	150 - 300	200 - 400	300 - 500	400 - 700	600 - 800
Drive output lathe max.		kW	1	2	4.5	7	13	20
Support width square chisel max	A	mm	12	20	20	25	32	40
Diameter round chisel max.	B	mm	Ø 12	Ø 20	Ø 20	Ø 25	Ø 32	Ø 40
Normal bore	C	mm	Ø 13	Ø 20	Ø 20	Ø 32	Ø 40	Ø 40
Height of base body/overall	D	mm	37	56	68	79	110	122
Height top carriage to lathe centre	E	mm	18 - 26	28.5 - 39.5	28.5 - 39.5	37 - 57	47 - 87	60 - 95

Lathe tool set

Lathe tool set HM 8 mm

Lathe tool set HM 8 mm					3441662
› 5-part › With HM turning plates › TiN coated › Aluminium box					
	ISO				h1
1	SWGC	L0808	D05		8 mm
2	SSDC	N0808	D06		8 mm
3	SWGC	R0808	D05		8 mm
4	STGC	R0808	D09		8 mm
5	SDJC	R0808	D07		8 mm

HM replacement turning plates (5 pcs. each)								
3441759			3441760			3441761		
3441758								
No.	Art. no.	ISO	D1	D2	B1	S1	right	
1/3	3441759	WCMT050308	7.94	3.2	80°	3.18	0.8	
2	3441761	SCMT060204	6.35	2.8	90°	2.38	0.4	
4	3441760	TCMT090204	5.56	2.5	60°	2.38	0.4	
5	3441758	DCMT070204	6.35	2.8	55°	2.38	0.4	

Lathe tool set HM 10 mm

Lathe tool set HM 10 mm					3441664
› 5-part › With HM turning plates › TiN coated › Aluminium box					
	ISO				h1
1	SWGC	L1010	E05		10 mm
2	SSDC	N1010	E06		10 mm
3	SWGC	R1010	E05		10 mm
4	STGC	R1010	E09		10 mm
5	SDJC	R1010	E07		10 mm

HM replacement turning plates (5 pcs. each)								
3441759			3441761			3441760		
3441758								
No.	Art. no.	ISO	D1	D2	B1	S1	right	
1/3	3441759	WCMT050308	7.94	3.2	80°	3.18	0.8	
2	3441761	SCMT060204	6.35	2.8	90°	2.38	0.4	
4	3441760	TCMT090204	5.56	2.5	60°	2.38	0.4	
5	3441758	DCMT070204	6.35	2.8	55°	2.38	0.4	

Lathe tool set HM 12 mm

Lathe tool set HM 12 mm					3441666
› 5-part › With HM turning plates › TiN coated › Aluminium box					
	ISO				h1
1	SWGC	L1212	H 05		12 mm
2	SSDC	N1212	H 09		12 mm
3	SWGC	R1212	H 05		12 mm
4	STGC	R1212	H 11		12 mm
5	SDJC	R1212	H 07		12 mm

HM replacement turning plates (5 pcs. each)								
3441759			3441763			3441762		
3441758								
No.	Art. no.	ISO	D1	D2	B1	S1	right	
1/3	3441759	WCMT050308	7.94	3.2	80°	3.18	0.8	
2	3441763	SCMT09T304	6.35	2.8	90°	2.38	0.4	
4	3441762	TCMT110204	6.35	2.8	60°	2.38	0.4	
5	3441758	DCMT070204	6.35	2.8	55°	2.38	0.4	

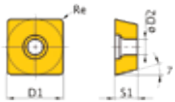
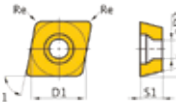
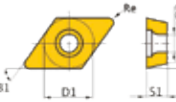
Lathe tool set

Lathe tool set
HM 12 mm

Lathe tool set HM 12 mm	3441212
› 5-part	
› With HM turning plates	
› TiN coated	

	ISO		Single lathe tool
			Art.no.
1	SSSC R1212 J09	12 mm	3441220
2	SCLC R1212 J09	12 mm	3441221
3	SDNC N1212 J11	12 mm	3441222
4	SDJC R1212 J11	12 mm	3441223
5	SDJC L1212 J11	12 mm	3441224



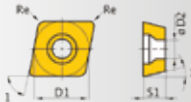
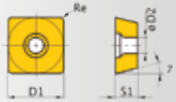
HM replacement turning plates (5 pcs. each)							
3441280		3441282		3441281			
							
No.	Art. no.	ISO	D1	D2	B1	S1	right
1	3441280	SCMT09T304	9.525	4.4	90°	3.97	0.4
2	3441282	CCMT09T304	9.525	4.4	80°	3.97	0.4
3-5	3441281	DCMT11T304	9.525	4.4	55°	3.97	0.4

NEW

Lathe tool 12 mm	MADE IN GERMANY	Article no.
SSSC L1212J09		3441225
HM replacement turning plates (5 pcs. each)		3441280
SCMT09T304	9.525 4.4 90° 3.97 0.4	

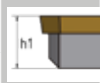
NEW

Lathe tool 12 mm	MADE IN GERMANY	Article no.
SCLC L1212J09		3441226
HM replacement turning plates (5 pcs. each)		3441282
CCMT09T304	9.525 4.4 80° 3.97 0.4	

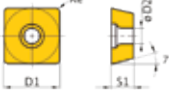
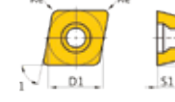
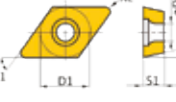


Lathe tool set
HM 16 mm

Lathe tool set HM 16 mm	3441216
› 5-part	
› With HM turning plates	
› TiN coated	

	ISO		Single lathe tool
			Art.no.
1	SSSC R1616 J09	16 mm	3441230
2	SCLC R1616 J09	16 mm	3441231
3	SDNC N1616 J11	16 mm	3441232
4	SDJC R1616 J11	16 mm	3441233
5	SDJC L1616 J11	16 mm	3441234

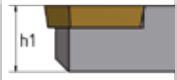


HM replacement turning plates (5 pcs. each)							
3441280		3441282		3441281			
							
No.	Art. no.	ISO	D1	D2	B1	S1	right
1	3441280	SCMT09T304	9.525	4.4	90°	3.97	0.4
2	3441282	CCMT09T304	9.525	4.4	80°	3.97	0.4
3-5	3441281	DCMT11T304	9.525	4.4	55°	3.97	0.4

Lathe tool set HM 16 mm

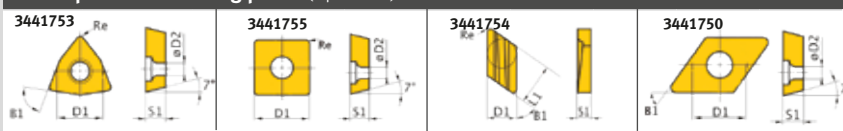
Lathe tool set HM 16 mm 3441668

- › 5-part
- › With HM turning plates
- › TiN coated
- › Aluminium box

	ISO				
1	PWLN	R1616	H06	16 mm	
2	PWLN	L1616	H06	16 mm	
3	PSDNN	1616	H09	16 mm	
4	CKJN	R1616	H16	16 mm	
5	MDJN	R1616	H11	16 mm	



HM replacement turning plates (5 pcs. each)



No.	Art. no.	ISO	D1	D2	B1	S1	right	L1
1/2	3441753	WNMG060408	9.252	3.81	80°	4.76	0.8	
3	3441755	SNMG090304	9.252	3.81	90°	3.18	0.4	
4	3441754	KNUX160405R	9.252		55°	4.76	0.5	16.15
5	3441750	DNMG110408	9.525	3.81	55°	4.76	0.8	

Lathe tool set HM 16 mm

Lathe tool set HM 16 mm 3441610

- › 5-part
- › With HM turning plates
- › TiN coated
- › Aluminium box

	ISO				
1	MVJNR	1616	H16	16 mm	
2	MVVNN	1616	H16	16 mm	
3	PRANN	1616	H10	16 mm	
4	PRGNR	1616	H10	16 mm	
5	SER	1616	H16	16 mm	



HM replacement turning plates (5 pcs. each)

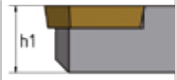


No.	Art. no.	ISO	D1	D2	B1	S1	right
1/2	3441701	VNMG160408	9.525	3.81	35°	4.76	0.8
3/4	3441702	RNMM1003MO	10	3.6	-	3.97	
5	3441703	16ER AG60	16	3.95	60°	3.65	

Lathe tool set HM 16 mm

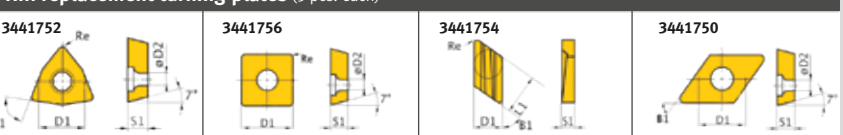
Lathe tool set HM 16 mm 3441670

- › 5-part
- › With HM turning plates
- › TiN coated
- › Aluminium box

	ISO				
1	PWLN	R2020	08 grain	20 mm	
2	PWLN	L2020	08 grain	20 mm	
3	PSDN	N2020	12 grain	20 mm	
4	CKJN	R2020	16 grain	20 mm	
5	MDJN	R2020	11 grain	20 mm	



HM replacement turning plates (5 pcs. each)

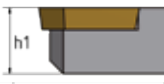


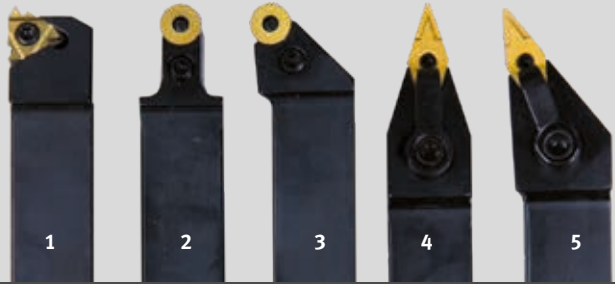
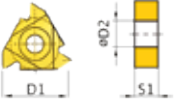
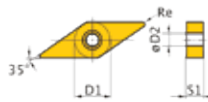
No.	Art. no.	ISO	D1	D2	B1	S1	right	L1
1/2	3441752	WNMG080408	9.252	3.81	80°	4.76	0.8	
3	3441756	SNMG120408	12.7	5.16	90°	4.76	0.8	
4	3441754	KNUX160405R	9.252		55°	4.76	0.5	16.15
5	3441750	DNMG110408	9.525	3.81	55°	4.76	0.8	

Lathe tool set

Lathe tool set HM 20 mm

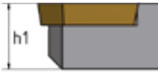
Lathe tool set HM 20 mm	3441617
› 5-part	
› With HM turning plates	
› TiN coated	
› Aluminium box	

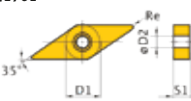
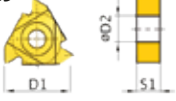
	ISO				
1	SER	2020	16 grain	20 mm	
2	PRGNR	2020	10 grain	20 mm	
3	PRANN	2020	10 grain	20 mm	
4	MVVNN	2020	16 grain	20 mm	
5	MVJNR	2020	16 grain	20 mm	

							
HM replacement turning plates (5 pcs. each)							
3441703 		3441702 		3441701 			
No.	Art. no.	ISO	D1	D2	B1	S1	right
1	3441703	16ER AG60	16	3.95	60°	3.65	
2/3	3441702	RNMM1003MO	10	3.6	-	3.97	
4/5	3441701	VNMG160408	9 525	3.81	35°	4.76	0.8

Lathe tool set HM 25 mm

Lathe tool set HM 25 mm	3441623
› 5-part	
› With HM turning plates	
› TiN coated	
› Aluminium box	

	ISO				
1	MVVN	N2525	M16	25 mm	
2	SE	R2525	M16	25 mm	
3	PRGN	R2525	M12	25 mm	
4	PRAN	N2525	M16	25 mm	
5	MVJN	R2525	M16	25 mm	

							
HM replacement turning plates (5 pcs. each)							
3441701 		3441703 		3441704/05 			
No.	Art. no.	ISO	D1	D2	B1	S1	right
1/2	3441701	VNMG160408	9 525	3.81	35°	4.76	0.8
3	3441703	16ER AG60	16	3.95	60°	3.65	
4	3441705	RNMG1204MO	12	4.75	R	5.1	-
5	3441704	RNMG1605MO	16	5.4	R	6.3	-

Lathe tool set HM 25 mm

Lathe tool set HM 25 mm	3441672
› 5-part	
› With HM turning plates	
› TiN coated	
› Aluminium box	

	ISO				
1	PWLN	L2525	M08	25 mm	
2	PSDN	N2525	M15	25 mm	
3	PWLN	R2525	M08	25 mm	
4	CKJNR	R2525	M16	25 mm	
5	MDJN	R2525	M15	25 mm	

HM replacement turning plates (5 pcs. each)

3441757

3441752

3441754

3441751

No.	Art. no.	ISO	D1	D2	B1	S1	right	L1
1/2	3441752	WNMG080408	9.252	3.81	80°	4.76	0.8	
3	3441757	SNMG150608	15.875	6.35	90°	6.35	0.8	
4	3441754	KNUX160405R	9.252		55°	4.76	0.5	16.15
5	3441751	DNMG150408	12.7	5.16	55°	4.76	0.8	

Lathe tool set
HM 32 mm

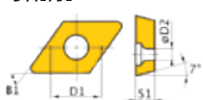
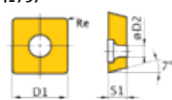
Lathe tool set HM 32 mm	3441674
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- › 5-part
- › With HM turning plates
- › TiN coated
- › Aluminium box

	ISO			
1	PWLN	L3232	P08	32 mm
2	PSDN	N3232	P15	32 mm
3	PWLN	R3232	P08	32 mm
4	CKJN	R3232	P16	32 mm
5	MDIN	R3232	P15	32 mm



HM replacement turning plates (5 pcs. each)



No.	Art. no.	ISO	D1	D2	B1	S1	right	L1
56/58	3441752	WNMG080408	9.252	3.81	80°	4.76	0.8	
57	3441757	SNMG150608	15 875	6.35	90°	6.35	0.8	
59	3441754	KNUX160405R	9.252		55°	4.76	0.5	16.15
60	3441751	DNMG150408	12.7	5.16	55°	4.76	0.8	

Inside lathe tool set 10 mm

Inside lathe tool set 10 mm	3441640
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- › 3-part
- › With HM turning plates
- › TiN coated
- › Aluminium box

No.	ISO		
1	S10K	SCFCR	06
2	S10K	SDQCR	07
3	S10K	STFCR	11



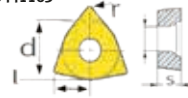
Inside lathe tool set 12 mm

Inside lathe tool set 12 mm	3441641
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- › 3-part
- › With HM turning plates
- › TiN coated
- › Aluminium box

No.	ISO		
1	S12M	SCFCR	06
2	S12M	SDQCR	07
3	S12M	STFCR	11

HM replacement turning plates (5 pcs. each)



No.	Art. no.	ISO		l	s	R	d	d1
61	3441164	CCMT060204	C/80°	6.35	2.60	0.40	6.35	2.70
62	3441163	TCMT110204	T/60°	10.84	2.53	0.40	9.1	2.70
63	3441166	DCMT070204	D/55°	7.30	2.53	0.40	6.35	2.70

Inside thread turning tool set 8 - 20 mm

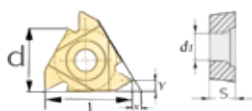
Inside thread turning tool set	3441650
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- › 5-part (8/10/12/16/20 mm)
- › With HM turning plates
- › TiN coated
- › Aluminium box

No.	ISO			d
1	S10K	SIR 0008	H08	8 mm
2	S10K	SIR 0010	11 grain	10 mm
3	S10K	SIR 0012	M11	12 mm
4	S10K	SIR 0016	P16	16 mm
5	S10K	SIR 0020	S16	20 mm



HM replacement turning plates (5 pcs. each)

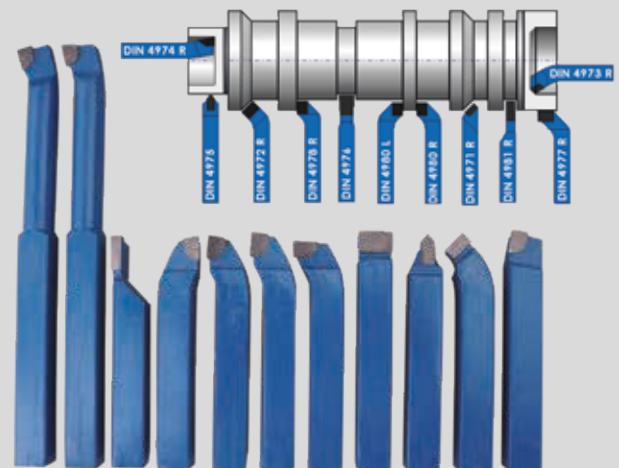


No.	Art. no.	ISO		l	s	R	d	d1
1	3441725	08IR A60	60° IR	8	2.22	4.76	2.5	M10
2/3	3441726	11IR A60	60° IR	11	3.22	6.35	3.0	M12
4/5	3441727	16IR A60	60° IR	16	3.65	9.5	3.95	M16

Lathe tool set

8 / 10 / 12 / 16 mm

Lathe tool set HM 8 mm	3441601
11-part . With HM plates soldered on	
Lathe tool set HM 10 mm	3441602
11-part . With HM plates soldered on	
Lathe tool set HM 12 mm	3441603
11-part . With HM plates soldered on	
Lathe tool set HM 16 mm	3441604
11-part . With HM plates soldered on	



Pilot bit set	3203010
› As per DIN 333 shape A › 10-part: 0.75/1/1.5/1.6/2/2.5/3/3.15/4/5 mm › Right-hand cutting chisel edge 120° › Countersinking angle 60° › Top quality HSS for tensile strength up to approx. 750 N/mm² › Powerful shank, also well suited for predrilling and expansion drilling with a twist drill bit › Practical OPTIMUM plastic case	



Levelling platen/vibration damper	Article no.
› Effective vibration and structure-borne noise insulation and noise reduction › Fast and technically uncomplicated levelling › Eliminates floor unevenness up to 5° › Precision levelling by means of a regular threaded screw › Better distribution of impact-like axial forces due to the geometrically larger contact surface with the screw. › No notching effect - like for example with conical screw tips. › The levelling screw and the levelling disc are captively connected by a very simple system. › Problem-free changeover of the machine possible, as the complete levelling disc remains on the machine foot when the machine is lifted.	

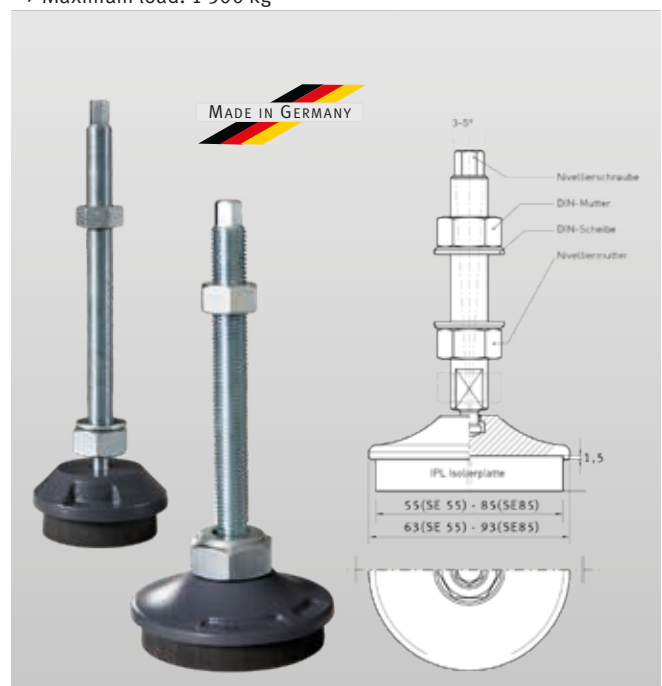
SE 55	3352981
› Jackscrew M12 x 1 x 150 › Maximum load: 600 kg	
SE 85	3352982
› Jackscrew M16 x 1 x 150 › Maximum load: 1 500 kg	

Vibration damping machine base
› The machines and equipment can be installed without anchors and precisely levelled using the height adjustment system. › Effective impact and vibration damping improves the machine's capability

SE 1	3381012
SE 2	3381016
SE 3	3381018



Load	SE 1	SE 2	SE 3
Milling machines	340 kg	460 kg	1 600 kg
Sawing/gen. Machine	570 kg	1 460 kg	3 500 kg
Threading	M12	M16	M 20
Base Ø/Base height	120/32	160/35	185/39



Clamping block set 16-05	3440653
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Lathes: TU 3008 / TH 3309 / TH 3610

- › 1 pc. clamping block SLTBN 16-05
- › 1 pc. parting off tool SLIH 26-2
- › 1 pc. parting off tool SLIH 26-3
- › 5 pcs. cutting inserts GTN2 (cutting width 2.2 mm)
- › 5 pcs. cutting inserts GTN3 (cutting width 3.1 mm)
- › Aluminium box

Clamping block set 20-05	3440654
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Lathes: TH 4010 / TH 4210 / TH 46 / TH 56

- › 1 pc. clamping block SLTBN 20-05
- › 1 pc. parting off tool SLIH 26-3
- › 1 pc. parting off tool SLIH 26-4
- › 5 pcs. cutting inserts GTN3 (cutting width 3.1 mm)
- › 5 pcs. cutting inserts GTN4 (cutting width 4.1 mm)
- › Aluminium box

Clamping block set 25-05	3440655
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For lathes: TH 66 / TH 80

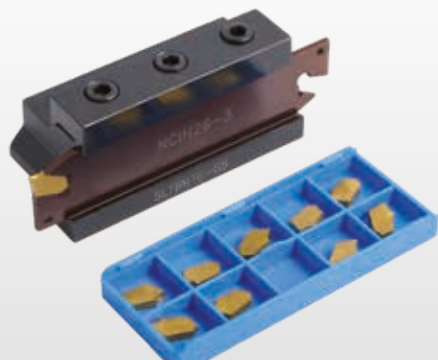
- › 1 pc. clamping block SLTBN 25-05
- › 1 pc. parting off tool SLIH 26-3
- › 1 pc. parting off tool SLIH 26-4
- › 5 pcs. cutting inserts GTN3 (cutting width 3.1 mm)
- › 5 pcs. cutting inserts GTN4 (cutting width 4.1 mm)
- › Aluminium box

Replacement cutting insert set (10 pcs.)	
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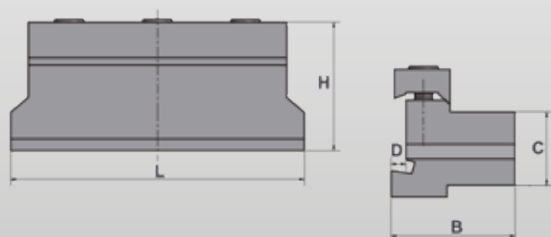
for cutting inserts **GTN 2** 3440663

for cutting inserts **GTN 3** 3440664

for cutting inserts **GTN 4** 3440665



Clamping block set with clamping inserts and parting off tool



Clamping block	16-05	20-05	25-05
L x W x H	88 x 38 x 42 mm	88 x 38 x 43 mm	100 x 42 x 43.5 mm
C	16 mm	20 mm	25 mm
D	4 mm	5 mm	5 mm

Workplace mats – for dry and wet areas	Article no.
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- › Fire-resistant
- › Made of polyurethane on polyether basis
- › Surface: nubbed
- › Underside: nubbed for maximum standing comfort and slip resistance
- › Thickness 14 mm
- › Colour anthracite
- › Temperature resistance -35°C to +95°C
- › Fire classification B1 as per DIN 4102
- › 5-year warranty



Work mat	6800000
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Dimensions 1 840 x 640 mm

Work mat	6800005
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Dimensions 1 840 x 940 mm

Work mat	6800001
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Dimensions 3 040 x 640 mm

Work mat	6800006
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Dimensions 3 040 x 940 mm



Twist drill HSS with morse taper	Article no.
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- › 9-part; sizes 14.5/16/18/20/22/24/26/28/30 mm
- › Long lifetime, good chip removal
- › Right handed

MT 2	3051002
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MT 3	3051003
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Accessories for lathes

Clamping disc	Article no.
Ø 170 mm for TU 2004V	3440295
Ø 220 mm for TU 2406	3440552
Ø 240 mm for TU 2506	3441352
Ø 265 mm for TU 2807	3441452
Ø 300 mm Camlock DIN ISO 702-2 No. 4	3442976
Ø 320 mm A 2-5	3442979
Ø 330 mm Camlock DIN ISO 702-2 No. 5	3442978
Ø 350 mm Camlock DIN ISO 702-2 No. 6	3442980
Ø 450 mm No. 8	3442982



Chuck flange	Article no.
› For lathe chuck assembly	
Ø 160 mm Camlock DIN ISO 702-2 No. 4	3441512
› for four-jaw lathe chucks Ø 160 mm	
Ø 200 mm Camlock DIN ISO 702-2 No. 4	3441513
› for four-jaw lathe chucks Ø 200 mm	
Ø 200 mm Camlock DIN ISO 702-2 No. 5	3441514
› for four-jaw lathe chucks Ø 200 mm	
Ø 200 mm Camlock DIN ISO 702-2 No. 6	3444012
› for four-jaw lathe chucks Ø 200 mm	
Ø 250 mm Camlock DIN ISO 702-2 No. 6	3444013
› for four-jaw lathe chucks Ø 250 mm	
Ø 315 mm Camlock DIN ISO 702-2 No. 8	3444041
› for three- and four-jaw lathe chucks Ø 315 mm	

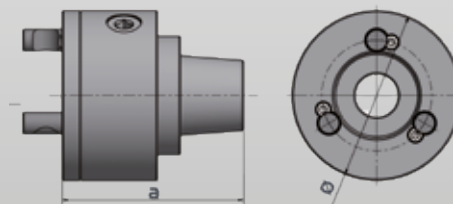
Chuck flange	Article no.
› For lathe chuck assembly	
Ø 100 mm	3440312
› Cylindrical for TU 2004V	
Ø 125 mm	3440313
› Cylindrical for TU 2304	
Ø 125 mm	3440511
› Cylindrical for TU 2406	
Ø 125 mm	3441312
› Short taper for TU 2506 / TU 2807	
Ø 160 mm	3441413
› Short taper for TU 2807	



Collet chuck	Article no.
With short taper mount	
ER 16 Ø 22 mm	3440281
› Cylindrical for TU 1503V	
ER 25 Ø 72 mm	3440305
› Cylindrical for TU 2004V / TU 2304	
ER 25 Ø 52 mm	3440505
› Cylindrical for TU 2406	
ER 32 Ø 52 mm	3440506
› Cylindrical for TU 2406	
ER 25 Ø 52 mm	3441305
› Cylindrical for TU 2506 / TU 2807	
ER 32 Ø 52 mm	3441306
› Short taper for TU 2506 / TU 2807	



Collet chuck for collet type 5C 5C / 385E	
› as per DIN 6341	
› With spindle chuck as per DIN ISO 702-2	
› Concentricity 0.02 mm	
5C - Camlock no. 4	3441554
› a = 71 mm / Ø = 126 mm	
5C - Camlock Nr. 5	3441555
› a = 107.4 mm / Ø = 126 mm	
5C - Camlock no. 6	3441556
› a = 160 mm / Ø = 182 mm	
5C - Camlock no. 8	3441558
› a = 163 mm / Ø = 225 mm	



Travelling centre	Article no.
max. radial run-out 0.006 mm	
MT 1	3440701
› Max. speed 5 000 rpm; radial load max. 320 N	
MT 2	3440702
› Max. speed 5 000 rpm; radial load max. 400 N	
MT 3	3440703
› Max. speed 4 500 rpm; radial load max. 800 N	
MT 4	3440704
› Max. speed 3 500 rpm; radial load max. 1 250 N	
MT 5	3440705
› Max. speed 3 000 rpm; radial load max. 1 500 N	
MT 6	3440706
› Max. speed 2 500 rpm; radial load max. 1 800 N	



Collet kit SPZ - 5C	3441509
› 17-part, clamping range 3 - 25 mm	
› Norm 385 E	
› For universal collet chuck device	



Collet kit	Article no.
› DIN 6499	
ER 16	3440282
› 12-part, clamping range Ø 1 - 10 mm	
ER 25	3441109
› 15-part, clamping range Ø 1 - 16 mm	
ER 32	3441122
› 18-part, clamping range Ø 3 - 20 mm	



BISON's centre	Article no.
max. radial run-out 0.005 mm	
MT 2 (NSK ball roller bearings INA needle bearings)	3451002
› Max. speed 7 000 rpm; radial load max. 2 000 N	
MT 3 (NSK ball roller bearings INA needle bearings)	3451003
› Max. speed 5 000 rpm; radial load max. 4 000 N	
MT 4 (NSK ball roller bearings INA needle bearings)	3451004
› Max. speed 3 800 rpm; radial load max. 8 000 N	
MT 5 (2-row SKF angular contact bearings)	3451005
› Max. speed 3 000 rpm; radial load max. 20 000 N	



Travelling centre	Article no.
› With 7 replaceable tips	
› Body made of tempered and polished tool steel	
› Precision needle bearings guarantee excellent concentricity	
MT 2	3440732
MT 3	3440733
MT 4	3440734



Universal collet chuck device 5C	Article no.
› for lathe TH 3309	3441506
› for lathe TH 42 (not Vario)	3441507



Accessories for lathes

Universal coolant unit	3352002
› Motor output 100 Watt 230 V ~50 Hz	
› Delivery height max. 2 m	
› Flow rate 4.5 l/min	
› Container capacity 10 l	
› Complete with container, flexible tube and hose	
› With switch/plug combination	
› Magnetic base fastener for coolant hose	
› For self-assembly!	



AQUACUT C1	3530030
• 10 litre canister	
• For mixing emulsions	
• Cooling emulsion	
• High-pressure resistant and containing mineral oil, for long tool life and clean surfaces	
• Emulsifiable with water, microbe-resistant and kind to the skin	

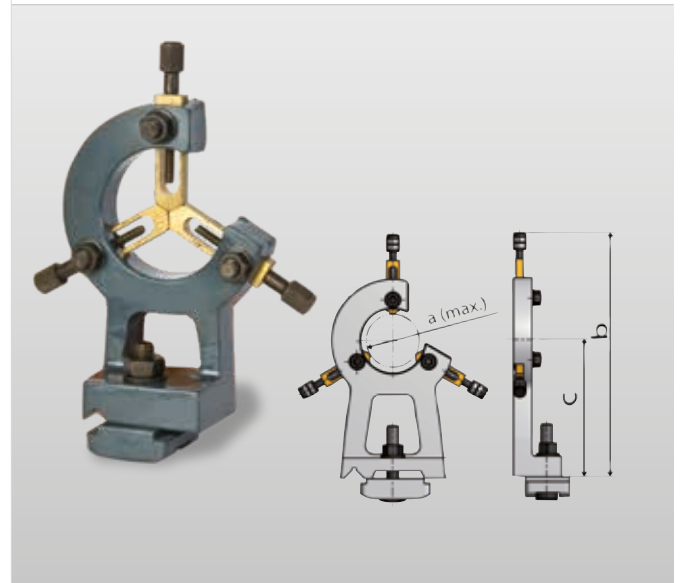


You will find more coolant accessories from page 246

Position stop With fine adjustment	Article no.
› for lathe TH 3309	3441522
› for lathe TH 3610	3441523
› for lathe TH 46	3444022
› for lathe TH 56	3444023



Fixed steady	Article no.
for TU 1503V	3440211
› a = Ø 40 mm; b = 145 mm; c = 70.5 mm	
for TU 2004V	3440231
› a = Ø 50 mm; b = 200 mm; c = 100 mm	
for TU 2304 / TU 2304V	3440361
› a = Ø 55 mm; b = 220 mm; c = 115 mm	
for TU 2406 / TU 2506	3441315
› a = Ø 50 mm; b = 245 mm; c = 125 mm	
for TU 2807 / TU 2807V	3441415
› a = Ø 55 mm; b = 250 mm; c = 140 mm	
for TU 3008 / TU 3008G / TU 3008V	3441461
› a = Ø 60 mm; b = 260 mm; c = 157 mm	



Travelling steady	Article no.
for TU 1503V	3440210
› a = Ø 45 mm; b = 155 mm; c = 76 mm	
for TU 2004V	3440230
› a = Ø 40 mm; b = 195 mm; c = 100 mm	
for TU 2304 / TU 2304V	3440360
› a = Ø 34 mm; b = 200 mm; c = 97 mm	
for TU 2406 / TU 2506	3441310
› a = Ø 34 mm; b = 220 mm; c = 107 mm	
for TU 2807 / TU 2807V	3441410
› a = Ø 56 mm; b = 250 mm; c = 130 mm	
for TU 3008 / TU 3008G / TU 3008V	3441460
› a = Ø 60 mm; b = 255 mm; c = 151 mm	

