

## The small-scale lathe with electronically controllable speed

**OPTIMUM**  
the original

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

- ▶ Direct current motor
- ▶ Low-voltage electronics
- ▶ Hardened and ground z-axis guideway
- ▶ Guaranteed concentricity of the spindle nose  $\leq 0.015$  mm
- ▶ Concentricity on the lathe chuck  $\leq 0.05$  mm
- ▶ Lead screw for thread cutting or automatic longitudinal turning
- ▶ Longitudinal, cross and top slides
- ▶ Automatic longitudinal/leading spindle drive
- ▶ Clockwise/Anti-clockwise rotation switchable via control panel
- ▶ All guides adjustable without play using V-ledges
- ▶ Sturdy metal handwheels with adjustable fine scaling 0.04 / 0.01 mm
- ▶ Ribbed grey cast prism bed, induction hardened and scraped
- ▶ Fast and easy speed change through V-belt
- ▶ Safety switch in cover
- ▶ Emergency stop button
- ▶ Chuck protection with microswitch
- ▶ Three-jaw lathe chuck included as standard
- ▶ Large thread cutting range thanks to interchangeable gear set included in standard delivery
- ▶ EMC filter class C1



<b>Model</b>	<b>TU 1503V<sup>1)</sup></b>
Article no.	3420260
<b>Output</b>	
Electrical connection	230 V / 1 Ph ~50 Hz
Drive motor S6-60% operation	450 W
<b>Spindle</b>	
Spindle taper	MK1
Spindle bore	Ø 11 mm
Spindle seat	cylindrical Ø 22 mm
Turning tool size max.	8 mm
<b>Work areas</b>	
Centre height	75 mm
Centre width	265 mm
Swing Ø above machine bed <sup>1)</sup>	150 mm
Swing Ø above cross slide	70 mm
Bed width	70 mm
<b>Speed range</b>	120 - 3000 min <sup>-1</sup>
Number of speeds	Electronic speed control
<b>Traverse paths</b>	
Top slide	40 mm
Cross slide	55 mm
Bed slide	270 mm
<b>Feed and pitch</b>	
Longitudinal feed within the range	0.05 - 0.1 mm/rev (2 feeds)
Metric pitch	0.5 - 1.5 mm/rev (8 pitches)
<b>Tailstock</b>	
Tailstock seat	MT1 shortened
Tailstock sleeve travel	30 mm
Dimensions (L x W x H) approx.	570 x 340 x 300 mm
Net weight approx.	23 kg

### Scope of delivery

- > Three-jaw lathe chuck Ø 80 mm, centre clamping
- > Non-rotating centring tip MT1
- > Double tool holder 8 mm
- > Splashguard
- > Chip tray
- > Change gear set
- > Operating tool

### Accessories

Lathe chuck Ø 100 mm	Article no.
Three-jaw lathe chuck, individual clamping	3440287
Four-jaw lathe chuck, individual clamping	3440286
Four-jaw lathe chuck Ø 80 mm, centre clamping	3442808

#### Information on lathe chuck from page 240

Accessories	Article no.
Lathe tool set 8 mm, 5-part	3441662
Lathe tool set 8 mm, 11-part	3441601
Follow steady rest	3440210
Passageway ma x. Ø 45 mm	
Steady rest	3440211
Passageway ma x. Ø 40 mm	
Co-rotating centring tip MT 1	3440700
Collet chuck ER 16, Ø 22 mm, cylindrical	3440281
Collet set ER 16, 1 - 10 mm	3440282

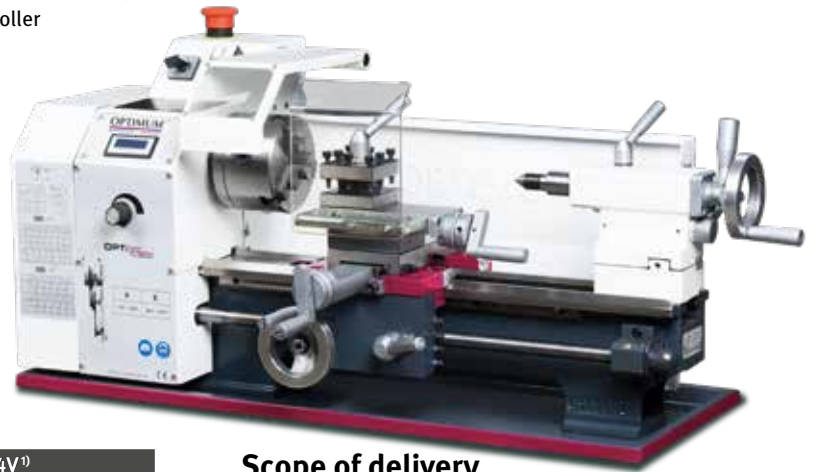
More accessories and information about accessories from page 237 onwards

## 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 heavily ribbed, induction hardened and precision ground
- ▶ Hardened and ground z-axis guideway
- ▶ Hardened spindle nose (DIN 6350)
- ▶ Guaranteed true running accuracy of spindle nose better than 0.009 mm
- ▶ Automatic longitudinal/leading spindle drive
- ▶ Roll-milled trapezoidal thread on lead spindle
- ▶ Thrust bearings
- ▶ Leading spindle borne on two sintered bearings
- ▶ Longitudinal, cross and top slides
- ▶ Clockwise/Anti-clockwise rotation switchable via control panel
- ▶ Hardened main spindle borne on adjustable precision taper roller bearings
- ▶ Tapered roller bearings in P5 quality
- ▶ Cylindrical centring mount
- ▶ Hardened spindle nose with Ø 21 mm spindle bore
- ▶ Tailstock adjustable for turning spheres
- ▶ Tailstock sleeve and handwheel with adjustable fine scaling 0.02 mm; fast, easy adjustment without tools thanks to clamping lever
- ▶ Gearbox with interchangeable gearwheels
- ▶ Emergency stop button
- ▶ Quadruple tool holder, rotating
- ▶ Lathe chuck true running accuracy better than 0.04 mm
- ▶ Chuck protection with microswitch
- ▶ Three-jaw lathe chuck included as standard
- ▶ Interchangeable gear set as standard delivery enables large thread cutting area
- ▶ EMC filter class C1



Model	TU 2004V <sup>1)</sup>
Article no.	3420310
<b>Output</b>	
Electrical connection	230 V / 1 Ph ~50 Hz
<b>Drive motor</b>	600 W
<b>Spindle</b>	
Spindle taper	MT3
Spindle bore	Ø 21 mm
Spindle seat	cylindrical Ø 72 mm
Three-jaw lathe chuck passageway	Ø 20 mm
Turning tool size max.	10 mm
<b>Work areas</b>	
Centre height	100 mm
Centre width	300 mm
Swing Ø above machine bed <sup>1)</sup>	200 mm
Swing Ø above cross slide	110 mm
Bed width	100 mm
<b>Speed range</b>	150 - 2500 min <sup>-1</sup>
Number of speeds	2 stages, Electronic speed control
<b>Traverse paths</b>	
Top slide	55 mm
Cross slide	75 mm
Bed slide	300 mm
<b>Feed and pitches</b>	
Longitudinal feed within the range	0.1/ 0.2 mm/rev (2 feeds)
Pitch - metric in range	0.25 - 3 mm/rev (14 pitches)
Pitch - inch in range	44 - 8 turns/inch (12 pitches)
<b>Tailstock</b>	
Tailstock seat	MT2
Tailstock sleeve travel	65 mm
<b>Dimensions (L x W x H) approx.</b>	830 x 425 x 360 mm
Net weight approx.	65 kg

### Scope of delivery

- › Three-jaw lathe chuck Ø 100 mm, centre clamping
- › Two non-rotating centring tips MT2 and MT 3
- › Quadruple tool holder 10 mm
- › Splashguard
- › Chip tray
- › Change gear set
- › Operating tool

### Accessories

Lathe chuck and chuck flange Ø 100 mm	Art. no.
Four-jaw lathe chuck, centric clamping (Chuck flange 3440312 is required)	3442810
Four-jaw lathe chuck, individual clamping (Chuck flange 3440312 required)	3442872
Cylindrical chuck flange, for mounting the lathe chuck	3440312

### Information on lathe chuck from page 240

Accessories	Art. no.
Quick change tool holder SWH-AA	3384311
Factory assembly SWH-AA	9000401
Spare tool holder 12 x 50 Type D for square	3384312
Spare tool holder 12 x 50 type H for round	3384320
Lathe tool set 10 mm, 11-part	3441602
Lathe tool set 10 mm, 5-part	3441664
Follow steady rest, passageway max. Ø 40 mm	3440230
Fixed steady rest, passageway max. Ø 50 mm	3440231
Collet chuck ER 25 Ø 72 mm	3440305
Clamping disc Ø 170 mm	3440295

More accessories and information about accessories from page 237 onwards

<sup>1)</sup> Note: The machine (frequency converter) complies with the DIN EN 55011 standard: class C1 Important information on operating machines with frequency inverters and general information on operating our machines on page 333

## Lathes for DIY. TU 2304V with electronic speed control

**OPTIMUM  
the original**

Facts that impress in terms of quality, performance and price

- ▶ Precision workmanship
- ▶ Hardened and ground z-axis guideway
- ▶ Guaranteed concentricity of the spindle nose  $\leq 0.009$  mm
- ▶ Concentricity on the lathe chuck  $\leq 0.05$  mm
- ▶ Lead screw for thread cutting or automatic longitudinal turning
- ▶ Clockwise/Anti-clockwise rotation switchable via control panel
- ▶ Roll-milled trapezoidal spindles
- ▶ Thrust bearings
- ▶ Precision slide
- ▶ Leading spindle borne on two sintered bearings
- ▶ All guides adjustable using V-ledges
- ▶ Handwheels with adjustable fine scaling 0.04 / 0.01 mm
- ▶ Tailstock for taper turning, adjustable by  $\pm 5$  mm
- ▶ Tailstock sleeve and handwheel with adjustable fine scaling 0.02 mm
- ▶ Emergency stop button
- ▶ Fast, easy adjustment of tailstock without tools thanks to clamping lever
- ▶ Quadruple tool holder
- ▶ Main spindle bearing of tolerance class P5
- ▶ Hardened spindle nose
- ▶ Set of interchangeable gears for thread cutting included in standard scope of delivery
- ▶ Comprehensive accessories
- ▶ Lasting value

### TU 2304V

- ▶ High-torque motor with constant torque curve to a great extent
- ▶ Speed change easily adjustable via potentiometer
- ▶ Digital speed display
- ▶ EMC filter class C1



Fig.: TU 2304V with optional machine base

## Arguments,...



### TU 2304V WITH DIGITAL SPEED DISPLAY

- › Electronically adjustable 2-stage spindle speed 150 - 2200 min<sup>-1</sup>
- › Speed change easily adjustable via potentiometer



### HORIZONTAL / VERTICAL

- › Grey cast iron prism bed heavily ribbed, aged for at least six months, induction hardened and precision ground



### LATHE CHUCK AND PROTECTION

- › Lathe chuck guard with position switch
- › Three-jaw lathe chuck  $\varnothing$  100 mm, centre clamping, included in standard scope of delivery

## Accessories

**Machine chassis MST1**  
Art no. 3440409

**Levelling platen SE 1**  
(6 units needed)  
Art no. 3381012

## Technical specifications, accessories and dimensions

Model	TU 2304	TU 2304V <sup>1)</sup>
Article no.	3420320	3420325
<b>Output</b>		
Electrical connection	230 V / 1 Ph ~50 Hz	
Drive motor	750 W	
<b>Spindle</b>		
Spindle taper	MT3	
Spindle seat	cylindrical Ø 72 mm	
Spindle hole, bar passage diameter	Ø 20 mm	
Turning tool size max.	12 mm	
<b>Work area</b>		
Centre height	115 mm	
Centre width	450 mm	
Swing Ø above machine bed <sup>1)</sup>	230 mm	
Swing Ø above cross slide	128 mm	
Bed width	133 mm	
<b>Speed range</b>		
Spindle speed	125 - 2000 min <sup>-1</sup>	150 - 2200 min <sup>-1</sup>
Number of speeds	6 stages	2 stages, electronically adjustable
<b>Traverse paths</b>		
Top slide	75 mm	
Cross slide	120 mm	
Bed slide	360 mm	
<b>Pitches</b>		
Pitch - metric in range	0.4 - 3.5 mm/rev (14 pitches)	
Pitch - inch in range	44 - 8 turns/inch (14 pitches)	
<b>Tailstock</b>		
Tailstock seat	MT2	
Tailstock sleeve travel	70 mm	
<b>Dimensions and weight</b>		
Dimensions (L x W x H) approx.	1090 x 585 x 510 mm	
Net weight approx.	111 kg	114 kg

## Accessories

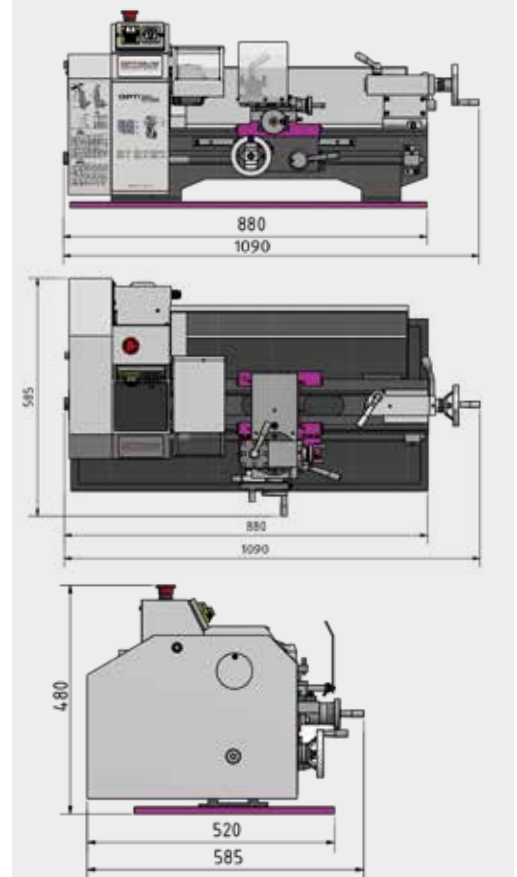
Lathe chuck and chuck flange Ø 125 mm	Article no.
Three-jaw lathe chuck,, centric clamping (Chuck flange 3440313 required)	3442712
Four-jaw lathe chuck, centric clamping (Chuck flange 3440313 required)	3442812
Four-jaw lathe chuck, individual clamping (Chuck flange 3440313 required)	3442874
Cylindrical chuck flange, for mounting the lathe chuck	3440313

### Information on lathe chuck from page 240

Accessories	Article no.
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	3441602
Lathe tool set 12 mm, 11-part	3441603
Lathe tool set 12 mm, 5-part "Made in Germany"	3441212
Fixed steady rest, passageway max. Ø 55 mm	3440361
Follow steady rest, passageway max. Ø 34 mm	3440360
Rotating centring tip MT 2	3440702
Clamping disc Ø 170 mm	3440295

More accessories and information about accessories from page 237 onwards

## Dimensions



## Scope of delivery

- › Three-jaw lathe chuck Ø 100 mm, centric
- › Non-rotating centring tip MT2 and MT3
- › Quadruple tool holder 12 mm
- › Splashguard
- › Chip tray
- › Change gear set
- › Operating tool

## Position display

Accessories	Art no.
	
Digital position display DRO 5 incl. 3 magnetic sensors	3383975
Magnetic strip, length 1100 mm	3383978
Factory assembly	9000420

For information on the DRO 5, see page 233

## Lathes for DIY. TU 2406V with electronic speed control

**OPTIMUM  
the original**

Facts that impress in terms of quality, performance and price

- ▶ Precision workmanship
  - ▶ Hardened and ground z-axis guideway
  - ▶ Guaranteed concentricity of the spindle nose  $\leq 0.009$  mm
  - ▶ Concentricity on the lathe chuck  $\leq 0.05$  mm
  - ▶ Lead screw for thread cutting or automatic longitudinal turning
  - ▶ Clockwise/Anti-clockwise rotation switchable via control panel
  - ▶ Roll-milled trapezoidal spindles
  - ▶ Thrust bearings
  - ▶ Precision slide
  - ▶ Two tapered roller bearings in P5 quality
  - ▶ Leading spindle borne on two sintered bearings
  - ▶ All guides adjustable using V-ledges
  - ▶ Handwheels with adjustable fine scaling 0.04 / 0.01 mm
  - ▶ Tailstock for taper turning, adjustable by  $\pm 5$  mm
  - ▶ Tailstock sleeve and handwheel with adjustable fine scaling 0.02 mm
- ▶ Fast, easy adjustment of the tailstock without tools thanks to clamping lever
  - ▶ Emergency stop button
  - ▶ Quadruple tool holder
  - ▶ Main spindle bearing of tolerance class P5
  - ▶ Hardened spindle nose
  - ▶ Set of interchangeable gears included in standard scope of delivery
  - ▶ Three-jaw lathe chuck included as standard
  - ▶ Comprehensive accessories
  - ▶ Lasting value

### TU 2406V

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



Fig.: TU 2406V with optional machine base

Fig.: TU 2406

## Arguments,...



### TU 2406V WITH DIGITAL SPEED DISPLAY

- › Electronically adjustable 2-stage spindle speed 150 - 2500 min<sup>-1</sup>
- › Speed change easily adjustable via potentiometer



### HORIZONTAL / VERTICAL

- › Ribbed grey cast steel prism bed heavily ribbed, induction hardened and precision ground



### LATHE CHUCK AND PROTECTION

- › Lathe chuck guard with position switch
- › Three-jaw lathe chuck  $\varnothing$  125 mm, centre clamping, included in standard scope of delivery

## Accessories

### Machine chassis MST1

Art no. 3440409

### Levelling platen SE 1

(6 units needed)

Art no. 3381012

## Technical specifications, accessories and dimensions

Model	TU 2406	TU 2406V <sup>1)</sup>
Article no. (230 V)	3420350	3420355
Article no. (400 V)	3420353	-
<b>Power</b>		
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
<b>Spindle</b>		
Spindle taper	MT3	
Spindle seat	cylindrical Ø 52 mm	
Spindle hole, bar passage diameter	Ø 21 mm	
Turning tool size max.	14 mm	
<b>Work area</b>		
Centre height	125 mm	
Centre width	550 mm	
Swing Ø above machine bed <sup>1)</sup>	250 mm	
Swing Ø above cross slide	148 mm	
Bed with	133 mm	
<b>Speed range</b>		
Spindle speed	125 - 2000 min <sup>-1</sup>	150 - 2500 min <sup>-1</sup>
Number of speeds	6 stages	2-speed, electronic speed control
<b>Traverse paths</b>		
Top slide	75 mm	
Cross slide	120 mm	
Bed slide	550 mm	
<b>Pitches</b>		
Pitch - metric in range	0.4 - 3.5 mm/rev (14 pitches)	
Pitch - inch in range	44 - 10 turns/inch (12 pitches)	
<b>Tailstock</b>		
Tailstock seat	MT2	
Tailstock sleeve travel	60 mm	
<b>Dimensions and weight</b>		
Dimensions (L x W x H) approx.	1250 x 581 x 485 mm	
Net weight approx.	125 kg	127 kg

## Accessories

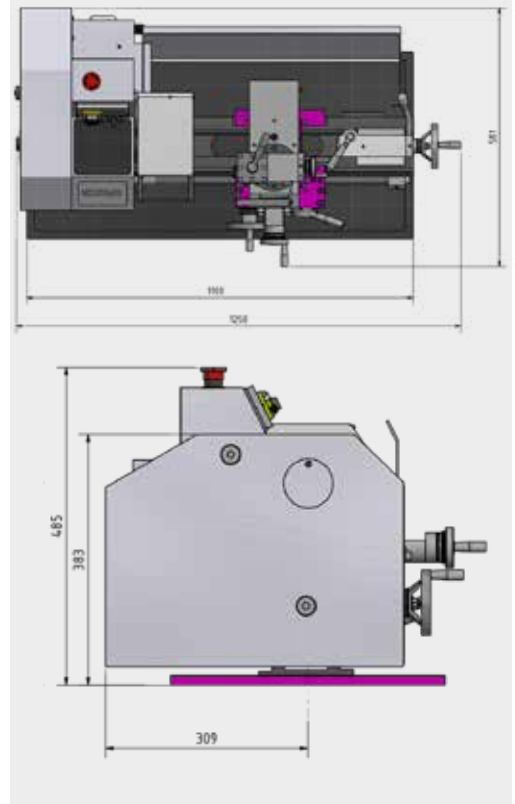
Lathe chuck and chuck flange Ø 125 mm	Article no.
Four-jaw lathe chuck, centric clamping (Chuck flange 3440511 required)	3442812
Four-jaw lathe chuck, single clamping (Chuck flange 3440511 required)	3442874
Cylindrical chuck flange, for mounting the lathe chuck	3440511

### Information on lathe chuck from page 240

Accessories	Article no.
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	3441602
Lathe tool set 12 mm, 11-part	3441603
Lathe tool set 12 mm, 5-part	3441666
Lathe tool set 12 mm, 5-part "Made in Germany"	3441212
Fixed steady rest passageway max. Ø 50 mm	3441315
Follow steady rest passageway max. Ø 34 mm	3441310
Collet chuck ER 32, short taper	3440506
Clamping disc Ø 240 mm	3440552

More accessories and information about accessories from page 237 onwards

## Dimensions



## Scope of delivery

- › Three-jaw lathe chuck Ø 125 mm, centre clamping
- › Non-rotating centring tip MT2 and MT3
- › Quadruple tool holder 14 mm
- › Splashguard
- › Chip tray
- › Change gear set
- › Operating tool

## Position display

Accessories	Art no.
	
Digital position display DRO 5 incl. 3 magnetic sensors	3383975
Magnetic strip, length 1100 mm	3383978
Factory assembly	9000420

For information on the DRO 5, see page 233

<sup>1)</sup> Note: The machine (frequency converter) complies with the DIN EN 55011 standard: class C1 Important information on operating machines with frequency inverters and general information on operating our machines on page 333

## Lead screw lathes with feed gear for the demanding user. TU 2506VB with electronically adjustable speed

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

- ▶ Precision workmanship
- ▶ Hardened and ground z-axis guideway
- ▶ Guaranteed concentricity of the spindle nose  $\leq 0.009$  mm
- ▶ Concentricity on the lathe chuck  $\leq 0.04$  mm
- ▶ Lead screw for thread cutting or automatic longitudinal turning
- ▶ Leading spindle borne on two sintered bearings
- ▶ All guides adjustable using V-ledges
- ▶ Clockwise/Anti-clockwise rotation switchable via control panel
- ▶ Roll-milled trapezoidal spindles
- ▶ Tapered roller bearings in P5 quality
- ▶ Hardened main spindle borne on adjustable, precision taper roller bearings
- ▶ Hardened spindle nose with  $\varnothing 26$  mm spindle bore
- ▶ Handwheels on slide with adjustable fine scaling 0.04 / 0.01 mm
- ▶ Top slide displaceable on cross slide
- ▶ Chip guard on top slide
- ▶ Tailstock for taper turning, adjustable by  $\pm 5$  mm
- ▶ Tailstock sleeve and handwheel with adjustable fine scaling 0.02 mm
- ▶ Fast, easy adjustment of the tailstock without tools thanks to clamping lever
- ▶ Emergency stop button
- ▶ Quadruple tool holder
- ▶ Interchangeable gear set included as standard for thread cutting
- ▶ Fully equipped; the user can immediately start productive work after commissioning

### TU 2506 VB

- ▶ Digital speed display



Fig.: TU 2506VB with optional machine base and SE1

Fig.: TU 2506

## Arguments,...



### TU 2506VB WITH DIGITAL SPEED DISPLAY

- › Electronically adjustable 2-stage spindle speed 150 - 2500  $\text{min}^{-1}$
- › Speed change easily adjustable via potentiometer



### HORIZONTAL / VERTICAL

- › Ribbed grey cast steel prism bed heavily ribbed, induction hardened and precision ground



### TAILSTOCK

- › for taper turning, adjustable by  $\pm 5$  mm
- › Tailstock sleeve and handwheel with adjustable fine scaling 0.02 mm
- › Quick, easy and tool-free adjustment by means of clamping lever



### LATHE CHUCK AND PROTECTION

- › Lathe chuck guard with position switch
- › Three-jaw lathe chuck  $\varnothing 125$  mm, centre clamping, included in standard scope of delivery

## Technical specifications, accessories and dimensions

Model	TU 2506	TU 2506VB <sup>1)</sup>
Article no. (230 V)	3425001	3425010
Article no. (400 V)	3425003	-
<b>Power</b>		
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
<b>Spindle</b>		
Spindle taper	MT4	
Spindle seat	Short taper	
Spindle hole, bar passage diameter	Ø 26 mm	
Turning tool size max.	12 mm	
<b>Work area</b>		
Centre height	125 mm	
Centre width	550 mm	
Swing Ø above machine bed <sup>1)</sup>	246 mm	
Swing Ø above cross slide	149 mm	
Bed width	134 mm	
<b>Speed range</b>		
Spindle speed	125 - 2000 min <sup>-1</sup>	150 - 2500 min <sup>-1</sup>
Number of speeds	6 stages	2 stages, electronically adjustable
<b>Traverse paths</b>		
Top slide	70 mm	
Cross slide	110 mm	
Bed slide	550 mm	
<b>Feeds and pitches</b>		
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)	
<b>Tailstock</b>		
Tailstock seat	MT2	
Tailstock quill diameter/travel	30 mm / 65 mm	
<b>Dimensions and weight</b>		
Dimensions (L x W x H) approx.	1250 x 585 x 475	1250 x 650 x 420
Net weight approx.	138 kg	132 kg

## Accessories

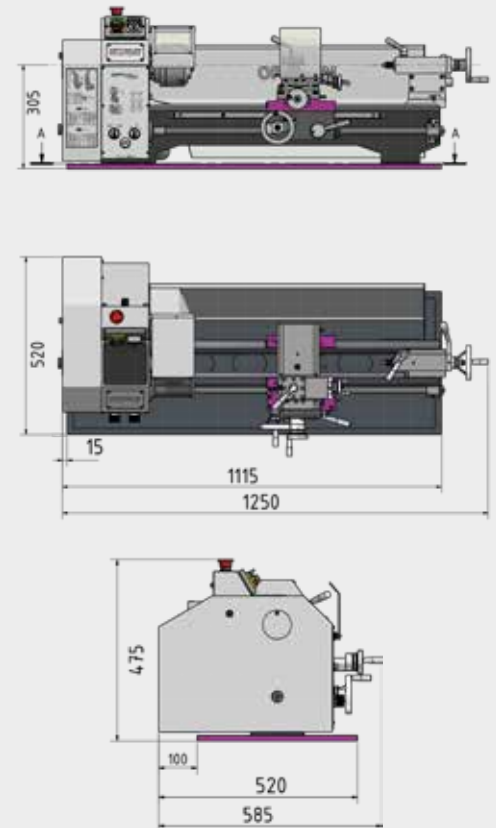
Lathe chuck and chuck flange Ø 125 mm	Article no.
Four-jaw lathe chuck, individual clamping (Chuck flange 3441312 required)	3442874
Four-jaw lathe chuck, centric clamping (Chuck flange 3441312 required)	3442812
Chuck flange, short cone, for mounting the lathe chuck	3441312

### Information on lathe chuck from page 240

Accessories	Article no.
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	3441602
Lathe tool set 12 mm, 11-part	3441603
Lathe tool set 12 mm, 5-part "Made in Germany"	3441212
Fixed steady rest, passageway max. Ø 50 mm	3441315
Follow steady rest, passageway max. Ø 34 mm	3441310
Collet set ER 32, 3- 20 mm	3441122
Collet chuck ER 32, short taper	3441306
Clamping disc Ø 240 mm	3441352

More accessories and information about accessories from page 237 onwards

## Dimensions



## Scope of delivery

- > Three-jaw lathe chuck Ø 125 mm, centre clamping
- > Non-rotating centring tip MT2 and MT4
- > Quadruple tool holder 12 mm
- > HSS lathe tools
- > Splashguard
- > Chip tray
- > Change gear set
- > Operating tool

## Position display

Accessories	Art no.
	
Digital position display DRO 5 incl. 3 magnetic sensors	3383975
Magnetic strip, length 1100 mm	3383978
Factory assembly	9000420

For information on the DRO 5, see page 233

<sup>1)</sup> Note: The machine (frequency converter) complies with the DIN EN 55011 standard Class C2. Important information on operating machines with frequency inverters and general information on operating our machines on page 333

## Leading spindle lathes with feed gear for demanding users. TU 2807VB with electronically adjustable speed

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

- ▶ Precision workmanship
- ▶ Hardened and ground z-axis guideway
- ▶ Guaranteed concentricity of the spindle nose  $\leq 0.009$  mm
- ▶ Concentricity on the lathe chuck  $\leq 0.04$  mm
- ▶ Lead screw for thread cutting or automatic longitudinal turning
- ▶ Automatic longitudinal/leading spindle drive
- ▶ Leading spindle borne on two sintered bearings
- ▶ Free moving feed gear with rounded gear wheels running in an oil bath
- ▶ All guides adjustable using V-ledges
- ▶ Clockwise/Anti-clockwise rotation switchable via control panel
- ▶ Roll-milled trapezoidal spindles
- ▶ Hardened main spindle borne on adjustable, precision taper roller bearings
- ▶ Hardened spindle nose with  $\varnothing 26$  mm spindle bore
- ▶ Tapered roller bearings in P5 quality
- ▶ Handwheels on slide with adjustable fine scaling 0.04 / 0.01 mm
- ▶ Top slide displaceable on cross slide
- ▶ Chip guard on top slide
- ▶ Ribbed grey cast steel prism bed heavily ribbed, induction hardened and precision ground
- ▶ Quadruple tool holder
- ▶ Emergency stop button
- ▶ Interchangeable gear set included as standard for thread cutting
- ▶ Fully equipped; the user can immediately start productive work after commissioning

### TU 2807VB

- ▶ Digital speed display



Fig.: TU 2807VB with optional machine base and SE1

Fig.: TU 2807

## Arguments,...



### TU 2807VB WITH DIGITAL SPEED DISPLAY

- › Electronically adjustable 2-stage spindle speed 150 - 2500 min<sup>-1</sup>
- › Speed change easily adjustable via potentiometer



### HORIZONTAL / VERTICAL

- › Ribbed grey cast steel prism bed heavily ribbed, induction hardened and precision ground



### TAILSTOCK

- › for taper turning, adjustable by  $\pm 5$  mm
- › Tailstock sleeve and handwheel with adjustable fine scaling 0.02 mm
- › Quick, easy and tool-free adjustment by means of clamping lever



### LATHE CHUCK AND PROTECTION

- › Lathe chuck guard with position switch
- › Three-jaw lathe chuck  $\varnothing 125$  mm, centre lamping, included in standard scope of delivery

## Technical specifications, accessories and dimensions

Model	TU 2807	TU 2807VB <sup>1)</sup>
Article no.	3427003	3427010
<b>Output</b>		
Electrical connection	400 V / 3 Ph ~50 Hz	230 V / 1 Ph ~50 Hz
Drive motor	850 W	1.1 kW
<b>Spindle</b>		
Spindle taper	MT4	
Spindle seat	Short taper	
Spindle hole, bar passage diameter	Ø 26 mm	
Turning tool size max.	12 mm	
<b>Work area</b>		
Centre height	140 mm	
Centre width	700 mm	
Swing Ø above machine bed <sup>1)</sup>	266 mm	
Swing Ø above cross slide	170 mm	
Bed width	180 mm	
<b>Speed range</b>		
Spindle speed	150 - 2000 min <sup>-1</sup>	150 - 2500 min <sup>-1</sup>
Number of speeds	6 stages	2 stages, electronically adjustable
<b>Traverse paths</b>		
Top slide	60 mm	
Cross slide	160 mm	
Bed slide	580 mm	
<b>Feeds and pitches</b>		
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)	
<b>Tailstock</b>		
Tailstock seat	MT3	
Tailstock quill diameter/travel	30 mm / 85 mm	
<b>Dimensions and weight</b>		
Dimensions (L x W x H) approx.	1370 x 640 x 535 mm	1370 x 660 x 440 mm
Net weight approx.	196 kg	188 kg

## Accessories

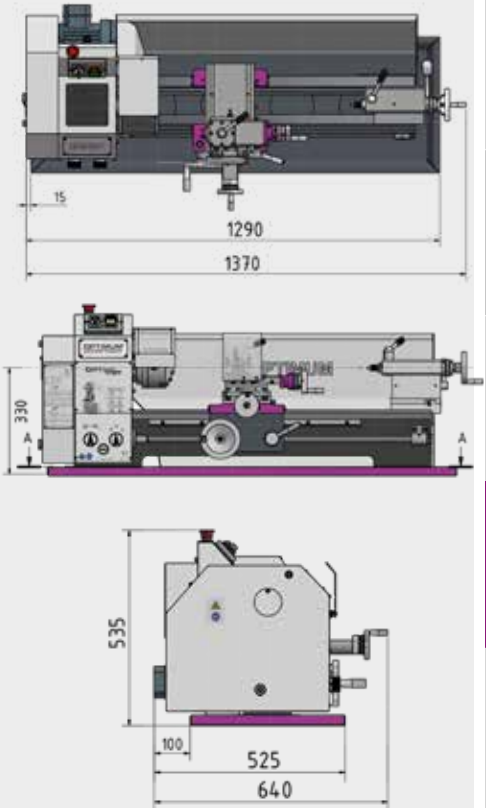
Lathe chuck and chuck flange	Article no.
Four-jaw lathe chuck Ø 125 mm, individual clamping (Chuck flange 3441312 required)	3442874
Four-jaw lathe chuck Ø 125 mm, centre clamping (Chuck flange 3441312 required)	3442812
Chuck flange, short cone, for mounting the lathe chuck Ø 125 mm	3441312
Three-jaw 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, short cone, for mounting the lathe chuck Ø 160 mm	3441413

Accessories	Article no.
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 12 mm, 11-part	3441603
Lathe tool set 12 mm, 5-part "Made in Germany"	3441212
Fixed steady rest, passageway max. Ø 55 mm	3441415
Follow steady rest, passageway max. Ø 56 mm	3441410
Machine base MST1	3440409
Levelling platen SE 1 (6 units required)	3381012

More accessories and information about accessories from page 237 onwards

<sup>1)</sup> Note: The machine (frequency converter) complies with the DIN EN 55011 standard: class C2 Important information on operating machines with frequency inverters and general information on operating our machines on page 333

## Dimensions



## Scope of delivery

- › Three-jaw lathe chuck Ø 125 mm, centre clamping
- › Non-rotating centring tip MT2 and MT4
- › Quadruple tool holder 12 mm
- › HSS lathe tools
- › Splashguard
- › Chip tray
- › Change gear set
- › Operating tool

## Position display

Accessories	Art no.
	
Digital position display DRO 5 incl. 3 magnetic sensors	3383975
Magnetic strip, length 1100 mm	3383978
Factory assembly	9000420

For information on the DRO 5, see page 233

**Lead and feed screw lathes with longitudinal and cross feed.  
TU 3008 with belt drive. TU 3008G with gearbox.  
TU 3008VB with electronically adjustable speed**

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

- ▶ Precision workmanship
  - ▶ Hardened and ground z-axis guideway
  - ▶ Free moving feed gear with rounded gear wheels running in an oil bath
  - ▶ Guaranteed concentricity of the spindle nose  $\leq 0.015$  mm
  - ▶ Concentricity on the lathe chuck  $\leq 0.04$  mm
  - ▶ Lead screw for thread cutting or automatic longitudinal turning
  - ▶ Automatic longitudinal/cross feeds
  - ▶ Leading and feed spindles borne on two sintered bearings
  - ▶ Feed and lead spindle cover
  - ▶ All guides adjustable using V-ledges
  - ▶ Clockwise/Anti-clockwise rotation switchable via control panel
  - ▶ Tapered roller bearings in P5 quality
  - ▶ Hardened main spindle borne on adjustable precision taper roller bearings
  - ▶ Hardened spindle nose with large  $\varnothing 38$  mm spindle bore
  - ▶ Handwheels on slide with adjustable fine scaling 0.04 / 0.01 mm
  - ▶ Quadruple tool holder
  - ▶ Emergency stop button
  - ▶ Three-jaw lathe chuck included as standard
  - ▶ Interchangeable gear set included as standard for thread cutting
- TU 3008**
- ▶ Driven by V-belt
- TU 3008G**
- ▶ Gear drive
- TU 3008VB**
- ▶ Speed change easily adjustable via potentiometer
  - ▶ Digital speed display

**Arguments...**



**TU 3008VB WITH DIGITAL SPEED DISPLAY**

- › Electronically adjustable 4-stage spindle speed 50 - 2400 min<sup>-1</sup>
- › Speed change easily adjustable via potentiometer



**HORIZONTAL / VERTICAL**

- › Ribbed grey cast steel prism bed heavily ribbed, induction hardened and precision ground



**TAILSTOCK**

- › for taper turning, adjustable by  $\pm 5$  mm
- › Tailstock sleeve and handwheel with adjustable fine scaling 0.02 mm
- › Quick, easy and tool-free adjustment by means of clamping lever



**PREPARED FOR A MEASURING SYSTEM**

- › Prepared for measuring system installation on the X, Z and ZO axis



Fig.: TU 3008VB with optional machine base



Fig.: TU 3008

## Technical specifications, accessories and dimensions

Model	TU 3008	TU 3008G	TU 3008VB <sup>1)</sup>
Article no.	3427200	3427210	3427206
<b>Output</b>			
Electrical connection	400 V / 3 Ph -50 Hz		230 V / 1 Ph
Drive motor	1.1 kW		1.1 kW
<b>Spindle</b>			
Spindle taper	MT5		
Spindle seat	Camlock DIN ISO 702- 2 No. 4		
Spindle hole, bar passage diameter	Ø 38 mm		
Turning tool size max.	25 mm		
<b>Work area</b>			
Centre height	158 mm		
Centre width	800 mm	720 mm	800 mm
Swing Ø above machine bed <sup>1)</sup>	310 mm		
Swing Ø above cross slide	190 mm		
Bed width	180 mm		
<b>Speed range</b>			
Spindle speed /stages TU 3008	150 - 2000 min <sup>-1</sup> / 6 stages		
Spindle speed/stages TU 3008G	165 - 2400 min <sup>-1</sup> / 6 stages		
Spindle speed/stages TU 3008VB	75 - 2500 min <sup>-1</sup> / 4 speeds, electronically controlled		
<b>Traverse paths</b>			
Top slide	65 mm		
Cross slide	150 mm		
Bed slide	600 mm		
<b>Feeds and pitches</b>			
Longitudinal feed within the range	0.085 - 0.832 mm/rev (9 feed rates)		
Cross feed within	0.01 - 0.1 mm/rev (9 feed rates)		
Pitch - metric in range	0.2 - 3.5 mm/rev (18 pitches)		
Pitch - inch in range	56 - 8 Thread pitches/inch (21 pitches)		
<b>Tailstock</b>			
Tailstock seat	MT3		
Tailstock quill diameter/travel	Ø 38 mm / 70 mm		
<b>Dimensions and weight</b>			
Dimensions (L x W x H) approx.	1525 x 705 x 575 mm		
Net weight approx.	226 kg	261 kg	243 kg

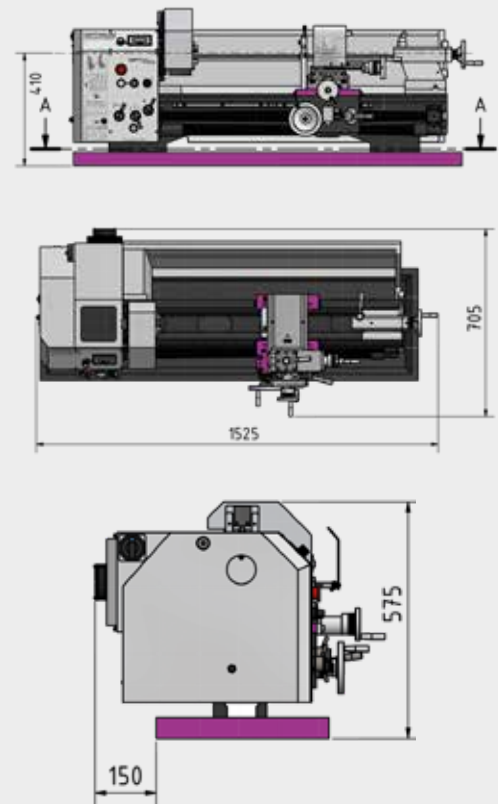
## Accessories

Lathe chuck Ø 160 mm Camlock DIN ISO 702-2 No. 4	Article no.
OPTIMUM four-jaw lathe chuck, centric clamping, speed 2150 min <sup>-1</sup>	3442840
BISON four-jaw lathe chuck, centric clamping, speed 3600 min <sup>-1</sup>	3450355

Accessories	Article no.
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 16 mm, 11-part	3441604
Lathe tool set 16 mm, 5-part	3441668
Lathe tool set 16 mm, 5-part	3441610
Lathe tool set 16 mm, 5-part "Made in Germany"	3441216
Follow steady rest, passageway Ø 6 - 55 mm	3441460
Fixed steady rest, passageway Ø 6 - 60 mm	3441461
Machine chassis MST1	3440409
Levelling platen SE 1 (6 units required)	3381012
Position stop with granular adjustment	3441475
Clamping disc Ø 300 mm Camlock DIN ISO 702-2 No. 4	3442976

More accessories and information about accessories from page 237 onwards

## Dimensions



## Scope of delivery

- › Three-jaw lathe chuck Ø 160 mm, centre clamping
- › Non-rotating centring tips MT3 and MT5
- › Quadruple tool holder 25 mm
- › Splashguard
- › Chip tray
- › Change gear set
- › Operating tool

## Position display

Accessories	Art no.
	
Digital position display DRO 5 incl. 3 magnetic sensors	3383975
Magnetic strip, length 1100 mm	3383978
Factory assembly	9000420

For information on the DRO 5, see page 233