

## Lathe

### OPTIturn TU 2807 (400 V)

Leading screw lathes with feed gear for the demanding user. TU 2807V with brushless motor for stepless speed control

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY

#### Article number ▼

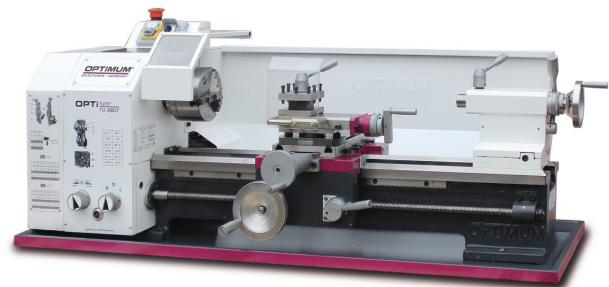
3427003

#### Brand ▼

Optimum

#### Catalog directory ▼

Metalworking machines » Lathes  
conventional » OPTIturn TU 2807 / TU  
2807V



#### Shipping informations ▼

Packaging Metrics		Weights		Delivery		Other	
Length	1,320 mm	Gross	225 kg	Delivery	Carrier	DualUse	✘
Width	700 mm	Net	196 kg	Content	1 pc(s).	SCIP	n/a
Height	680 mm					SVHC	No



## Description ▼

- Precise processing
- Powerful, maintenance-free engine
- Heavily ribbed prism bed made of gray cast iron, inductively hardened and precision ground
- Smooth-running feed gear with rounded gears running in an oil bath
- Hardened and ground Z-axis guideway
- Guaranteed concentricity of the spindle nose better than 0.009 mm
- Concentricity on the lathe chuck better than 0.04 mm
- Automatic longitudinal / lead screw drive
- Lead screw for thread cutting or automatic longitudinal turning
- Quadruple tool holder
- All guides can be adjusted by wedge strips
- Right / left rotation in the control panel switchable
- Hardened main spindle mounted in adjustable precision tapered roller bearings
- Tapered roller bearings in P5 quality
- Hardened spindle nose with  $\varnothing$  26 mm spindle bore
- Rolled trapezoid spindles
- Chip protection on the upper slide
- Upper slide on cross slide slidable
- Tailstock for taper turning  $\pm$  5 mm adjustable
- Tailstock quill and handwheel with adjustable fine scale 0.02 mm
- Fast, easy and tool-free adjustment by means of a clamping lever
- Leadscrew stored in two sintered bearings
- Change gear set in standard scope of supply for thread cutting
- Handwheels on the carriage with adjustable fine scale 0.04 / 0.01 mm
- thrust bearing
- 3-jaw lathe chuck in the standard scope of delivery
- Emergency stop impact switch
- Fully equipped, allowing the user to be productive immediately after commissioning

## TU 2807V

- Quiet, powerful and brushless DC drive with excellent control characteristics
- High precision steel lining for higher speeds
- Speed change easily adjustable via potentiometer
- Digital speed display

## Delivery content ▼

- Three-jaw lathe chuck  $\varnothing$  125 mm, centric clamping
- Fixed centering point MK 2 and MK 4
- Quadruple steel holder 12 mm
- HSS lathe tool
- Bulkhead
- Chip pan
- Change gear set
- Operating tool

## Media informations ▼



**Machine bed**

- Prepared for measuring system assembly of the X, Z and Z0 axes



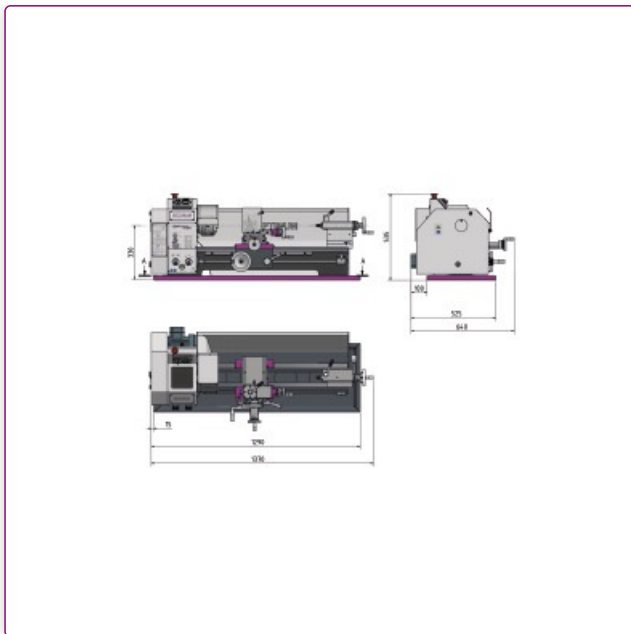
**Tailstock**

- for taper turning  $\pm 5$  mm adjustable
- Tailstock quill and handwheel with adjustable fine scaling 0.02 mm
- Quick, easy and toolless adjustment of the tailstock by means of clamping lever



**Lathe chuck and protection**

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



## Technical data ▼

Dimensions and weights			
Length (product) approx.	1370 mm	Width/depth (product) approx.	640 mm
Height (product) approx.	535 mm	Net weight approx.	196 kg
Work areas			
Max. height	140 mm	Max. width	700 mm
Swing diameter above machine bed	266 mm	Swing diameter above planing slide	170 mm
Bed width	180 mm		
Speed range			
Number of gears	6	Speed range	150 – 2000 min <sup>-1</sup>
Electrical Data			
Drive motor output	0,85 kW	Supply voltage	400 V
Mains frequency	50 Hz		
Spindle			
Spindle chuck	short taper	Spindle bore/rod passage diameter	26 mm
Spindle cone	MT 4	Tool holder max. chuck height	12 mm
Tailstock			
Tailstock chuck	MK 2	Tailstock quill stroke	85 mm
Tailstock quill diameter	30 mm		
Pitches			
Metric pitch	0,2 – 3,5 mm/rev	Number of metric pitches	18
Imperial pitch	56 – 8 Gg/1"	Number of imperial pitches	21
Travel			
Travel upper slide	60 mm	Travel cross slide	160 mm
Travel carriage saddle	580 mm		
Feed			
Longitudinal feed range	0,07 – 0,4 mm/rev	Number of longitudinal feeds	6

## Accessories ▼



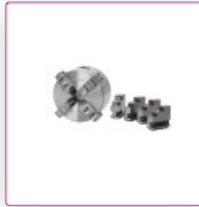
### Four-jaw lathe chuck, individually clamping

Ø 125 mm

Article number ▼

3442874

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



### Four-jaw lathe chuck, concentric clamping

Ø 125 mm

Article number ▼

3442812

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



### Chuck flange

Ø 125 mm short taper

Article number ▼

3441312

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



### Three-jaw lathe chuck

Ø 160 mm centrally exciting

Article number ▼

3442716

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



### Four-jaw lathe chuck, concentric clamping

Ø 160 mm

Article number ▼

3442816

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



### Chuck flange

Ø 160 mm short taper

Article number ▼

3441413

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



### Quick change tool kit

SWH 1 - A

Repeat accuracy 0.01 mm

Article number ▼

3384301

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



### Factory assembly

SWH 1-A

Article number ▼

9000401

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



### Spare steel holder

20x90 type D

Article number ▼

3384302

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



### Spare steel holder

20 x 85 type H, for round chisel

Article number ▼

3384321

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



### Turning tool set

10 mm, 11-part

Article number ▼

3441602

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



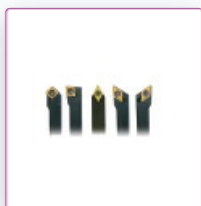
### Turning tool set

12 mm, 11-part

Article number ▼

3441603

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



### Turning tool set

HM 12 mm, 5-part "Made in Germany"

Article number ▼

3441212

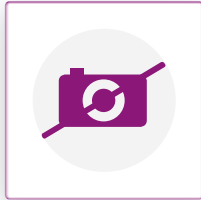
**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



**Fixed bezel**  
for TU 2807 / TU 2807V

**Article number** ▼  
3441415

**OPTIMUM®**  
MASCHINEN - GERMANY



**Rotating bezel**  
Ø max. 56 mm

**Article number** ▼  
3441410

**OPTIMUM®**  
MASCHINEN - GERMANY



**Collet set**  
ER 32, Ø 1 - 16 mm

**Article number** ▼  
3441122

**OPTIMUM®**  
MASCHINEN - GERMANY



**Collet chuck**  
ER 25, Ø 52 mm, cylindrical

**Article number** ▼  
3441305

**OPTIMUM®**  
MASCHINEN - GERMANY



**Collet chuck**  
ER 32 Ø 52 mm short taper

**Article number** ▼  
3441306

**OPTIMUM®**  
MASCHINEN - GERMANY

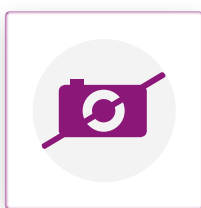


**Digital position indicator**  
DRO 5

Digital 3-axis position indicator for milling machines and lathes with speed display

**Article number** ▼  
3383975

**OPTIMUM®**  
MASCHINEN - GERMANY



**Magnetic tape**  
OMB10 for DRO5 1100 mm

**Article number** ▼  
3383978

**OPTIMUM®**  
MASCHINEN - GERMANY



**Factory assembly**  
MPA 3/4/DRO5

Article number ▼  
9000420

**OPTIMUM®**  
MASCHINEN - GERMANY



**Turning tool set**  
HM 10 mm, 5-part

Article number ▼  
3441664

**OPTIMUM®**  
MASCHINEN - GERMANY



**Turning tool set**  
HM 12 mm, 5-part

Article number ▼  
3441666

**OPTIMUM®**  
MASCHINEN - GERMANY



**Internal turning set**  
10 mm

Article number ▼  
3441640

**OPTIMUM®**  
MASCHINEN - GERMANY



**Internal turning set**  
12 mm

Article number ▼  
3441641

**OPTIMUM®**  
MASCHINEN - GERMANY





**Center drill set**  
10tlg. 0.75-4.5 mm HSS

Article number ▼  
3203010

**OPTIMUM®**  
MASCHINEN - GERMANY



**Leveling plate**  
SE 1

Article number ▼  
3381012

**OPTIMUM®**  
MASCHINEN - GERMANY



**Vibration damper machine foot**  
SE 55

Article number ▼  
3352981

**OPTIMUM®**  
MASCHINEN - GERMANY



**Substructure**  
MST 1

Article number ▼  
3440409

**OPTIMUM®**  
MASCHINEN - GERMANY



**Twist drill HSS with Morse taper**  
MT 2

Article number ▼  
3051002

**OPTIMUM®**  
MASCHINEN - GERMANY



**Face plate**  
Ø 265 mm for TU 2807

Article number ▼  
3441452

**OPTIMUM®**  
MASCHINEN - GERMANY



**Revolving centering point**  
MT 2

Article number ▼  
3440702

**OPTIMUM®**  
MASCHINEN - GERMANY



**Revolving centering point**  
**MK2 - with exchangeable tips**

**Article number** ▼  
3440732

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



**Revolving centering point**  
**MT 3**

**Article number** ▼  
3451003

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



**Collet set**  
**ER 25, Ø 1-16 mm**

**Article number** ▼  
3441109

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY



**Universal coolant device**  
**230 V**

**Article number** ▼  
3351999

**OPTIMUM**<sup>®</sup>  
MASCHINEN - GERMANY