

## Center lathe and center lathe

### OPTIturn TH 8020D

Leading and traction spindle lathes, which are characterized by high flexibility, precision and cost-effectiveness. With digital position indicator DPA 21 and quick-change steel holder

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

#### Article number ▼

3462230

#### Brand ▼

Optimum

#### Catalog directory ▼

Metalworking machines » Lathes  
conventional » OPTIturn TH 8020D / TH  
8030D



#### Shipping informations ▼

Packaging Metrics		Weights		Delivery		Other	
Length	3,770 mm	Gross	4,005 kg	Delivery	Special transportation	DualUse	✘
Width	1,150 mm	Net	3,505 kg	Content	1 pc(s).	SCIP	n/a
Height	1,840 mm					SVHC	No



## Description ▼

- Hardened and ground Z-axis guideway
- Spindle mount Camlock DIN ISO 702-2 No. 8
- Precisely crafted sled
- All guides can be adjusted by wedge strips
- Adjustment range upper slide  $\pm 90^\circ$
- Guaranteed concentricity of the spindle nose better than 0.015 mm Waves, wheels and main spindle running in oil bath
- Gear wheels smooth, hardened and ground with 2 adjustable precision tapered roller bearings
- Clear selection lever for switching the feed rates
- Closed design of the rapid-action feed gear
- Gears and shafts hardened and ground in an oil bath in precision bearings
- Handwheels decoupled and tested according to EN 23125
- Two-channel right-left switch tested to EN 23125
- Switch with life cycle calculation, tested according to EN ISO 13849
- Right / left rotation on bed carriage via switching spindle switchable
- Central lubrication in the bed slide
- Coolant device with separate coolant tank with level indicator and oil separator; easy and complete emptying and cleaning according to DIN
- leading spindle
- Emergency stop blow switch, motor protection switch, lockable main switch
- Emergency stop device with foot control
- Safety handwheels with release function in the X-axis
- Handwheels with adjustable fine scale 0.04 / 0.02 mm
- Tailstock for taper turning  $\pm 10$  mm adjustable
- Tailstock quill and handwheel with adjustable fine scaling
- Tailstock crank for position change
- Tailstock quill with two adjustable ratios 1/4 or 1/1 turn
- LED machine lamp
- Fast feed - pushbutton and selector lever for activating the rapid traverse for plan and longitudinal direction for even more efficient work. Does not switch off the entire machine when retracting into the limit switch
- Safety limit switch with positive opening contacts
- Electric engine brake with fast emergency stop - in normal operation fast stop without caster
- Electrics with Siemens components
- Energy chain for gentle line and hose routing
- Quick change steel holder SWH 9-D
- 1 steel holder 41 x 180 type D for square chisel 32 mm

## Digital position indicator DPA 21

- Significant reduction in production
- glass scales

## Delivery content ▼

- Fixed bezel passage max.  $\varnothing$  150 mm
- Running bezel passage max.  $\varnothing$  130 mm
- machine light
- Reduction sleeve MK 5 / MK 7
- Fixed centering point MK 5
- Fixed center point MK 5, alloyed
- Quick change steel holder 9-D
- Steel holder 41 x 180 type D for square chisels
- Position stop with fine adjustment
- Change gear set
- Quality oil enclosed
- operating tool

## Media informations ▼



**Control cabinet**

- 24 Volt DC power supply
- All contactors and relays from Siemens or Schneider-



**Face and longitudinal feed**

- Rapid feed - pushbutton and selector lever for activating or deactivating rapid feed for face and longitudinal direction for even more rational working. Does not switch off the entire machine when retracting into the limit switch.



**Tailstock**

- Tailstock crank for changing the position
- Tailstock quill with two adjustable ratios 1/4 or 1/1 turn



## Technical data ▼

Dimensions and weights			
Length (product) approx.	4287 mm	Width/depth (product) approx.	1525 mm
Height (product) approx.	1925 mm	Net weight approx.	3455 kg
Load bearing capacity	1,4 t/m		
Work areas			
Max. height	400 mm	Max. width	2050 mm
Swing diameter above machine bed	800 mm	Swing diameter in bed bridge	1035 mm
Swing diameter above planing slide	570 mm	Turning length in bed bridge	250 mm
Bed width	400 mm		
Speed range			
Number of gears	16	Speed range	25 – 1600 min <sup>-1</sup>
Fast motion speed			
Rapid motion speed	3800 mm/min	Explanations about rapid motion	max. 5 min (30 min. break)
Electrical Data			
Drive motor output	11 kW	Supply voltage	400 V
Mains frequency	50 Hz		
Cooling lubricant system			
Cooling lubricant system coolant pump output	150 W		
Spindle			
Spindle chuck	Camlock DIN ISO 702-2 No. 8	Spindle bore/rod passage diameter	105 mm
Spindle cone	Ø 113 (cone 1:20) mm	Tool holder max. chuck height	32 mm
Tailstock			
Tailstock chuck	MK 5	Tailstock quill stroke	235 mm
Tailstock quill diameter	90 mm		
Pitches			
Metric pitch	0,45 – 120 mm/rev	Number of metric pitches	54
Imperial pitch	80 – 7/16 Gg/1"	Number of imperial pitches	60
Diametrical pitch	7/8 – 160	Number of diametrical pitches	42

Modular thread pitch	0,25 – 60 mm/rev	Number of modular thread pitches	46
<b>Travel</b>			
Travel upper slide	230 mm	Travel cross slide	368 mm
Travel carriage saddle	1965 mm		
<b>Feed</b>			
Longitudinal feed range	0,044 – 1,48 mm/rev	Number of longitudinal feeds	25
Flat feed range	0,022 – 0,74 mm/rev	Number of flat feeds	25
<b>Electrical connections</b>			
Total rated value	12 kW		

## Accessories ▼



### OPTIMUM Three-jaw lathe chuck centre clamping

Ø 315 mm Camlock DIN ISO 702-2 No. 8

Article number ▼  
3442768

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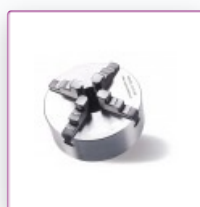


### OPTIMUM four-jaw lathe chuck Cast Camlock, centre clamping

Ø 315 mm Camlock DIN ISO 702-2 No. 8

Article number ▼  
3442856

**OPTIMUM®**  
MASCHINEN - GERMANY

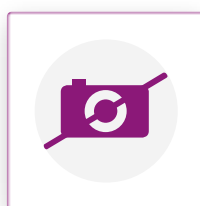


### OPTIMUM four-jaw lathe chuck Cast Camlock, single clamping

Ø 315 mm Camlock DIN ISO 702-2 No. 8

Article number ▼  
3442888

**OPTIMUM®**  
MASCHINEN - GERMANY

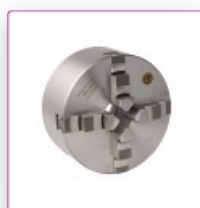


### BISON three-jaw lathe chuck Camlock casting centre clamping

Ø 315 mm Camlock DIN ISO 702-2 No. 8

Article number ▼  
3450335

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### BISON four-jaw lathe chuck Cast Camlock centric exciting

Ø 315 mm Camlock DIN ISO 702-2 No. 8

Article number ▼  
3450385

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### Revolving centering point MT 5

Article number ▼  
3440705

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### Revolving centering point MT 5

Article number ▼  
3451005

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### Turning tool set HM 25 mm, 5-part

Article number ▼  
3441672

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### Turning tool set HM 25 mm, 5-part With carbide inserts

Article number ▼  
3441623

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### Turning tool set HM 32 mm, 5-part

Article number ▼  
3441674

**OPTIMUM**<sup>®</sup>  
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### Internal turning set 5-piece

Article number ▼  
3441650

**OPTIMUM**<sup>®</sup>  
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### Center drill set 10tlg. 0.75-4.5 mm HSS

Article number ▼  
3203010

**OPTIMUM**<sup>®</sup>  
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**Clamping block set for lathes**  
**25-05**

**Article number** ▼  
3440655

**OPTIMUM®**  
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**Face plate**  
**Ø 480 mm Camlock DIN ISO 702-2 No. 8**

**Article number** ▼  
3442982

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**Collet chuck**  
**5C - No. 8**

**Article number** ▼  
3441558

**OPTIMUM®**  
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**Collet set**  
**SPC 5C**

**Article number** ▼  
3441509

**OPTIMUM®**  
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**Revolving centering point**  
**MT 3**

**Article number** ▼  
3440733

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**Vibration damper machine foot**  
**SE 85**

**Article number** ▼  
3352982

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**Leveling plate**  
**SE 3**

**Article number** ▼  
3381018

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