

## Center lathe and center lathe

### OPTIturn TH 4210

Precise head and spindle lathes, sophisticated technology, complete equipment, easy to operate

#### Article number ▼

3462050

#### Brand ▼

Optimum

#### Catalog directory ▼

Metalworking machines » Lathes conventional » OPTIturn TH 4210 / TH 4210D / TH 4210V / TH 4215D

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



#### Shipping informations ▼

Packaging Metrics		Weights		Delivery		Other	
Length	2,060 mm	Gross	1,352 kg	Delivery	Carrier	DualUse	✘
Width	900 mm	Net	1,160 kg	Content	1 pc(s).	SCIP	n/a
Height	1,650 mm					SVHC	No



## Description ▼

- Hardened and ground Z-axis guideway
- Spindle mount Camlock DIN ISO 702-2 No. 6
- Precisely crafted sled
- Handwheels with adjustable fine scale 0.04 / 0.02 mm
- Quadruple tool holder
- 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
- Main spindle running in oil bath
- Gear wheels smooth, hardened and ground with 2 adjustable precision tapered roller 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
- All metric pitches in the range of 0.2 to 14 mm / rev and all inch threads in the range of 72 - 2 pitch per inch are adjustable without change of the change gears by lever in the control panel
- Right / left rotation on bed carriage via switching spindle switchable
- Central lubrication in the bed slide
- Substructure and machine bed made of casted Meehanite cast in one piece
- leading spindle
- Emergency stop device with foot control
- Safety handwheels with release function in the X and Z axis
- Tailstock for taper turning  $\pm 10$  mm adjustable
- Tailstock quill and hand wheel with adjustable fine scale 0.025 mm
- Fast, easy and tool-free adjustment by means of a clamping lever
- Strongly ribbed prism bed, induction hardened and precision ground from gray cast iron
- Coolant device with separate coolant tank with level indicator and oil separator; easy and complete emptying and cleaning according to DIN
- LED machine lamp in chip protection

### Models TH 4210D and TH 4215D with digital position display DPA21

- User-friendly membrane keypad, splash-proof, closed and glare-free
- Glass scales

## Delivery content ▼

- Fixed bezel passage  $\varnothing 15 - 145$  mm
- Running bezel passage  $\varnothing 10 - 75$  mm
- LED machine light
- Reduction sleeve MK 6 / MK 4
- Fixed centering point MK 4
- Change gear set
- Position stop with fine adjustment
- Initial machine filling with quality oil
- operating tool

### TH 4210 / TH 4210D / TH 4215D

- Quadruple steel holder max. 20 mm

### TH 4210V

- Quick change steel holder 5-B
- Steel holder 25 x 120 type D for square chisels

**Do not forget the lathe chuck!**

## Media informations ▼



Picture shows TH 4210D with optional lathe chuck



**Switch cabinet**

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



**Tailstock**

- Tailstock for taper turning adjustable  $\pm 10$  mm
- Tailstock quill and handwheel with adjustable fine scaling 0.025 mm
- Quick, easy and tool-free adjustment of the tailstock by means of clamping lever



**LED machine lamp**

- in chip protection

**Technical data** ▼

Dimensions and weights			
Length (product) approx.	1940 mm	Width/depth (product) approx.	915 mm
Height (product) approx.	1375 mm	Net weight approx.	1160 kg

<b>Work areas</b>			
Max. height	210 mm	Max. width	1000 mm
Swing diameter above machine bed	420 mm	Swing diameter in bed bridge	590 mm
Swing diameter above planing slide	250 mm	Turning length in bed bridge	260 mm
Bed width	250 mm		
<b>Speed range</b>			
Number of gears	16	Speed range	45 – 1800 min-1
<b>Electrical Data</b>			
Drive motor output	4,5 kW	Supply voltage	400 V
Mains frequency	50 Hz		
<b>Cooling lubricant system</b>			
Cooling lubricant system coolant pump output	100 W		
<b>Spindle</b>			
Spindle chuck	Camlock DIN ISO 702-2 No. 6	Spindle bore/rod passage diameter	52 mm
Spindle cone	MT 6	Tool holder max. chuck height	20 mm
<b>Tailstock</b>			
Tailstock chuck	MT 4	Tailstock quill stroke	120 mm
Tailstock quill diameter	50 mm		
<b>Pitches</b>			
Metric pitch	0,2 – 14 mm/rev	Number of metric pitches	39
Imperial pitch	72 – 2 Gg/1"	Number of imperial pitches	45
Diametrical pitch	8 – 44	Number of diametrical pitches	21
Modular thread pitch	0,3 – 3,5 mm/rev	Number of modular thread pitches	18
<b>Travel</b>			
Travel carriage saddle	780 mm	Travel X axis	140 mm
Travel Y axis	230 mm		
<b>Feed</b>			
Longitudinal feed range	0,05 – 1,7 mm/rev	Number of longitudinal feeds	17
Flat feed range	0,025 – 0,85 mm/rev	Number of flat feeds	17
<b>Electrical connections</b>			
Total rated value	4.6 kW		

## Accessories ▼



### **OPTIMUM Three-jaw lathe chuck centre clamping** Ø 250 mm Camlock DIN ISO 702-2 No. 6

**Article number ▼**  
 3442765

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

Ø 250 mm Camlock DIN ISO 702-2 No. 6

Article number ▼

3442852

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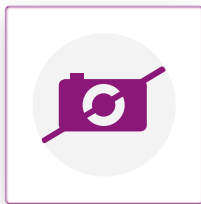
**OPTIMUM four-jaw lathe chuck Cast Camlock,  
single clamping**

Ø 250 mm Camlock DIN ISO 702-2 No. 6

Article number ▼

3442884

**OPTIMUM®**  
MASCHINEN - GERMANY



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

Ø 250 mm Camlock DIN ISO 702-2 No. 6

Article number ▼

3450330

**OPTIMUM®**  
MASCHINEN - GERMANY



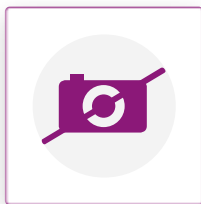
**BISON four-jaw lathe chuck Cast Camlock  
centric exciting**

Ø 250 mm Camlock DIN ISO 702-2 No. 6

Article number ▼

3450380

**OPTIMUM®**  
MASCHINEN - GERMANY



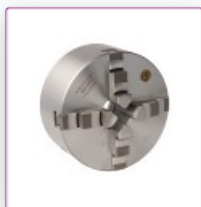
**BISON three-jaw lathe chuck steel**

Ø 250 mm Camlock DIN ISO 702-2 No. 6

Article number ▼

3450530

**OPTIMUM®**  
MASCHINEN - GERMANY



**BISON four-jaw lathe chuck steel Camlock,  
centric clamping**

Ø 250 mm Camlock DIN ISO 702-2 No. 6

Article number ▼

3450580

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### Quick change tool kit

SWH 5 - B

Repeat accuracy 0.01 mm

Article number ▼

3384305

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### Factory assembly and adaptation

SWH

Article number ▼

9000400

**OPTIMUM**<sup>®</sup>  
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### Spare steel holder

25 x 120 type D

Article number ▼

3384306

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### Spare steel holder

32 x 130 type H

Article number ▼

3384324

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### Turning tool set

HM 20 mm, 5-part

Article number ▼

3441670

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### Turning tool set

HM 20 mm, 5-part

Article number ▼

3441617

**OPTIMUM**<sup>®</sup>  
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### Vibration damper machine foot

SE 85

Article number ▼

3352982

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**Internal turning set**  
5-piece

Article number ▼  
3441650

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

Article number ▼  
3203010

**OPTIMUM®**  
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**Clamping block set for lathes**  
20-05

Article number ▼  
3440654

**OPTIMUM®**  
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**Face plate**  
Ø 350 mm Camlock DIN ISO 702-2 No. 6

Article number ▼  
3442980

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**Collet chuck**  
5C - No. 6

Article number ▼  
3441556

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

Article number ▼  
3441509

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### Revolving centering point

MT 4

Article number ▼

3440704

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### Revolving centering point

MT 4

Article number ▼

3440734

**OPTIMUM®**  
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### Revolving centering point

MT 4

Article number ▼

3451004

**OPTIMUM®**  
MASCHINEN - GERMANY



### Leveling plate

SE 2

Article number ▼

3381016

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