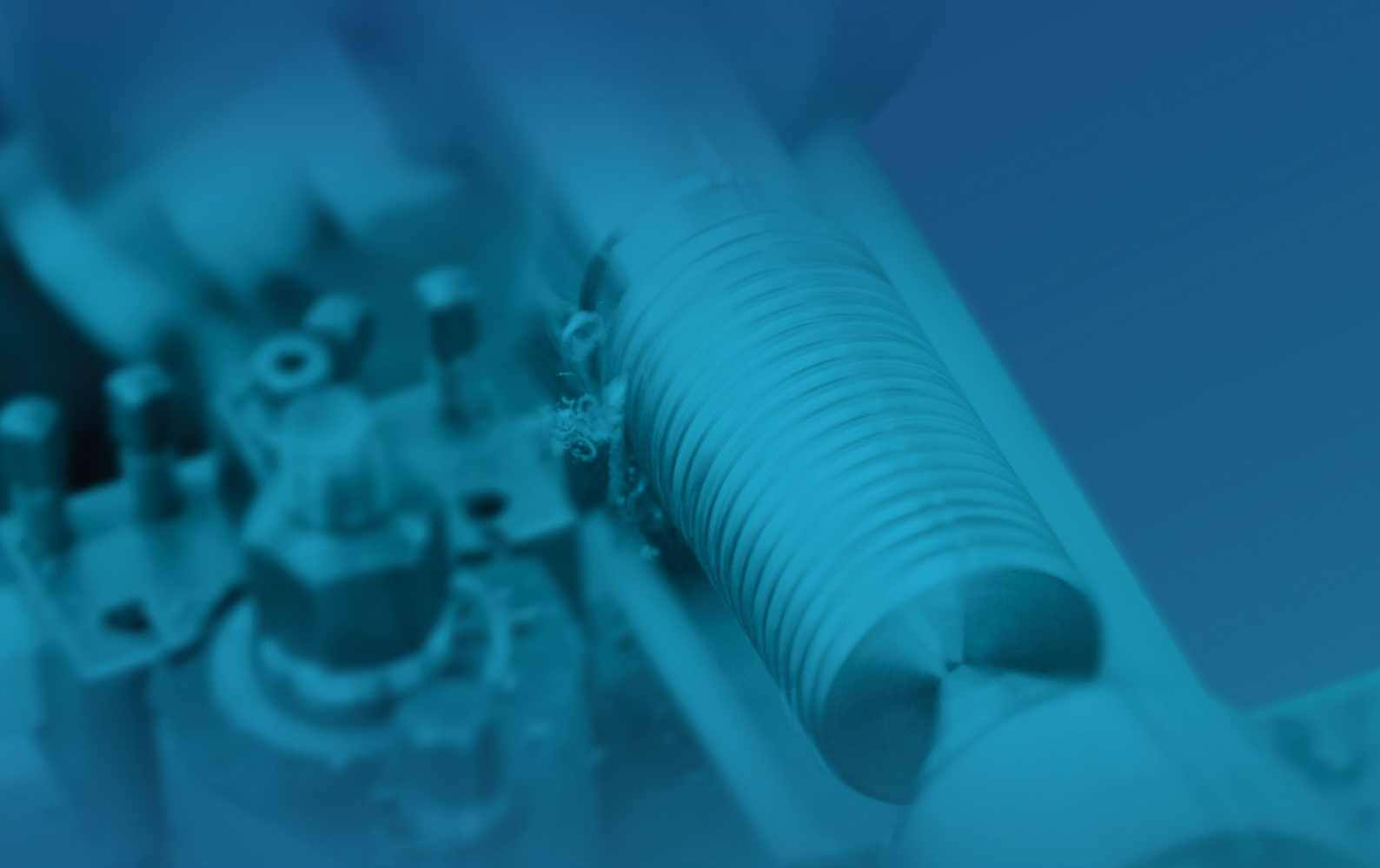




WABECO

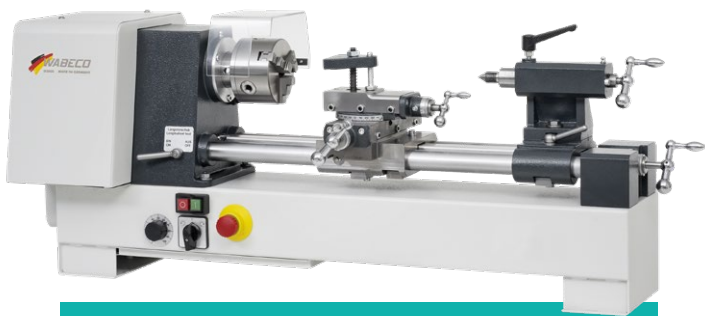
MASCHINENMANUFAKTUR seit 1885

POWER MEETS PRECISION

Lathes | Milling Machines
conventional & CNC | Made in Germany

WABECO PRECISION LATHES

OVERVIEW



LATHES D2000

WITH STEEL CYLINDRICAL GUIDEWAYS

FROM PAGE 6

WORKING RANGE

center distance 350 mm

center height 110 mm

FEED SCREWS

precise threaded spindles

MAIN SPINDLE BORE

Ø 20 mm or Ø 30 mm

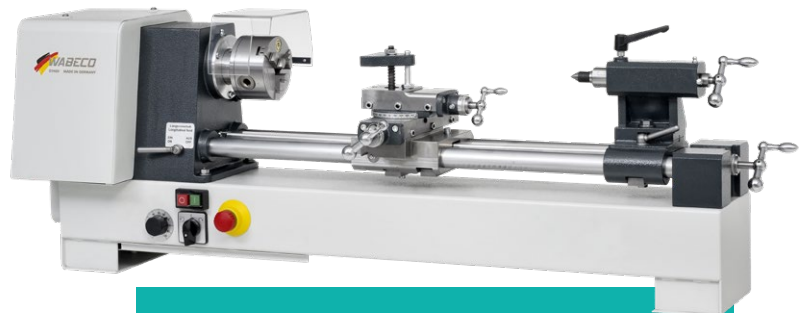
MAIN SPINDLES

according to DIN 6350

MAIN DRIVE MOTOR

1.4 kW, 30-2300 rpm

single-phase series-wound motor



LATHES D2400

WITH STEEL CYLINDRICAL GUIDEWAYS

FROM PAGE 6

WORKING RANGE

center distance 500 mm

center height 110 mm

FEED SCREWS

precise threaded spindles

MAIN SPINDLE BORE

Ø 20 mm or Ø 30 mm

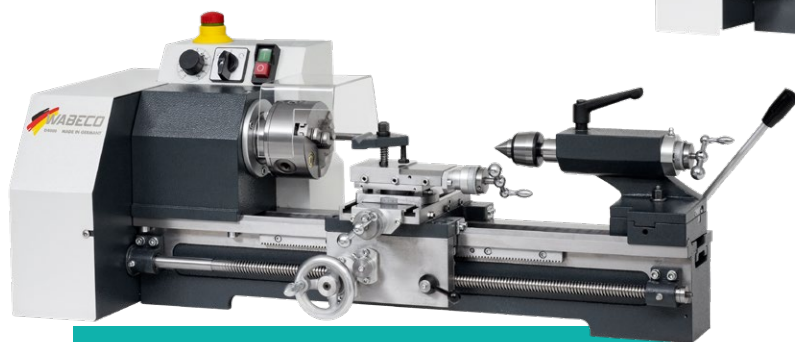
MAIN SPINDLES

according to DIN 6350

MAIN DRIVE MOTOR

1.4 kW, 30-2300 rpm

single-phase series-wound motor



LATHES D4000

WITH PRISMATIC CAST IRON BED

FROM PAGE 6

WORKING RANGE

center distance 350 mm

center height 100 mm

FEED SCREWS

trapezoidal thread spindles

MAIN SPINDLE BORE

Ø 20 mm

MAIN SPINDLES

according to DIN 6350

MAIN DRIVE MOTOR

1.4 kW, 30-2300 rpm

single-phase series-wound motor



LATHES

D6000 | D6200 HS

WITH PRISMATIC CAST IRON BED

FROM PAGE 6

WORKING RANGE

center distance 600 mm

center height 135 mm

FEED SCREWS

trapezoidal thread spindles

ball screws

MAIN SPINDLE BORE

Ø 30 mm

MAIN SPINDLES

according to DIN 6350

according to DIN 55029 size 4

Camlock quick-release fastener

MAIN DRIVE MOTOR

D6000

1.4 kW, 30-2300 rpm

single-phase series-wound motor

D6200 HS

2.5 kW, 50-5000 rpm

servo motor with frequency converter

WABECO PRECISION CNC LATHES

OVERVIEW



CNC LATHES
CC-D6000 | CC-D6200 HS
WITH PRISMATIC CAST IRON BED
FROM PAGE 26

CONTROLLER AND TURNING SOFTWARE

NCCAD BASIC

controller and turning software
trapezoidal thread spindles
optional ball screws

NCCAD PROFI

controller and turning software with
ball screws

WORKING RANGE

center distance 600 mm
center height 135 mm

MAIN SPINDLE BORE

Ø 30 mm

MAIN SPINDLES

according to DIN 6350
according to DIN 55029 size 4
Camlock quick-release fastener

MAIN DRIVE MOTOR

CC-D6000

1.4 kW, 30-2300 rpm
single-phase series-wound motor

CC-D6200 HS

2.5 kW, 50-5000 rpm
servo motor with frequency converter



CNC LATHES
CC-D6800 HS
SLANT BED WITH PRISMATIC CAST
IRON BED
 FROM PAGE 38

CONTROLLER AND TURNING
SOFTWARE

NCCAD PROFI

controller and turning software with
 ball screws

WORKING RANGE

center distance 600 mm
 center height 135 mm

MAIN SPINDLE BORE

Ø 30 mm

MAIN SPINDLES

according to DIN 6350
 according to DIN 55029 size 4
 Camlock quick-release fastener

MAIN DRIVE MOTOR

2.5 kW, 50-5000 rpm
 servo motor with frequency converter

CNC TOOL TURRET

with 8 tool positions

MACHINE SAFETY CABIN

with integrated coolant unit

WABECO PRECISION LATHES

EXAMPLES OF USE





LATHES

TECHNICAL DETAILS

WABECO - MADE IN GERMANY

- WABECO quality – durable, innovative, reliable
- developed and manufactured in Germany
- highest precision for industry, workshops, education, hobbies and model making
- In special machine construction, we realize individual requirements with technical expertise and passion.

LEAD SCREW LATHES

- for processing metal, non-ferrous metal and plastics

STEEL CYLINDRICAL GUIDEWAYS

- precisely ground cylindrical columns made from solid material
- made of highest quality steel
- high rigidity
- optimal swarf waste
- 10 years warranty on the cylindrical guideways

THE CLASSICS

- for over 40 years

INGENIUS

- also ideally suited for wood processing

PRISMATIC CAST IRON BED

- made of diagonally ribbed gray cast iron
- inductively hardened and ground guideways

MACHINE PRECISION

- according to DIN 8606

MAIN DRIVE MOTOR

- overload protection
- dynamic torque throughout the entire speed range
- high torque even in the lowest speed range
- main spindle drive, which can be adjusted to a wide cutting speed range via a potentiometer

1.4 kW, 230 V, 50/60 Hz

- single-phase series-wound motor as direct current model
- with closed loop rpm control system
- electronically infinitely variable drive **30 - 2300 rpm**

2.5 kW, 230 V, 50/60Hz

- servo motor with frequency converter
- due to high speed suitable for small workpieces
- brushless
- electronically infinitely variable drive **50 - 5000 rpm**

SILENT RUNNING

- extremely silent running due to innovative belt drive

DRIVE TECHNOLOGY

- with multiple fault monitoring circuit
- e.g. turning a steel shaft Ø 50 mm in one infeed by approx. 5 mm

HEADSTOCK

- main spindle in 2 adjustable precision DIN tapered roller bearings
- right-left rotation of the main spindle
- only with lathes with 1.4 kW motor
intermediate gear between main spindle and drive

MAIN SPINDLE BORE

- main spindle bore **Ø 20 mm**
taper in main spindle MT3
- main spindle bore **Ø 30 mm**

MAIN SPINDLE

- main spindle mount **according to DIN 6350**
- main spindle mount **according to DIN 55029 size 4**
(Camlock quick-release fastener)
Camlock quick-release fastener for quick change of the lathe chuck or collet chuck via quick-release fastener

FEED SCREWS

Lathes with steel cylindrical guideways

- precise threaded spindles

Lathes with prismatic cast iron bed

- trapezoidal thread spindles
- ball screws
incl. lead screw cover
high precision pitch and positioning accuracy
wear-free
free of play

LEAD SCREW DRIVE

- with lead screw drive and change gear quadrant for automatic longitudinal feed 0.085 mm/rev

Lathes with prismatic cast iron bed

- with tumbler gear for left- and right-hand threads

LATHES

TECHNICAL DETAILS

OVERLOAD CLUTCH

- on the lead screw and the lead screw drive to avoid damage to the feed system

THREAD CUTTING

- change gear set optional

Lathes with steel cylindrical guideways

- for metric 0.25 - 6.0 mm and inch 10 - 36 TPI threads
- second automatic longitudinal feed 0.16 mm/rev

Lathes with prismatic cast iron bed

- for metric 0.25 - 7.0 mm and inch 10 - 40 TPI threads
- second automatic longitudinal feed 0.16 mm/rev

TOOL SLIDE

- dovetail guides readjustable free of play
- longitudinal slide can be swiveled through 360°
- cutting scrapers prevent dirt and cuttings entering the guideways

TAILSTOCK

- with quick adjustment
- tailstock sleeve with inner morse taper MT2

SPECIAL EQUIPMENT AND ACCESSORIES

- individually configurable
- Expandable. Customizable. Precisely tailored to your requirements.

WARRANTY

- 5 years warranty - not for wearing parts
- delivery of spare parts guaranteed even after years

FURTHER TECHNICAL DATA

- can be found starting on page 10



LATHES

TECHNICAL DATA

STEEL CYLINDRICAL GUIDEWAYS

PRISMATIC CAST IRON BED

WORKING RANGE

center distance

center height

MACHINE PRECISION ACCORDING TO DIN 8606

true running accuracy of spindle nose

cylindrical turning to 100 mm cantilevered

cylindrical turning with a finishing cut to 300 mm between the tips

MAIN DRIVE MOTOR

single-phase series-wound motor 230 V, 50/60 Hz

servo motor with frequency converter 230 V, 50/60 Hz

electronically infinitely variable drive

MAIN SPINDLE BORE

main spindle bore

MAIN SPINDLE

main spindle mount according to DIN 6350 - main spindle Ø 70 mm

main spindle mount according to DIN 55029 size 4 - Camlock quick-release fastener

FEED SCREWS

precise threaded spindles

trapezoidal thread spindles

LEAD SCREW DRIVE

with lead screw drive and change gear quadrant for automatic feed

with tumbler gear for left- and right-hand threads

TOOL SLIDE

dovetail guides readjustable free of play

reading accuracy of the scale rings

adjustability of cross slide

adjustability of longitudinal slide

max. height of turning tools

TAILSTOCK WITH QUICK ADJUSTMENT

lateral adjustability of tailstock upper part

quill adjustable

reading accuracy of the scale ring

DIMENSIONS AND WEIGHT

machine dimensions without packaging

weight without packaging

subject to technical changes

D2000		D2400		D4000		D6000		D6200 HS	
●		●		○				○	
○		○		●				●	
350 mm		500 mm		350 mm		600 mm			
110 mm		110 mm		100 mm		135 mm			
0.005 mm				0.005 mm		0.005 mm			
0.01 mm				0.01 mm		0.01 mm			
± 0.015 mm				± 0.015 mm		± 0.015 mm			
1.4 kW		1.4 kW		1.4 kW		1.4 kW		○	
○		○		○		○		2.5 kW	
30 - 2300 rpm		30 - 2300 rpm		30 - 2300 rpm		30 - 2300 rpm		50 - 5000 rpm	
Ø 20 mm optional Ø 30 mm				Ø 20 mm		Ø 30 mm			
●				●		●			
○				○		D6000 CA			
●				○		○			
○				●		●			
0.085 mm/rev				0.085 mm/rev		0.085 mm/rev			
○				●		●			
●				●		●			
0.05 mm				0.05 mm		0.05 mm			
110 mm				100 mm		140 mm			
58 mm				50 mm		60 mm			
20 mm				16 mm		20 mm			
± 10 mm				± 10 mm		± 10 mm			
65 mm				45 mm		65 mm			
○				0.1 mm		0.1 mm			
W1050 x D410 x H420 mm		W1200 x D410 x H420 mm		W860 x D400 x H370 mm		W1200 x D510 x H470 mm		W1200 x D630 x H470 mm	
59 kg		65 kg		71 kg		150 kg		177 kg	

● yes ○ no

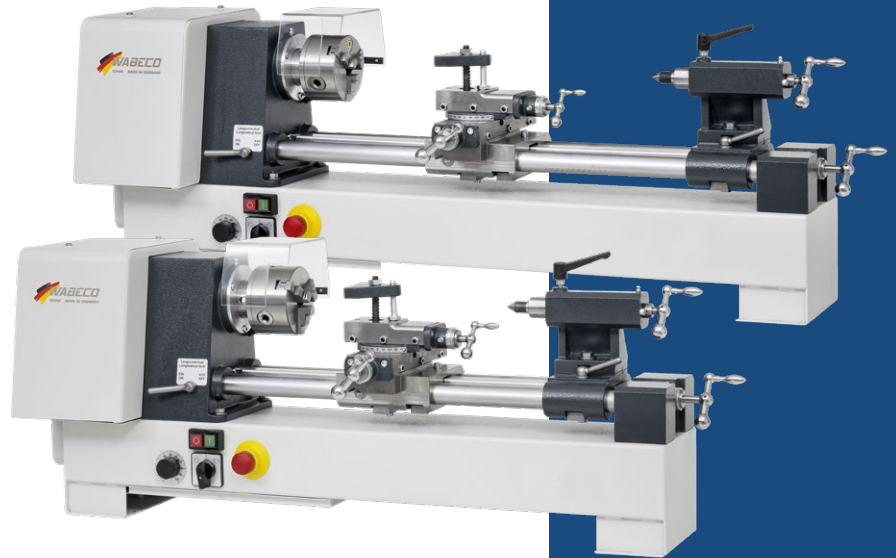
prices incl. 19% VAT - in case of a delivery abroad, the sales taxes applicable there will be charged

LATHES D2000 | D2400

WITH STEEL CYLINDRICAL GUIDEWAYS

LATHES D2000 | D2400

- with steel cylindrical guideways
- 1.4 kW, 30 - 2300 rpm
single-phase series-wound motor
- main spindle bore
 - main spindle bore Ø 20 mm
taper in main spindle MT3
 - main spindle bore Ø 30 mm
without MT
- precise threaded spindles
- main spindle according to DIN 6350
- dead center MT2
- **D2000**
 - center distance **350 mm**
 - center height 110 mm
 - workpiece diameter max. 210 mm
- **D2400**
 - center distance **500 mm**
 - center height 110 mm
 - workpiece diameter max. 210 mm



D2000

Lathe D2000	order no. 10108V	3,099.00 € 4,057.90-€
3-jaw lathe chuck Ø 100 mm		
main spindle bore Ø 20 mm		
Lathe D2000	order no. 10109V	3,299.00 € 4,376.82-€
3-jaw lathe chuck Ø 125 mm		
main spindle bore Ø 30 mm		

D2400

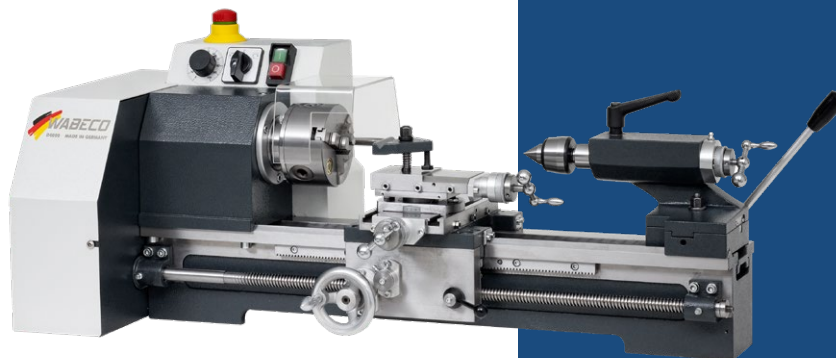
Lathe D2400	order no. 10200V	3,199.00 € 4,295.90-€
3-jaw lathe chuck Ø 100 mm		
main spindle bore Ø 20 mm		
Lathe D2400	order no. 10201V	3,399.00 € 4,614.82-€
3-jaw lathe chuck Ø 125 mm		
main spindle bore Ø 30 mm		

LATHES D4000

WITH PRISMATIC CAST IRON BED

LATHES D4000

- with prismatic cast iron bed
- 1.4 kW, 30 - 2300 rpm
single-phase series-wound motor
- main spindle bore Ø 20 mm
taper in main spindle MT3
- trapezoidal thread spindles
- main spindle according to DIN 6350
- live center MT2
- center distance **350 mm**
- center height 100 mm
- workpiece diameter max. 200 mm



D4000

Lathe D4000

order no. 10400V

4,299.00 € | 5,712.00-€

3-jaw lathe chuck Ø 100 mm

Lathe D4000

order no. 10401V

4,399.00 € | 5,831.00-€

3-jaw lathe chuck Ø 125 mm

LATHES D6000

WITH PRISMATIC CAST IRON BED

LATHES D6000

- with prismatic cast iron bed
- **1.4 kW, 30 - 2300 rpm**
single-phase series-wound motor
- main spindle bore Ø 30 mm
with ground taper insert MT3
- **trapezoidal thread spindles**
ball screws
incl. lead screw cover
- main spindle according to **DIN 6350**
main spindle according to **DIN 55029 size 4**
- live center MT2
- center distance 600 mm
- center height 135 mm
- workpiece diameter max. 270 mm



D6000

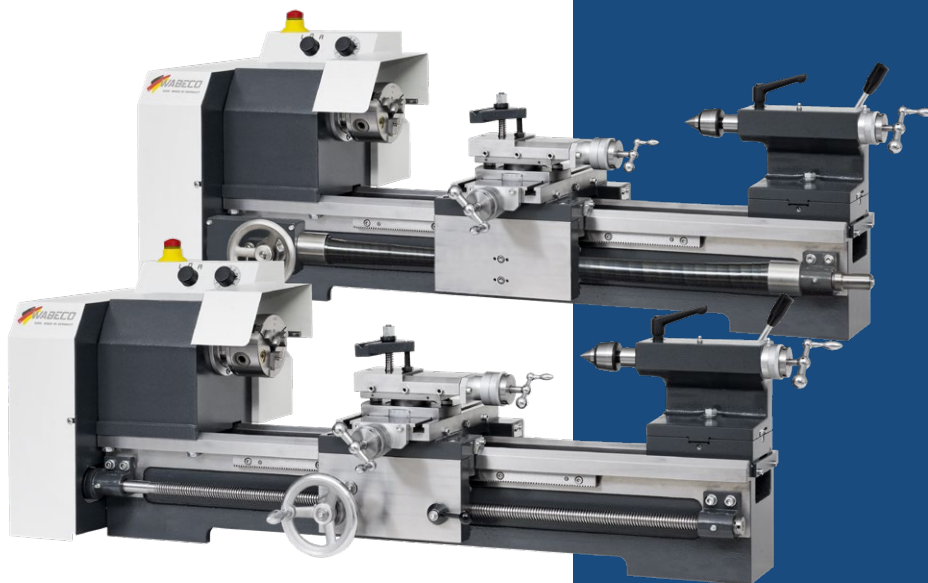
Lathe D6000 3-jaw lathe chuck Ø 125 mm main spindle according to DIN 6350 trapezoidal thread spindles	order no. 10601V	5,299.00 € 7,128.10-€
Lathe D6000 CA Camlock 3-jaw lathe chuck Ø 125 mm main spindle according to DIN 55029 size 4 - Camlock quick-release fastener trapezoidal thread spindles	order no. 10630V	5,890.00 € 7,520.80-€
Lathe D6000 3-jaw lathe chuck Ø 125 mm main spindle according to DIN 6350 ball screws	order no. 10615V	6,399.00 € 8,211.00-€
Lathe D6000 CA Camlock 3-jaw lathe chuck Ø 125 mm main spindle according to DIN 55029 size 4 - Camlock quick-release fastener ball screws	order no. 10632V	6,990.00 € 8,603.70-€

LATHES D6200 HS

WITH PRISMATIC CAST IRON BED

LATHES D6200 HS

- with prismatic cast iron bed
- **2.5 kW, 50 - 5000 rpm**
servo motor with frequency converter
- main spindle bore Ø 30 mm
with ground taper insert MT3
- **trapezoidal thread spindles**
ball screws
incl. lead screw cover
- main spindle according to **DIN 6350**
main spindle according to **DIN 55029 size 4**
- live center MT2
- center distance 600 mm
- center height 135 mm
- workpiece diameter max. 270 mm



D6200 HS

Lathe D6200 HS 3-jaw lathe chuck Ø 125 mm main spindle according to DIN 6350 trapezoidal thread spindles	order no. 10606V	7,399.00 € 9,639.00-€
Lathe D6200 HS CA Camlock 3-jaw lathe chuck Ø 125 mm main spindle according to DIN 55029 size 4 - Camlock quick-release fastener trapezoidal thread spindles	order no. 10636V	7,990.00 € 10,031.70-€
Lathe D6200 HS 3-jaw lathe chuck Ø 125 mm main spindle according to DIN 6350 ball screws	order no. 10620V	8,499.00 € 10,721.90-€
Lathe D6200 HS CA Camlock 3-jaw lathe chuck Ø 125 mm main spindle according to DIN 55029 size 4 - Camlock quick-release fastener ball screws	order no. 10638V	9,090.00 € 11,114.60-€

PRECISE POSITIONING & MACHINING

DIGITAL MEASURING SYSTEMS

MOUNTABLE DIGITAL VERNIER SCALES

X-, Z- AND Z1-AXIS

- factory installed

Application

- for precise machining of the workpieces
- for precise and exact positioning

Mountable digital vernier scales

- 5-digit LCD display
- 0.01 mm reading accuracy
- reversible metric/inch
- zero position
- mini-USB interface for position readout
- made of hardened steel

order no. 10125	379.00 €		448.63 €	D2000	
order no. 10225	399.00 €		468.86 €	D2400	
order no. 10425	379.00 €		448.63 €	D4000	
order no. 10625	399.00 €		468.86 €	D6000	D6200 HS



CUSTOMER INSTALLATION

MOUNTABLE DIGITAL VERNIER SCALES

- holes and threads must be attached to the lathe by the customer
- included in delivery
- mountable digital vernier scale X-axis
- mountable digital vernier scale Z-axis
- mountable digital vernier scale Z1-axis
- mounting kit for mountable vernier scales

order no. 10198	279.00 €		329.63 €	D2000	
order no. 10298	299.00 €		349.86 €	D2400	
order no. 10498	279.00 €		329.63 €	D4000	
order no. 10697	299.00 €		349.86 €	D6000	D6200 HS

DIGITAL POSITION READOUT (DRO) AND OPTICAL SCALES

- factory installed

Application

- for exact positioning of the workpieces
- absolute repeatability
- for precise, fast and safe manufacturing
- quick set up due to exact positioning

Digital position readout (DRO)

- diameter or radius display
- color display, 7-digit position indicator, resolution 0.005 mm
- reversible metric/inch
- reversible count direction by means of operation sign change
- coordinate value setting or zero setting
- incremental or absolute measurement input
- tool memory for 100 tools
- the data remains stored in the read-only memory in the event of a power failure
- function for lathes and milling machines
- optical scales protected against shock and dirt
- ergonomically designed folio keyboard, protected against dust and splash water
- display of the Z0 and Z1 axes with adding function, either the addend or the individual value is displayed

WITH 2 OPTICAL SCALES X- AND Z-ACHSE

order no. 10126	899.00 € 975.80€	D2000
order no. 10226	939.00 € 1,011.50 €	D2400
order no. 10426	899.00 € 975.80 €	D4000

WITH 3 OPTICAL SCALES X-, Z- AND Z1-AXIS

order no. 10627	989.00 € 1,071.00 €	D6000	D6200 HS
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PRECISE POSITIONING & MACHINING

DIGITAL MEASURING SYSTEMS

CUSTOMER INSTALLATION

DIGITAL POSITION READOUT (DRO) AND OPTICAL SCALES

- holes and threads must be attached to the lathe by the customer

WITH 2 OPTICAL SCALES X- AND Z-AXIS

included in delivery

- digital position readout (DRO)
- optical scale X-axis
- optical scale Z-axis
- mounting kit for position readout and optical scales

order no. 10190	799.00 € 856.80-€	D2000
order no. 10290	839.00 € 892.50-€	D2400
order no. 10490	799.00 € 856.80-€	D4000

WITH 3 OPTICAL SCALES X-, Z- AND Z1-AXIS

included in delivery

- digital position readout (DRO)
- optical scale X-axis
- optical scale Z-axis
- optical scale Z1-axis
- mounting kit for position readout and optical scales

order no. 10690	889.00 € 952.00-€	D6000	D6200 HS
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SPECIAL EQUIPMENT

LATHES

MAIN SPINDLE BORE Ø 30 MM

- factory installed
- not retrofittable
- for workpiece Ø up to 30 mm
- without morse taper

order no. 10278 **190.00 €** | 236.81-€

D2000

D2400



LEAD SCREW COVER

- factory installed
 - not retrofittable
 - to protect the lead screw against swarf
 - to prevent premature wear and loss of precision
- suitable for
- WABECO lathes with trapezoidal thread spindles

order no. 10680 **349.00 €** | 392.70-€

D6000

D6200 HS



QUICK-ACTION COLLET CHUCK

- factory installed
- not retrofittable
- clamping range 2 - 30 mm
- to be used up to max. 4000 rpm
- self-locking
- for dead length collets or Rubber-Flex collets
- collets from 2 - 30 mm available - price upon request

Application

- for quickly changing the workpieces
- for clamping and unclamping of the workpieces with hand lever

order no. 10929 **2,399.00 €** | 2,546.60-€

D4000

order no. 10930 **2,399.00 €** | 2,546.60-€

D6000

D6200 HS



ACCESSORIES

LATHES

CHIP- AND COOLANT TRAY

- dimensions W560 x D170 x H10 mm

Application

- for the containing of swarfs and coolant lubricants

order no. 10174 **32.00 €** | 34.51 €

D2000

D2400



CHIP TRAY WITH SPLASH GUARD

- dimensions W1060 x D464 x H500 mm
- weight 14 kg

Application

- for the containing of swarfs and coolant lubricants at the working range of the lathe

order no. 10156 **249.00 €** | 332.01 €

D2000

order no. 10256 **249.00 €** | 332.01 €

D2400

order no. 10456 **299.00 €** | 403.41 €

D4000

order no. 10656 **249.00 €** | 332.01 €

D6000

D6200 HS



COOLANT UNIT WITH SPLASH GUARD

- with feed pump 230 V, 50/60 Hz
- flexible hose with stop valve and nozzle
- capacity coolant: 19 liters
- dimensions W1060 x D445 x H553 mm
- weight 39 kg

Application

- for cooling and lubrication

order no. 10164 **659.00 €** | 867.51 €

D2000

order no. 10264 **659.00 €** | 867.51 €

D2400

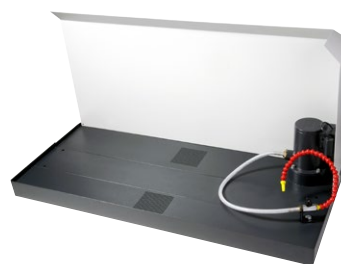
order no. 10464 **659.00 €** | 867.51 €

D4000

order no. 10664 **659.00 €** | 867.51 €

D6000

D6200 HS



MACHINE BASE CABINET

- with 2 lockable doors and 1 shelf
- dimensions W1060 x D445 x H850 mm
- weight 58 kg

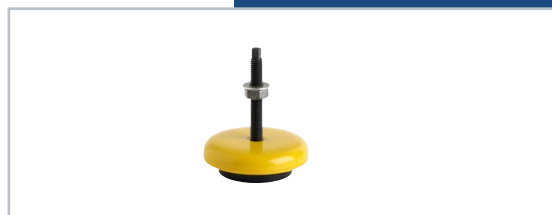
order no. 10267	699.00 €		831.81 €
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LEVELLING ELEMENT

- vibration pick-up and absorption element
- for precise height adjustment on uneven grounds
- Ø 80 mm, thread M10
- prevents the machine base cabinet from moving
- 4 levelling elements per machine base cabinet
- PU: 1 piece

order no. 10268	19.00 €		24.99 €
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MILLING DEVICE

FOR LATHES WITH CYLINDRICAL GUIDEWAYS

included in delivery

- milling table 130 x 100 mm
width of slots 12 mm
can be rotated infinitely by 360°, can be traversed in 3 axes
- clamping angle

Application

- for drilling and milling works
- the milling device is mounted on the longitudinal slide belonging to the lathe

order no. 10270	179.00 €		189.21 €
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D2000**D2400**

FOR LATHES WITH PRISMATIC CAST IRON BED

included in delivery

- milling table 130 x 100 mm
width of slots 12 mm
can be rotated infinitely by 360°, can be traversed in 3 axes
- clamping angle
- longitudinal slide
the supplied longitudinal slide is required to mount the milling device on the lathe

Application

- for drilling and milling works

order no. 10470	315.00 €		392.70 €
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D4000

order no. 10671	315.00 €		392.70 €
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D6000**D6200 HS**

ACCESSORIES

LATHES

ADJUSTABLE LONGITUDINAL STOP

- for longitudinal turning
- for protecting the lathe chuck

Application

- Precise length limitation - the slide only moves to the set stop, ensuring that all workpieces have the same length
- High repeat accuracy - ideal for series production – multiple parts receive exactly the same dimensions
- Time savings - no constant re-measuring or marking required
- Protection against over-turning - prevents the workpiece from being turned too deeply - less waste
- Easy adjustment - mechanically adjustable and quick to fix in place

order no. 10475	69.00 € 70.21 €	D4000	
order no. 10675	69.00 € 70.21 €	D6000	D6200 HS



CHANGE GEAR SET

- 10 pieces
- for thread cutting
- second automatic longitudinal feed 0.16 mm/rev

D2000

D2400

- for metric 0.25 - 6.0 mm and inch 10 - 36 TPI threads

D4000

D6000

D6200 HS

- for metric 0.25 - 7.0 mm and inch 10 - 40 TPI threads

order no. 10179	129.00 € 136.85 €
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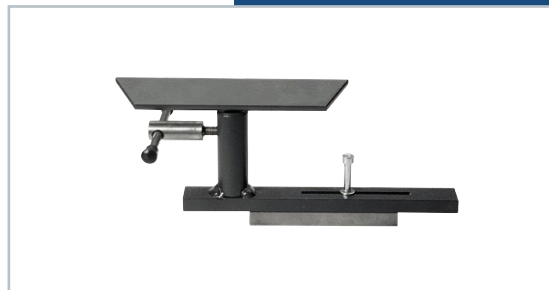
TOOL REST FOR WOODTURNING

- steel design
- adjustable height 60 mm
- tool rest length 175 mm

Application

- The lathes D2000 | D2400 impress with their versatility - in addition to classic turning operations, woodturning is also possible without any problems.
- The flexibly adjustable tool rest enables the woodturning tool to be securely positioned and precisely adjusted to the workpiece.

order no. 10160	84.00 € 94.01 €	D2000	D2400
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FIXED STAY

- clamping range Ø 4 to 84 mm

Application

- for stable, precise, and safe machining of long workpieces
- for hollow turning and drilling longer workpieces
- machining of long shafts, e.g., drive shafts or axles
- turning thin workpieces - prevents sagging and vibrations

order no. 10170	145.00 €		148.75 €	D2000	D2400
order no. 10471	169.00 €		213.01 €	D4000	
order no. 10670	169.00 €		213.01 €	D6000	D6200 HS



LIVE STAY

- clamping range Ø 4 to 84 mm

Application

- is fixed to the tool slide
- moves along the workpiece with the tool
- prevents sagging - especially with long and slender workpieces
- ideal for thin shafts - especially for longitudinal turning or thread turning

order no. 10172	129.00 €		130.90 €	D2000	D2400
order no. 10672	169.00 €		213.01 €	D6000	D6200 HS



5C COLLET CHUCK

- suitable for main spindle mount according to DIN 6350
- cylindrical inside diameter 95 mm
- clamping range in connection with 5C collets from 2-25 mm (5C collets are not part of the delivery)

Application

- high true running accuracy when clamping workpieces
- for holding the 5C collets - see order no. 11735

order no. 10749	255.00 €		333.20 €
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MOUNTING FLANGE

- for mounting the 5C collet chuck on WABECO lathes, a mounting flange is required

order no. 10733	63.00 €		65.45 €
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ACCESSORIES

LATHES

CAMLOCK 5C COLLET CHUCK

- suitable for main spindle mount according to DIN 55029 size 4
- clamping range in connection with 5C collets from 2-25 mm (5C collets are not part of the delivery)

Application

- high true running accuracy when clamping workpieces
- for holding the 5C collets - see order no. 11735

order no. 10779 **499.00 €** | 546.21€

D6000

D6200 HS



COLLET CHUCK

- suitable for main spindle mount according to DIN 6350
- cylindrical inside diameter 70 mm
- clamping range in connection with collets from 3-16 mm (collets are not part of the delivery)

Application

- for a high true running accuracy when clamping workpieces
- for holding the collets

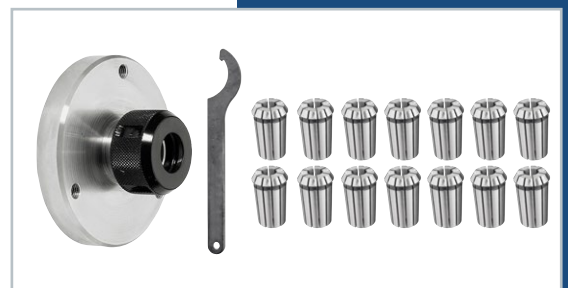
order no. 10775 **69.00 €** | 85.68€



COLLET CHUCK WITH COLLETS

- 16 pieces
- collet chuck with key
- 14 collets from Ø 3 - 16 mm according to DIN 415E OZ, double slotted, hardened and ground with a clamping range up to 0.5 mm below nominal size, i.e. e.g. the collet 8 mm can clamp up to 7.5 mm

order no. 10778 **199.00 €** | 355.81€



CLAMPING AND FACE PLATE

- suitable for main spindle according to DIN 6350
- cylindrical inside diameter 70 mm
- clamping Ø up to 150 mm
- with 4 T-slots, width 10 mm
- for holding irregularly shaped workpieces

order no. 13300 **89.00 €** | 117.81€



TOOL SET

- 1x turning tool set with indexable inserts, 6 pieces
cross section 10 x 10 mm
- 1x key-type drill chuck B16 1.5-13 mm
with drill chuck arbor MT2 and flat tang
- 1x quick-change tool post, main body „Multifix“ system
- 1x turning tool holder „Multifix“ system

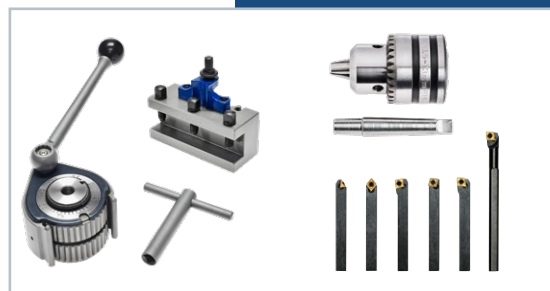
- with steel holder size Aa (A0)

order no. 10997	178.00 € 292.74 €	D2000	D2400
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D4000

- with steel holder size A

order no. 10995	229.00 € 385.56 €	D6000	D6200 HS
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TOOL SET

- 1x turning tool set with indexable inserts, 6 pieces
cross section 10 x 10 mm
- 1x quick-action drill chuck B16 1-13 mm
with drill chuck arbor MT2 and flat tang
- 1x quick-change tool post, main body „Multifix“ system
- 3x turning tool holder „Multifix“ system
- 1x boring steel holder „Multifix“ system

- with steel holder size Aa (A0)

order no. 10991	239.90 € 318.92 €	D2000	D2400
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D4000

- with steel holder size A

order no. 10992	299.90 € 393.89 €	D6000	D6200 HS
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QUICK-CHANGE TOOL POST SET

- 5 pieces
- 1x quick-change tool post, main body „Multifix“ system
- 3x turning tool holder „Multifix“ system
- 1x boring steel holder „Multifix“ system

- with steel holder size Aa (A0)

order no. 10793	159.99 € 216.58 €	D2000	D2400
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D4000

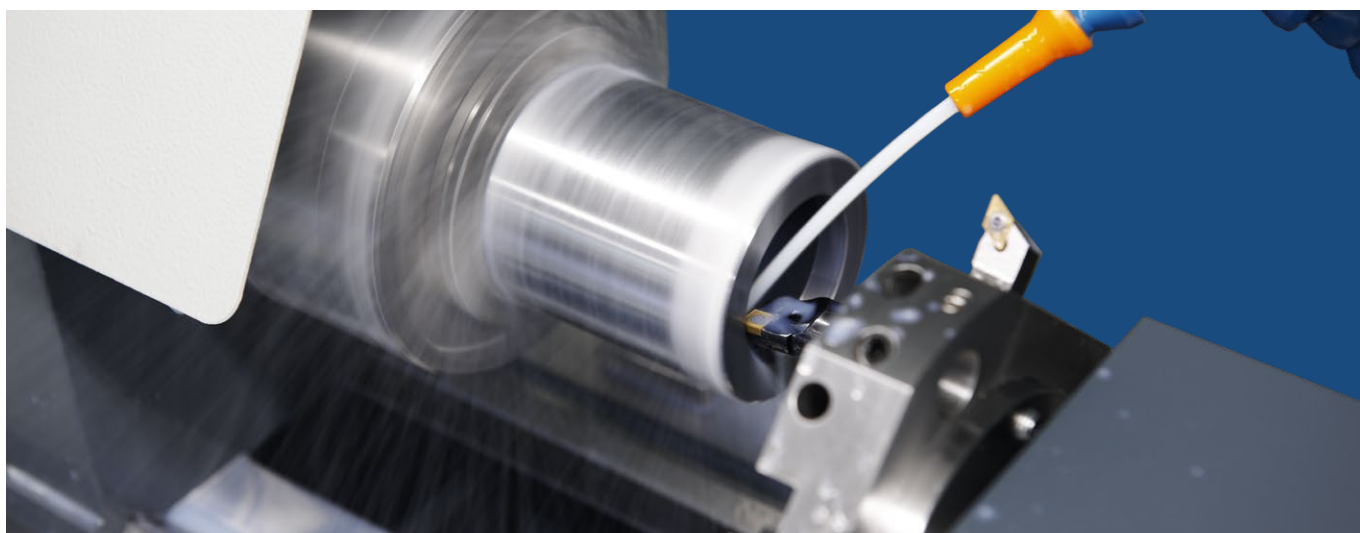
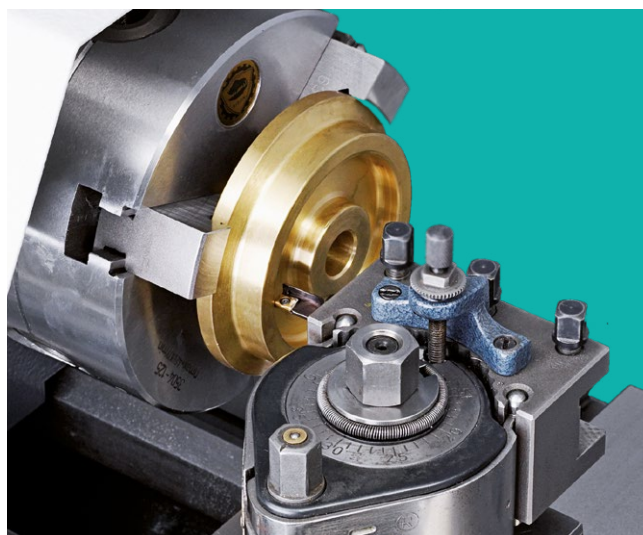
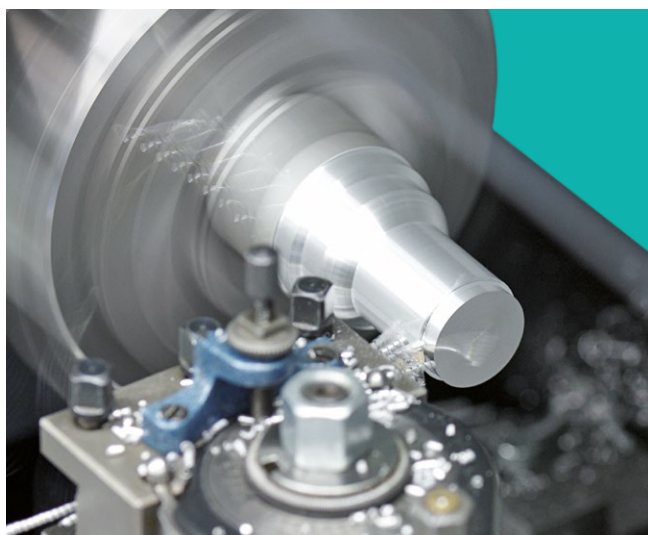
- with steel holder size A

order no. 10794	215.99 € 291.55 €	D6000	D6200 HS
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CNC LATHES CC-D6000 | CC-D6200 HS

EXAMPLES OF USE





CNC LATHES CC-D6000 | CC-D6200 HS

TECHNICAL DETAILS

WABECO - MADE IN GERMANY

- WABECO quality – durable, innovative, reliable
- developed and manufactured in Germany
- highest precision for industry, workshops, education
- In special machine construction, we realize individual requirements with technical expertise and passion.

LEAD SCREW CNC LATHES

- for processing metal, non-ferrous metal and plastics

ADVANTAGE

- the lathes can be used in conventional as well as in CNC mode

PRISMATIC CAST IRON BED

- made of diagonally ribbed gray cast iron
- inductively hardened and ground guideways

MACHINE PRECISION

- according to DIN 8606

MAIN DRIVE MOTOR

- main spindle drive, which can be adjusted to a wide cutting speed range via a potentiometer
- overload protection
- dynamic torque throughout the entire speed range
- high torque even in the lowest speed range

1.4 kW, 230 V, 50/60 Hz

- single-phase series-wound motor as direct current model
- with closed loop rpm control system
- electronically infinitely variable drive **30 - 2300 rpm**

2.5 kW, 230 V, 50/60Hz

- servo motor with frequency converter
- due to high speed suitable for small workpieces
- brushless
- electronically infinitely variable drive **50 - 5000 rpm**

SILENT RUNNING

- extremely silent running due to innovative belt drive

DRIVE TECHNOLOGY

- with multiple fault monitoring circuit
- e.g. turning a steel shaft Ø 50 mm in one infeed by approx. 5 mm

HEADSTOCK

- main spindle in 2 adjustable precision DIN tapered roller bearings
- right-left rotation of the main spindle
- CC-D6000 with 1.4 kW motor
intermediate gear between main spindle and drive

MAIN SPINDLE BORE Ø 30 MM

- with ground taper insert MT3

MAIN SPINDLE

- main spindle mount **according to DIN 6350**
- main spindle mount **according to DIN 55029 size 4**
(Camlock quick-release fastener)
Camlock quick-release fastener for quick change of the lathe chuck or collet chuck via quick-release fastener

FEED SCREWS

- **trapezoidal thread spindles**
- **ball screws**
incl. lead screw cover
high precision pitch and positioning accuracy
wear-free
free of play

LEAD SCREW DRIVE

- with lead screw drive and change gear quadrant for automatic longitudinal feed 0.085 mm/rev
- with tumbler gear for left- and right-hand threads

OVERLOAD CLUTCH

- on the lead screw and the lead screw drive to avoid damage to the feed system

THREAD CUTTING

CONVENTIONAL

- for metric 0.25 - 7.0 mm and inch 10 - 40 TPI threads
- second automatic longitudinal feed 0.16 mm/rev

IN CNC MODE

- only with nccad PROFI

TOOL SLIDE

- dovetail guides readjustable free of play
- cutting scrapers

TAILSTOCK

- with quick adjustment
- tailstock sleeve with inner morse taper MT2

HIGH-PERFORMANCE STEPPER MOTORS

- maintenance-free
- high feed and acceleration values
- high holding torque

TRAVEL SPEED (RAPID TRAVERSE)

nccad BASIC

- X- and Z-axis 30 - 500 mm/min

nccad PROFI

- X- and Z-axis 30 - 1000 mm/min

WARRANTY

- 2 years warranty - not for wearing parts
- delivery of spare parts guaranteed even after years

FURTHER TECHNICAL DATA

- can be found starting on page 30

NCCAD CONTROLLER AND TURNING SOFTWARE

nccad BASIC

- import and editing of 2D models
- 2D interpolation, i.e., 2 axes move simultaneously
- the nccad CAM module is used to create a CNC program graphically
- contour creation with the nccad CAD module
- graphical simulation
- manual control panel

nccad PROFI

- import and editing of 2D models
- 2D interpolation, i.e., 2 axes move simultaneously
- a tool turret can be controlled
- the nccad CAM module is used to create a CNC program graphically
- contour creation with the nccad CAD module
- graphical simulation with 3D view
- tool administration
- manual control panel
- automation and robotics - easy integration into automated production chains thanks to additional inputs and outputs, e.g., for controlling a pneumatic collet chuck or a sliding door

PROGRAM CREATION (PC CONTROL)

- program creation and machine control of the CNC machine are carried out via a PC (PCs are not part of the delivery)
- the PC assumes the program creation, the program administration and the data archiving
- CNC programs can be created on several PCs independently from the CNC machine
- the user-friendly interface of the nccad software supports simple and fast program creation

DETAILED SOFTWARE DESCRIPTION

- can be found starting on page 46

SPECIAL EQUIPMENT AND ACCESSORIES

- individually configurable
- Expandable. Customizable. Precisely tailored to your requirements.

Machine safety cabin

- with integrated coolant unit
- optional

Measuring system

Digital position readout (DRO) and optical scales

- for exact positioning of the workpieces
- absolute repeatability
- for precise, fast and safe manufacturing
- quick set up due to exact positioning

CNC tool turret

- for an automated production
- with 8 tool positions
- optional with nccad PROFI

Electronic handwheel

- for positioning of the axes during the setup mode
- for manually moving the axes
- optional with nccad PROFI

CNC LATHES CC-D6000 | CC-D6200 HS

TECHNICAL DATA

	CC-D6000	CC-D6200 HS
PRISMATIC CAST IRON BED		
prismatic cast iron bed made of diagonally ribbed gray cast iron	●	
WORKING RANGE		
center distance	600 mm	
center height	135 mm	
workpiece diameter	max. 270 mm	
turning diameter above the cross slide	170 mm	
bed width	180 mm	
MACHINE PRECISION		
true running accuracy of spindle nose	0.005 mm	
cylindrical turning to 100 mm cantilevered	0.01 mm	
cylindrical turning with a finishing cut to 300 mm between the tips	± 0.015 mm	
MAIN DRIVE MOTOR		
single-phase series-wound motor 230 V, 50/60 Hz	1.4 kW	○
servo motor with frequency converter 230 V, 50/60 Hz	○	2.5 kW
electronically infinitely variable drive	30 - 2300 rpm	50 - 5000 rpm
MAIN SPINDLE BORE		
main spindle bore Ø 30 mm	●	
HEADSTOCK		
main spindle in 2 adjustable precision DIN tapered roller bearings	●	
right-left rotation of the main spindle	●	
intermediate gear between main spindle and drive	●	○
MAIN SPINDLE		
main spindle mount according to DIN 6350 - main spindle Ø 70 mm	●	
main spindle mount according to DIN 55029 size 4 - Camlock quick-release fastener		alternatively
FEED SCREWS		
trapezoidal thread spindles	with nccad BASIC	
ball screws	with nccad PROFI	
LEAD SCREW DRIVE		
with lead screw drive and change gear quadrant for automatic feed	0.085 mm/rev	
with tumbler gear for left- and right-hand threads	●	
TOOL SLIDE		
reading accuracy of the scale rings	0.05 mm	
adjustability of cross slide	140 mm	
adjustability of longitudinal slide	60 mm	
max. height of turning tools	20 mm	

CC-D6000

CC-D6200 HS

TAILSTOCK WITH QUICK ADJUSTMENT

lateral adjustability of tailstock upper part	± 10 mm
tailstock sleeve with inner morse taper MT2	●
quill adjustable	65 mm
reading accuracy of the scale ring	0.1 mm

HIGH-PERFORMANCE STEPPER MOTORS

in X- and Z-axis	●
maintenance-free	●
high feed and acceleration values	●
high holding torque	●

TRAVEL SPEED (RAPID TRAVERSE)

in X- and Z-axis	
with nccad BASIC	30 - 500 mm/min
with nccad PROFI	30 - 1000 mm/min

LIMIT SWITCHES

in X- and Z-axis	●
mechanical single limit switches	●

DIMENSIONS AND WEIGHT

machine dimensions without packaging	W1230 x D510 x H470 mm	W1230 x D630 x H470 mm
weight without packaging	172 kg	199 kg

subject to technical changes ☒ yes ☐ no

MACHINE SAFETY CABIN (OPTIONAL)

capacity coolant	36 liters
dimensions without packaging	W1298 x D848 x H653 mm
weight without packaging	81.5 kg

TOOL TURRET (OPTIONAL)

tool turret only with nccad PROFI	
4 outside processing tools, cross section	10 x 10 mm
4 inside processing tools, location hole	Ø 16 mm

subject to technical changes ☒ yes ☐ no

CNC LATHES CC-D6000

WITH PRISMATIC CAST IRON BED

CNC LATHES CC-D6000

- **CC-D6000 BASIC**
nccad **BASIC** controller and turning software
with trapezoidal thread spindles
- **CC-D6000 PROFI**
nccad **PROFI** controller and turning software
with ball screws
incl. lead screw cover
- with prismatic cast iron bed
- **1.4 kW, 30 - 2300 rpm**
single-phase series-wound motor
- main spindle bore Ø 30 mm
with ground taper insert MT3
- main spindle according to **DIN 6350**
main spindle according to **DIN 55029 size 4**
- live center MT2
- center distance 600 mm
- center height 135 mm
- workpiece diameter max. 270 mm
- **the lathes can be used in conventional
as well as in CNC mode**



CC-D6000 BASIC

CNC lathe CC-D6000
3-jaw lathe chuck Ø 125 mm
main spindle according to **DIN 6350**
trapezoidal thread spindles

order no. 1060051V **8,290.00 €** | 10,353.00-€

CNC lathe CC-D6000 CA
Camlock 3-jaw lathe chuck Ø 125 mm
main spindle according to **DIN 55029 size 4** - Camlock quick-release fastener
trapezoidal thread spindles

order no. 1060024V **8,880.00 €** | 10,948.00-€

CC-D6000 PROFI

CNC lathe CC-D6000
3-jaw lathe chuck Ø 125 mm
main spindle according to **DIN 6350**
ball screws

order no. 1060021V **10,800.00 €** | 12,971.00-€

CNC lathe CC-D6000 CA
Camlock 3-jaw lathe chuck Ø 125 mm
main spindle according to **DIN 55029 size 4** - Camlock quick-release fastener
ball screws

order no. 1060034V **11,390.00 €** | 13,566.00-€

CNC LATHES CC-D6200 HS

WITH PRISMATIC CAST IRON BED

CNC LATHES CC-D6200 HS

- **CC-D6200 HS BASIC**

nccad **BASIC** controller and turning software
with trapezoidal thread spindles

- **CC-D6200 HS PROFI**

nccad **PROFI** controller and turning software
with ball screws
incl. lead screw cover

- with prismatic cast iron bed
- **2.5 kW, 50 - 5000 rpm**
servo motor with frequency converter
- main spindle bore Ø 30 mm
with ground taper insert MT3
- main spindle according to **DIN 6350**
main spindle according to **DIN 55029 size 4**
- live center MT2
- center distance 600 mm
- center height 135 mm
- workpiece diameter max. 270 mm
- **the lathes can be used in conventional
as well as in CNC mode**



CC-D6200 HS BASIC

CNC lathe CC-D6200 HS
3-jaw lathe chuck Ø 125 mm
main spindle according to **DIN 6350**
trapezoidal thread spindles

order no. 1060056V **10,790.00 €** | 12,852.00-€

CNC lathe CC-D6200 HS CA
Camlock 3-jaw lathe chuck Ø 125 mm
main spindle according to **DIN 55029 size 4** - Camlock quick-release fastener
trapezoidal thread spindles

order no. 1060066V **11,380.00 €** | 13,447.00-€

CC-D6200 HS PROFI

CNC lathe CC-D6200 HS KRS
3-jaw lathe chuck **Ø 125 mm**
main spindle according to **DIN 6350**
ball screws

order no. 1060071V **13,490.00 €** | 15,589.00-€

CNC lathe CC-D6200 HS CA KRS
Camlock 3-jaw lathe chuck Ø 125 mm
main spindle according to **DIN 55029 size 4** - Camlock quick-release fastener
ball screws

order no. 1060076V **14,080.00 €** | 16,184.00-€

SPECIAL EQUIPMENT

CNC LATHES CC-D6000 | CC-D6200 HS

BALL SCREWS FOR 2 AXES

- factory installed
- not retrofittable
- high precision pitch and positioning accuracy
- wear-free
- incl. lead screw cover
to protect the lead screw against swarf
to prevent premature wear and loss of precision
- with free of play ball screw nuts

for WABECO CNC Lathes with nccad BASIC

order no. 10645	1,645.00 €		1,898.05 €
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LEAD SCREW COVER

- factory installed
 - not retrofittable
 - to protect the lead screw against swarf
 - to prevent premature wear and loss of precision
- suitable for
- WABECO CNC lathes with trapezoidal thread spindles

order no. 10680	349.00 €		392.70 €
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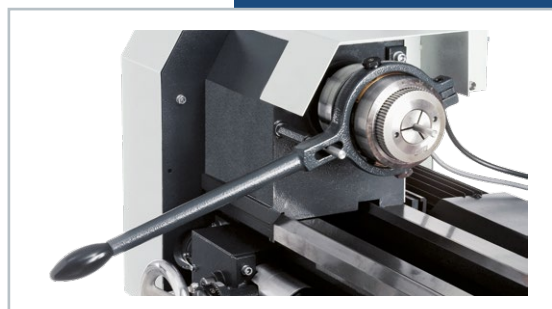
QUICK-ACTION COLLET CHUCK

- factory installed
- not retrofittable
- clamping range 2 - 30 mm
- to be used up to max. 4000 rpm
- self-locking
- for dead length collets or Rubber-Flex collets
- collets from 2 - 30 mm available - price upon request

Application

- for quickly changing the workpieces
- for clamping and unclamping of the workpieces with hand lever

order no. 10930	2,399.00 €		2,546.60 €
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MACHINE SAFETY CABIN

- to prevent accidents
- with integrated coolant unit
- capacity coolant 36 liters
- dimensions W1298 x D848 x H653 mm
- factory installed
- not retrofittable

NOTE

The EN2006/42 EC standard is only fulfilled in conjunction with a machine safety cabin. Without a machine safety cabin, the CNC version of the machine is incomplete and therefore does not comply with the CE directive.

Operation without a machine safety cabin carries considerable risks.



order no. 1060090	2,800.00 €		3,451.00 €
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MACHINE BASE CABINET

- with 2 lockable doors and 1 shelf
- dimensions W1060 x D445 x H850 mm
- weight 58 kg

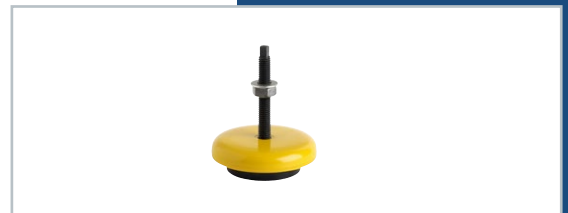
order no. 10267	699.00 €		831.81 €
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LEVELLING ELEMENT

- vibration pick-up and absorption element
- for precise height adjustment on uneven grounds
- Ø 80 mm, thread M10
- prevents the machine base cabinet from moving
- 4 levelling elements per machine base cabinet
- PU: 1 piece

order no. 10268	19.00 €		24.99 €
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SPECIAL EQUIPMENT

CNC LATHES CC-D6000 | CC-D6200 HS

DIGITAL POSITION READOUT (DRO) AND OPTICAL SCALES X-, Z- AND Z1-AXIS

- factory installed

Application

- for exact positioning of the workpieces
- absolute repeatability
- for precise, fast and safe manufacturing
- quick set up due to exact positioning

Digital position readout (DRO)

- diameter or radius display
- color display, 7-digit position indicator, resolution 0.005 mm
- reversible metric/inch
- reversible count direction by means of operation sign change
- coordinate value setting or zero setting
- incremental or absolute measurement input
- tool memory for 100 tools
- the data remains stored in the read-only memory in the event of a power failure
- function for lathes and milling machines
- optical scales protected against shock and dirt
- ergonomically designed folio keyboard, protected against dust and splash water
- display of the Z0 and Z1 axes with adding function, either the addend or the individual value is displayed



order no. 1060127 **989.00 €** | 1,071.00-€

CUSTOMER INSTALLATION

DIGITAL POSITION READOUT (DRO) AND OPTICAL SCALES X-, Z- AND Z1-AXIS

- holes and threads must be attached to the lathe by the customer

included in delivery

- digital position readout (DRO)
- optical scale X-axis
- optical scale Z-axis
- optical scale Z1-axis
- mounting kit for position readout and optical scales



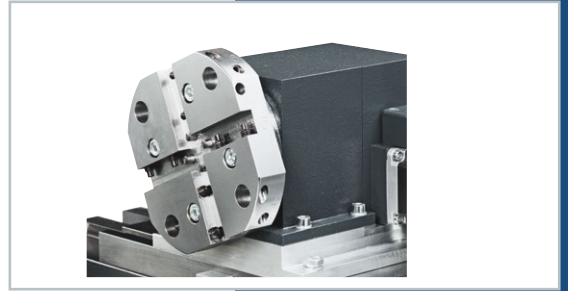
order no. 1060128 **889.00 €** | 952.00-€

CNC TOOL TURRET

- factory installed
- not retrofittable
- for an automated production
- with 8 tool positions
- for 4 outside processing tools
cross section 10 x 10 mm
- for 4 inside processing tools
location hole Ø 16 mm
- for safety reasons only available with machine safety cabin

order no. 1060098 **2,199.00 €** | ~~2,499.00 €~~

nur PROFI



ELECTRONIC HANDWHEEL

- electronic handwheel for X- and Z-axis
- Application**
- for manually moving the axes
 - for positioning of the axes during the setup mode
(workpiece zero point)

order no. 1060130 **669.00 €** | ~~772.31 €~~

nur PROFI



TOOL SET

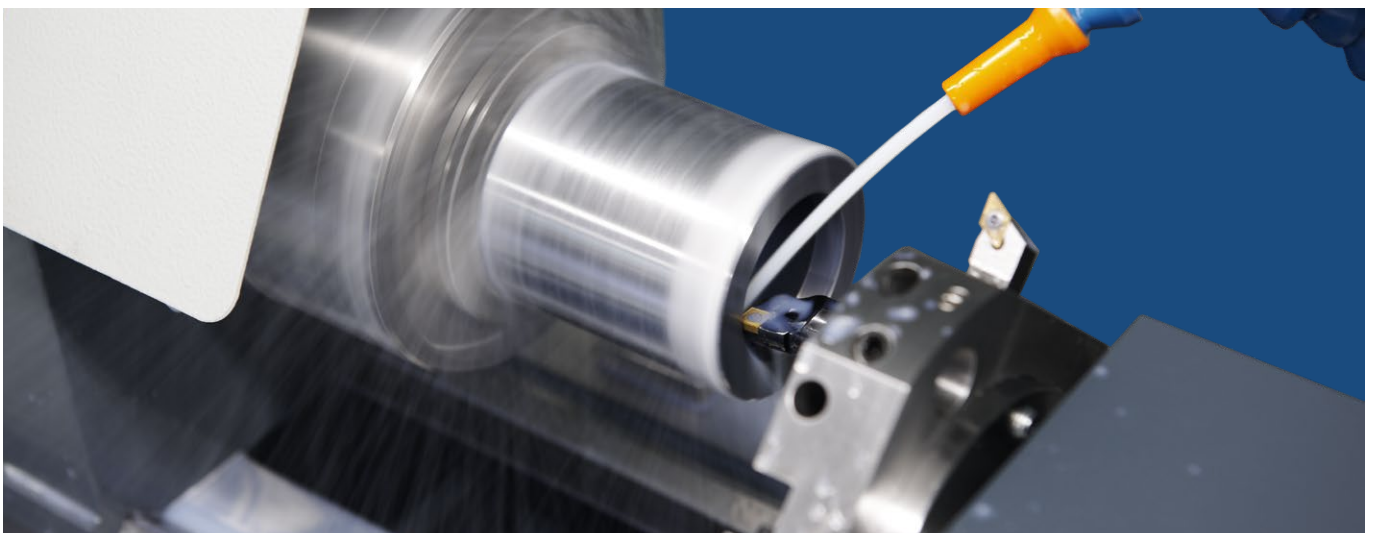
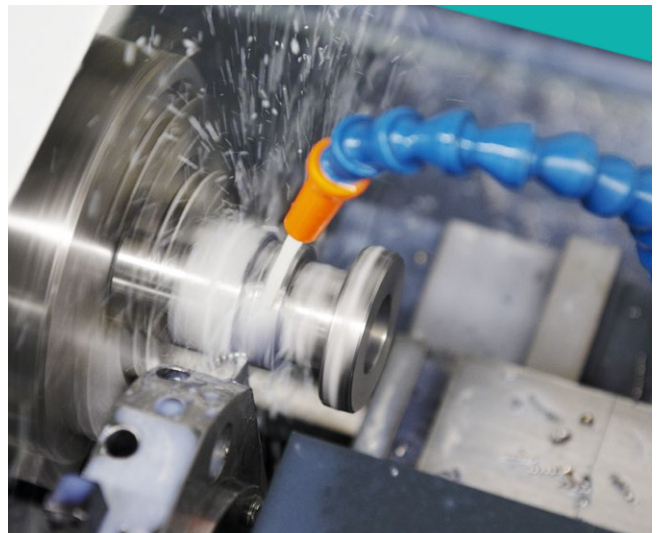
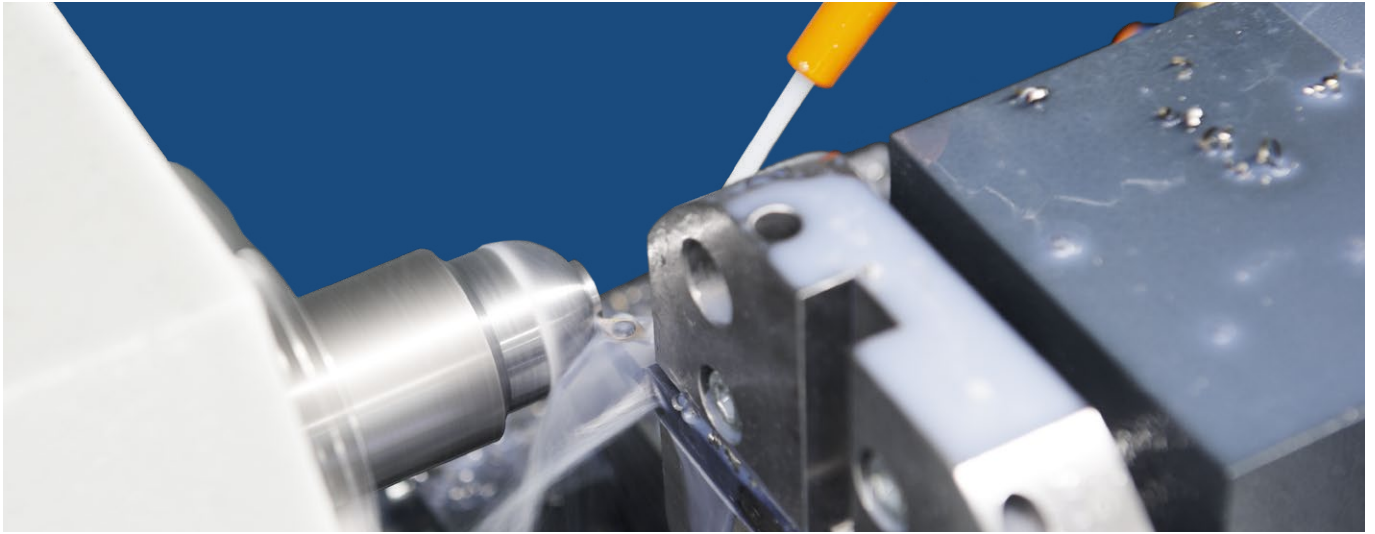
- 1x turning tool set with indexable inserts, 6 pieces
cross section 10 x 10 mm
- 1x quick-action drill chuck B16 1-13 mm
with drill chuck arbor MT2 and flat tang
- 1x quick-change tool post, main body „Multifix“ system size A
- 3x turning tool holder „Multifix“ system size A
- 1x boring steel holder „Multifix“ system size A

order no. 10992 **299.90 €** | ~~393.89 €~~



CNC LATHES CC-D6800 HS

EXAMPLES OF USE





CNC LATHES CC-D6800 HS

TECHNICAL DETAILS

WABECO - MADE IN GERMANY

- WABECO quality – durable, innovative, reliable
- developed and manufactured in Germany
- highest precision for industry, workshops, education
- In special machine construction, we realize individual requirements with technical expertise and passion.

LEAD SCREW CNC LATHES

- for processing metal, non-ferrous metal and plastics

SLANT BED WITH PRISMATIC CAST IRON BED

- made of diagonally ribbed gray cast iron
- inductively hardened and ground guideways

MACHINE PRECISION

- according to DIN 8606

MAIN DRIVE MOTOR

- **2.5 kW, 230 V, 50/60Hz**
- servo motor with frequency converter
- due to high speed suitable for small workpieces
- brushless
- electronically infinitely variable drive **50 - 5000 rpm**
- main spindle drive, which can be adjusted to a wide cutting speed range via a potentiometer
- overload protection
- dynamic torque throughout the entire speed range
- high torque even in the lowest speed range

SILENT RUNNING

- extremely silent running due to innovative belt drive

DRIVE TECHNOLOGY

- with multiple fault monitoring circuit
- e.g. turning a steel shaft Ø 50 mm in one infeed by approx. 5 mm

HEADSTOCK

- main spindle in 2 adjustable precision DIN tapered roller bearings
- right-left rotation of the main spindle

MAIN SPINDLE BORE Ø 30 MM

- with ground taper insert MT3

MAIN SPINDLE

- main spindle mount **according to DIN 6350**
- main spindle mount **according to DIN 55029 size 4**
(Camlock quick-release fastener)
Camlock quick-release fastener for quick change of the lathe chuck or collet chuck via quick-release fastener

FEED SCREWS

- ball screws in all axes
- high precision pitch and positioning accuracy
- wear-free
- free of play

LEAD SCREW COVER

- to protect the lead screw against swarf
- to prevent premature wear and loss of precision

OVERLOAD CLUTCH

- on the lead screw and the lead screw drive to avoid damage to the feed system

THREAD CUTTING

- thread cutting in CNC mode

TOOL SLIDE

- dovetail guides readjustable free of play
- cutting scrapers

TAILSTOCK

- with quick adjustment
- tailstock sleeve with inner morse taper MT2

HIGH-PERFORMANCE STEPPER MOTORS

- maintenance-free
- high feed and acceleration values
- high holding torque

TRAVEL SPEED (RAPID TRAVERSE)

- **nccad PROFI**
X- and Z-axis 30 - 1000 mm/min

CNC TOOL TURRET

- for an automated production
- with 8 tool positions
- 4 outside processing tools
- 4 inside processing tools

MACHINE SAFETY CABIN

- with integrated coolant unit

MACHINE CONTROL PANEL

- with integrated machine operating elements

WARRANTY

- 2 years warranty - not for wearing parts
- delivery of spare parts guaranteed even after years

FURTHER TECHNICAL DATA

- can be found starting on page 42

NCCAD CONTROLLER AND TURNING SOFTWARE

nccad PROFI

- import and editing of 2D models
- 2D interpolation, i.e., 2 axes move simultaneously
- a tool turret can be controlled
- the nccad CAM module is used to create a CNC program graphically
- contour creation with the nccad CAD module
- graphical simulation with 3D view
- tool administration
- manual control panel
- automation and robotics - easy integration into automated production chains thanks to additional inputs and outputs, e.g., for controlling a pneumatic collet chuck or a sliding door

PROGRAM CREATION (PC CONTROL)

- program creation and machine control of the CNC machine are carried out via a PC (PCs are not part of the delivery)
- the PC assumes the program creation, the program administration and the data archiving
- CNC programs can be created on several PCs independently from the CNC machine
- the user-friendly interface of the nccad software supports simple and fast program creation

DETAILED SOFTWARE DESCRIPTION

- can be found starting on page 46

SPECIAL EQUIPMENT

Machine base cabinet

- with 2 lockable doors and 2 shelves

Electronic handwheel

- for positioning of the axes during the setup mode
- for manually moving the axes

CNC LATHES CC-D6800 HS

TECHNICAL DATA

CC-D6800 HS

SLANT BED WITH PRISMATIC CAST IRON BED

made of diagonally ribbed gray cast iron	●
inductively hardened and ground guideways	●

WORKING RANGE

center distance	600 mm
center height	135 mm
workpiece diameter	max. 270 mm
turning Ø above the cross slide	170 mm

MACHINE PRECISION

machine precision	according to DIN 8606
true running accuracy of spindle nose	0.005 mm
cylindrical turning to 100 mm cantilevered	0.01 mm
cylindrical turning with a finishing cut to 300 mm between the tips	± 0.015 mm

MAIN DRIVE MOTOR

servo motor with frequency converter 230 V, 50/60 Hz	2.5 kW
due to high speed suitable for small workpieces, brushless	●
electronically infinitely variable drive	50 - 5000 rpm
main spindle drive, which can be adjusted to a wide cutting speed range via a potentiometer	●
with overload protection	●
dynamic torque throughout the entire speed range	●
high torque even in the lowest speed range	●

SILENT RUNNING

extremely silent running due to innovative belt drive	●
---	---

DRIVE TECHNOLOGY

drive electronics with multiple fault monitoring circuit	●
e.g. turning a steel shaft Ø 50 mm in one infeed by	approx. 5 mm

HEADSTOCK

housing made of gray cast iron	●
prism groove scraped by hand	●
main spindle in 2 adjustable precision DIN tapered roller bearings	●

MAIN SPINDLE BORE

main spindle bore	Ø 30 mm
with ground taper insert in the main spindle	MT3

MAIN SPINDLE

main spindle mount according to DIN 6350 - main spindle Ø 70 mm	●
main spindle mount according to DIN 55029 size 4 - Camlock quick-release fastener	alternatively

FEED SCREWS

ball screws with free of play ball screw nuts	●
incl. lead screw cover to protect the lead screw against swarf	
to prevent premature wear and loss of precision	

OVERLOAD CLUTCH

on the lead screw and the lead screw drive to avoid damage to the feed system	●
---	---

THREAD CUTTING

thread cutting in CNC mode	●
----------------------------	---

TOOL SLIDE

dovetail guides readjustable free of play	●
cutting scrapers	●

TAILSTOCK WITH QUICK ADJUSTMENT

lateral adjustability of tailstock upper part	± 10 mm
tailstock sleeve	MT2
quill adjustable	65 mm
reading accuracy of the scale ring	0.1 mm

HIGH-PERFORMANCE STEPPER MOTORS

maintenance-free	●
high feed and acceleration values	●
high holding torque	●

TRAVEL SPEED (RAPID TRAVERSE)

X- and Z-axis	30 - 1000 mm/min
---------------	------------------

LIMIT SWITCHES X- AND Z-AXIS

mechanical single limit switches	●
----------------------------------	---

TOOL TURRET

cross section for 4 outside processing tools	10 x 10 mm
location hole for 4 inside processing tools	Ø 16 mm

MACHINE SAFETY CABIN

with integrated coolant unit	●
capacity coolant	27 liters
feed pump	230 V, 50/60 Hz

DIMENSIONS AND WEIGHT

machine dimensions without packaging	W1420 x D1000 x H900 mm
weight without packaging	352 kg

subject to technical changes ● yes ○ no

CNC LATHES CC-D6800 HS

SLANT BED WITH PRISMATIC CAST IRON BED

CNC LATHES CC-D6800 HS PROFI

- nccad **PROFI** controller and turning software
- **with ball screws**
incl. lead screw cover
- slant bed with prismatic cast iron bed
- **2.5 kW, 50 - 5000 rpm**
servo motor with frequency converter
- main spindle bore Ø 30 mm
- **CNC tool turret**
- **machine safety cabin**
with coolant unit
- main spindle according to **DIN 6350**
main spindle according to **DIN 55029 size 4**
- live center MT2
- center distance 600 mm
- center height 135 mm
- workpiece diameter max. 270 mm



CNC lathe CC-D6800 HS
3-jaw lathe chuck Ø 125 mm
main spindle according to **DIN 6350**

order no. 1060800V **24,999.00 €** | 29,738.10-€

CNC lathe CC-D6800 HS CA
Camlock 3-jaw lathe chuck Ø 125 mm
main spindle according to **DIN 55029 size 4** - Camlock quick-release fastener

order no. 1060804V **25,589.00 €** | 30,333.10-€

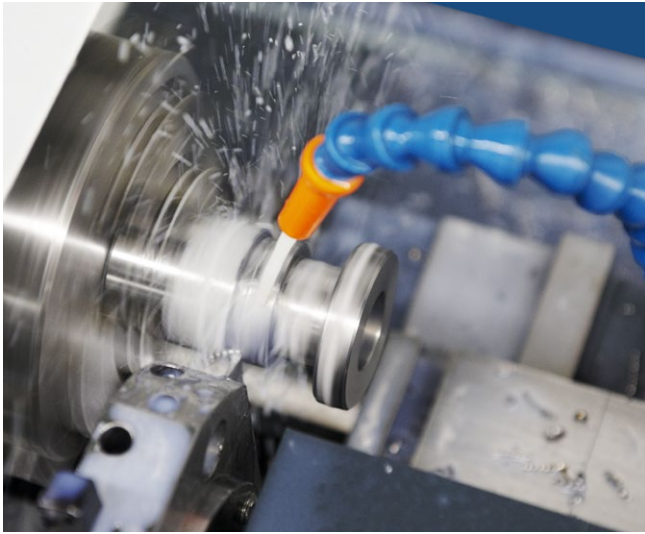
SPECIAL EQUIPMENT

Machine base cabinet
with 2 lockable doors and 2 shelves
dimensions W1420 x D1000 x H850 mm
weight without packaging 117 kg

order no. 1120269 **2,399.00 €** | 2,522.80-€

Electronic handwheel
for X- and Z-axis
for manually moving the axes
for positioning of the axes during the setup mode (workpiece zero point)

order no. 1060130 **669.00 €** | 772.31-€



NCCAD CONTROLLER AND TURNING SOFTWARE

CNC LATHES

NCCAD CONTROLLER	BASIC	PROFI
2 axes can be moved simultaneously	●	●
a tool turret can be controlled	○	●
main spindle connectable via the control unit	●	●
programmable speed control	○	●
manufacturing complex shapes	●	●
thread cutting	○	●
electronic handwheel	○	●
support of microstepping, i.e. smooth run and high position resolution	●	●
automation and robotics - easy integration into automated production chains thanks to additional inputs and outputs, e.g., for controlling a pneumatic collet chuck or a sliding door	○	●
upgrade to nccad PROFI controller (prerequisite ball screws)	●	○

NCCAD TURNING SOFTWARE

DIALOG-ORIENTED OPERATOR GUIDANCE

dialog-oriented operator guidance

PROGRAM INPUT

manual program input according to DIN 66025 with G- and M-functions

the nccad CAM module is used to create a CNC program graphically according to DIN 66025 based on a previously created contour

CONTOUR CREATION BY USING THE INTEGRATED NCCAD CAD MODULE

drawings can be created directly

coordinates can be entered or edited, e.g. commands can be changed, added and/or deleted

the following functions are available: drawing of straight lines, curves, circles, polygons etc.

contours can be e.g. shifted, rotated, copied, mirrored and trimmed

contour creation by means of mouse or keyboard

the drawings can be dimensioned

EDITING AND DATA TRANSFER

import and editing of 2D models DXF files from a CAD system

import and editing of 2D models from HPGL files

G-Code according to DIN 66025 from a CAM system

NCCAD TURNING SOFTWARE

TECHNOLOGY VALUES

input of technology values for the drawn contour e.g. feed, in-feed depth, processing sequence, fine swarf removal etc.

CONTOUR CREATION BY USING AN EXTERNAL CAD SOFTWARE

drawings can be created in any CAD program

GRAPHICAL SIMULATION WITH 3D VIEW

simulation with the represented tool

for easy checking of programming errors

workpiece can be rotated during the simulation for a better view

MACHINE ZERO POINT

machine zero point is interrogated by means of a reference travel via limit switches

WORKPIECE ZERO POINTS

19 workpiece zero points can arbitrarily be set

TOOL ADMINISTRATION

administration of up to max. 20 tools

definition of tools e.g. cutter angle, cutting edge length, cutting edge geometry, etc.

MANUAL CONTROL PANEL

for displacing the individual axes without inputting a program

direct input of the travel value either by means of the keyboard or the arrow keys in the manual control panel

display of the current values on the screen

HELP

manual integrated in the software

direct help via the F1 key for the functions displayed in the menu bar

NETWORK

compatible

SYSTEM REQUIREMENTS

serial interface (RS232) recommended

graphic resolution 1024x768, operating system from Windows 8 onwards

WABECO PRECISION MILLING MACHINES

OVERVIEW



DRILLING AND MILLING MACHINES F1200 | F1202 HS WITH DOVETAIL GUIDES

FROM PAGE 52

WORKING RANGE

longitudinal travel X-axis 260 mm

transverse travel Y-axis 150 mm

vertical travel Z-axis 280 mm

CLAMPING TABLE

450 x 180 mm

FEED SCREWS

trapezoidal thread spindles

ball screws

TOOL HOLDER

MT2 or ISO30

MAIN DRIVE MOTOR

F1200

1.4 kW, 140-3000 U/min

single-phase series-wound motor

F1202 HS

2.5 kW, 100-7500 U/min

servo motor with frequency converter



DRILLING AND MILLING MACHINES F1210 | F1220 HS WITH DOVETAIL GUIDES

FROM PAGE 52

WORKING RANGE

longitudinal travel X-axis 500 mm

transverse travel Y-axis 150 mm

vertical travel Z-axis 280 mm

CLAMPING TABLE

700 x 180 mm

FEED SCREWS

trapezoidal thread spindles

ball screws

TOOL HOLDER

MT2 or ISO30

MAIN DRIVE MOTOR

F1210

1.4 kW, 140-3000 U/min

single-phase series-wound motor

F1220 HS

2.5 kW, 100-7500 U/min

servo motor with frequency converter



DRILLING AND MILLING MACHINES F1410 LF | F1420 LF HS WITH LINEAR GUIDES

FROM PAGE 52

WORKING RANGE

longitudinal travel X-axis 500 mm

transverse travel Y-axis 200 mm

vertical travel Z-axis 280 mm

CLAMPING TABLE

700 x 180 mm

FEED SCREWS

trapezoidal thread spindles

ball screws

TOOL HOLDER

MT2 or ISO30

MAIN DRIVE MOTOR

F1410 LF

1.4 kW, 140-3000 U/min

single-phase series-wound motor

F1420 LF HS

2.5 kW, 100-7500 U/min

servo motor with frequency converter

WABECO PRECISION CNC MILLING MACHINES

OVERVIEW



CNC MILLING MACHINES CC-F1210 | CC-F1220 HS WITH DOVETAIL GUIDES

FROM PAGE 68

CONTROLLER AND MILLING SOFTWARE

NCCAD BASIC

controller and milling software
with trapezoidal thread spindles optional
ball screws

NCCAD PROFI

controller and milling software
with ball screws

WORKING RANGE

longitudinal travel X-axis 500 mm
transverse travel Y-axis 150 mm
vertical travel Z-axis 280 mm

CLAMPING TABLE

700 x 180 mm

TOOL HOLDER

MT2 optional ISO30

MAIN DRIVE MOTOR

CC-F1210

1.4 kW, 140-3000 U/min
single-phase series-wound motor

CC-F1220 HS

2.5 kW, 100-7500 U/min
servo motor with frequency converter



CNC MILLING MACHINES CC-F1410 LF | CC-F1420 LF HS WITH LINEAR GUIDES

FROM PAGE 68

CONTROLLER AND MILLING SOFTWARE

NCCAD BASIC

controller and milling software
with trapezoidal thread spindles optional
ball screws

NCCAD PROFI

controller and milling software
with ball screws

WORKING RANGE

longitudinal travel X-axis 500 mm
transverse travel Y-axis 200 mm
vertical travel Z-axis 280 mm

CLAMPING TABLE

700 x 180 mm

TOOL HOLDER

MT2 optional ISO30

MAIN DRIVE MOTOR

CC-F1410 LF

1.4 kW, 140-3000 U/min
single-phase series-wound motor

CC-F1420 LF HS

2.5 kW, 100-7500 U/min
servo motor with frequency converter

WABECO PRECISION MILLING MACHINES

TECHNICAL DETAILS

WABECO - MADE IN GERMANY

- WABECO quality – durable, innovative, reliable
- developed and manufactured in Germany
- highest precision for industry, workshops, education, hobbies and model making
- In special machine construction, we realize individual requirements with technical expertise and passion.

VERTICAL MILLING MACHINES

- for processing metal, non-ferrous metal and plastics

INGENIOUS

- ideally suitable as a drilling machine thanks to the quill stroke with drilling depth stop

MACHINE PRECISION

- according to DIN 8615

MAIN DRIVE MOTOR

- with overload protection
- dynamic torque throughout the entire speed range
- high torque even in the lowest speed range, e.g. for machining difficult-to-cut materials

1.4 kW, 230 V, 50/60 Hz

- single-phase series-wound motor as direct current model
- with closed loop rpm control system
- electronically infinitely variable drive **140 - 3000 rpm**

2.5 kW, 230 V, 50/60 Hz

- servo motor with frequency converter
- due to high speed suitable for small tools e.g. engraving work
- brushless
- left-right rotation for thread cutting
- electronically infinitely variable drive **100 - 7500 rpm**

SILENT RUNNING

- extremely silent running due to innovative belt drive

DRIVE TECHNOLOGY

- with multiple fault monitoring circuit
e.g. milling in steel with a shank cutter Ø 10 mm with one infeed approx. 10 mm

MILLING HEAD

- milling head can be swivelled through 90° on both sides (-90° to +90°)
- angle position easily read off of the large scale
- vertical position can be preset by means of a hardened and ground conical index pin
- protective hood

QUILL STROKE

- quill stroke with drilling depth stop
- form-fit clamping of the quill over the entire lateral surface

TOOL SPINDLE

- with readjustable anti-friction bearings arranged in a large dimensioned drilling- and milling quill
- wide toothed belt between motor and tool spindle ensures a slip-free drive and a smooth running

TOOL HOLDER

- **MT2** with tightening thread M10
- **steep taper ISO30** (DIN 2080) with tightening thread M12

TOOL CLAMPING AND EJECTING SYSTEM

- for clamping and ejecting the tools without extra effort

Z-COLUMN AND BASE PLATE

- made of ribbed gray cast iron

FINE FEED Z-AXIS

GUIDES

Dovetail guides

- free of play adjustable in all axes
- high workpiece accuracy
- 2 folding bellows for guide protection

Linear guides

- maintenance-free
- hardened and ground in all axes
- 2 with free of play ball guides
- high precision and rigidity
- very high workpiece accuracy
- 4 folding bellows for guide protection

AXES LOCKING DEVICE

- clean milling surface by fixing the individual axes

FEED SCREWS

Trapezoidal thread spindles

- readjustable by means of adjustable bronze double nuts
- reading accuracy of the scale rings 0.05 mm

Ball screws

- high precision pitch and positioning accuracy
- wear-free
- free of play
- synchronous and up-cut milling
- reading accuracy of the scale rings 0.05 mm
- counterbalance adjustment in the Z-axis with milling machines with linear guides

SPECIAL EQUIPMENT AND ACCESSORIES

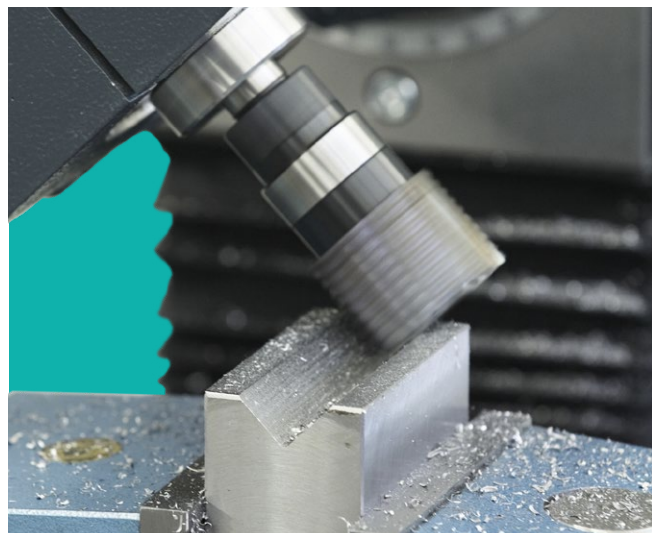
- individually configurable
- Expandable. Customizable. Precisely tailored to your requirements.

FURTHER TECHNICAL DATA

- can be found starting on page 54

WARRANTY

- 5 years warranty - not for wearing parts
- delivery of spare parts guaranteed even after years



MILLING MACHINES

TECHNICAL DATA

WORKING RANGE

longitudinal travel X-axis

transverse travel Y-axis

vertical travel Z-axis

quill stroke

distance milling table - tool spindle

outreach tool spindle - column

CLAMPING TABLE

clamping table

number of T-slots

width of T-slots

center distance between T-slots

MAIN DRIVE MOTOR

single-phase series-wound motor 230 V, 50/60 Hz

servo motor with frequency converter 230 V, 50/60 Hz

electronically infinitely variable drive

QUILL STROKE

reading accuracy scale ring - quill stroke

TOOL SPINDLE

true running accuracy of the tool spindle

TOOL HOLDER

morse taper MT2 with tightening thread M10

steep taper ISO30 (DIN 2080) with tightening thread M12

GUIDES

dovetail guides

linear guides

FEED SCREWS

trapezoidal thread spindles in all axes

ball screws in all axes

counterbalance adjustment in the Z-axis

DIMENSIONS AND WEIGHT

machine dimensions without packaging

weight without packaging

subject to technical changes

F1200	F1202 HS	F1210	F1220 HS	F1410 LF	F1420 LF HS
-------	----------	-------	----------	----------	-------------

260 mm	500 mm	500 mm
150 mm optional 180 mm	150 mm optional 180 mm	200 mm
280 mm	280 mm	280 mm
55 mm	55 mm	55 mm
min. 100 mm max. 380 mm	min. 90 mm max. 370 mm	min. 60 mm max. 340 mm
185 mm	185 mm	185 mm

450 x 180 mm	700 x 180 mm	700 x 180 mm
3	3	3
12 mm	12 mm	12 mm
50 mm	50 mm	50 mm

1.4 kW	☐	1.4 kW	☐	1.4 kW	☐
☐	2.5 kW	☐	2.5 kW	☐	2.5 kW
140 - 3000 rpm	100 - 7500 rpm	140 - 3000 rpm	100 - 7500 rpm	140 - 3000 rpm	100 - 7500 rpm

0.1 mm	0.1 mm	0.1 mm
--------	--------	--------

0.01 mm	0.01 mm	0.01 mm
---------	---------	---------

☒	☒	☒
alternatively	alternatively	alternatively

☒	☒	☐
☐	☐	☒

☒	☒	☒
optional	optional	optional
☐	☐	☒

W650 x D625 x H700 mm	W650 x D625 x H900 mm	W900 x D625 x H700 mm	W900 x D625 x H900 mm	W940 x D890 x H770 mm	W940 x D890 x H900 mm
85 kg	96 kg	101 kg	112 kg	118 kg	127 kg

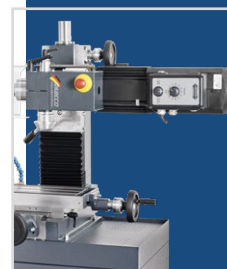
☒ yes ☐ no

MILLING MACHINES F1200 | F1202 HS

WITH DOVETAIL GUIDES

DRILLING AND MILLING MACHINES F1200 | F1202 HS

- with dovetail guides
- **F1200**
1.4 kW, 140 - 3000 rpm
single-phase series-wound motor
- **F1202 HS**
2.5 kW, 100 - 7500 rpm
servo motor with frequency converter
- trapezoidal thread spindles
- tool holder MT2
tool holder ISO30
- clamping table 450 x 180 mm
- longitudinal travel X-axis **260 mm**
- transverse travel Y-axis 150 mm
- vertical travel Z-axis 280 mm



F1200

Drilling and milling machine F1200
with tool holder **MT2**
main drive motor **1.4 kW**

order no. 11200V

2,799.00 € | 3,724.70 €

Drilling and milling machine F1200
with tool holder **ISO30**
main drive motor **1.4 kW**

order no. 11206V

2,949.00 € | 3,843.70 €

F1202 HS

Drilling and milling machine F1202 HS
with tool holder **MT2**
main drive motor **2.5 kW**

order no. 11202V

4,699.00 € | 6,009.50 €

Drilling and milling machine F1202 HS
with tool holder **ISO30**
main drive motor **2.5 kW**

order no. 11216V

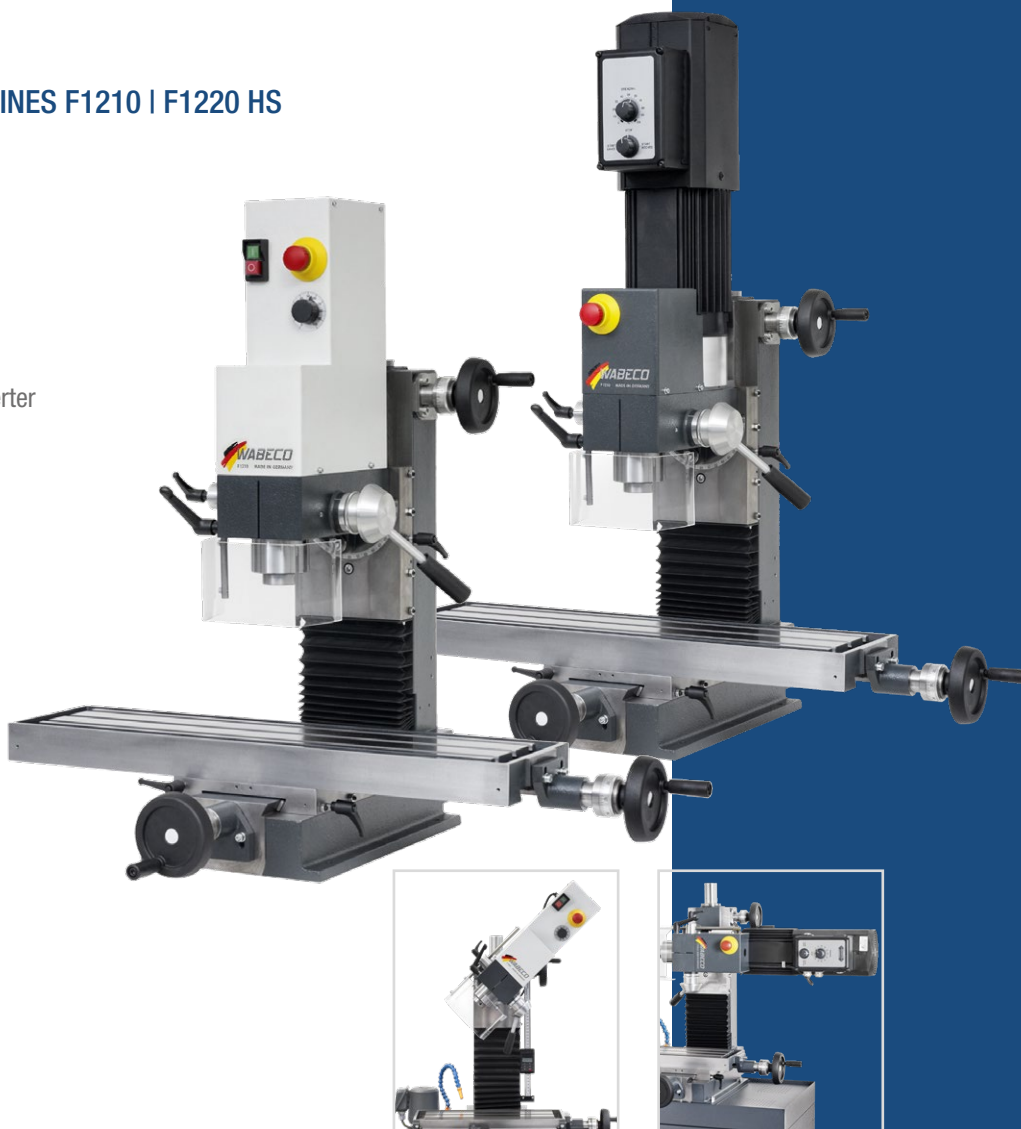
4,849.00 € | 6,128.50 €

MILLING MACHINES F1210 | F1220 HS

WITH DOVETAIL GUIDES

DRILLING AND MILLING MACHINES F1210 | F1220 HS

- with dovetail guides
- **F1210**
1.4 kW, 140 - 3000 rpm
single-phase series-wound motor
- **F1220 HS**
2.5 kW, 100 - 7500 rpm
servo motor with frequency converter
- trapezoidal thread spindles
- tool holder MT2
tool holder ISO30
- clamping table 700 x 180 mm
- longitudinal travel X-axis 500 mm
- transverse travel Y-axis 150 mm
- vertical travel Z-axis 280 mm



F1210

Drilling and milling machine F1210
with tool holder **MT2**
main drive motor **1.4 kW**

order no. 11400V

2,999.00 € | 3,867.50 €

Drilling and milling machine F1210
with tool holder **ISO30**
main drive motor **1.4 kW**

order no. 11406V

3,149.00 € | 3,986.50 €

F1220 HS

Drilling and milling machine F1220 HS
with tool holder **MT2**
main drive motor **2.5 kW**

order no. 11402V

4,899.00 € | 6,128.50 €

Drilling and milling machine F1220 HS
with tool holder **ISO30**
main drive motor **2.5 kW**

order no. 11416V

5,049.00 € | 6,247.50 €

MILLING MACHINES F1410 LF | F1420 LF HS WITH LINEAR GUIDES

DRILLING AND MILLING MACHINES F1410 LF

- with linear guides
- **F1410 LF**
1.4 kW, 140 - 3000 rpm
single-phase series-wound motor
- **F1420 LF HS**
2.5 kW, 100 - 7500 rpm
servo motor with frequency converter
- trapezoidal thread spindles
- tool holder MT2
tool holder ISO30
- clamping table 700 x 180 mm
- longitudinal travel X-axis 500 mm
- transverse travel Y-axis 200 mm
- vertical travel Z-axis 280 mm



F1410 LF

Drilling and milling machine F1410 LF
with tool holder **MT2**
main drive motor **1.4 kW**

order no. 16400V

5,499.00 € | 7,259.00-€

Drilling and milling machine F1410 LF
with tool holder **ISO30**
main drive motor **1.4 kW**

order no. 16406V

5,649.00 € | 7,378.00-€

F1420 LF HS

Drilling and milling machine F1420 LF HS
with tool holder **MT2**
main drive motor **2.5 kW**

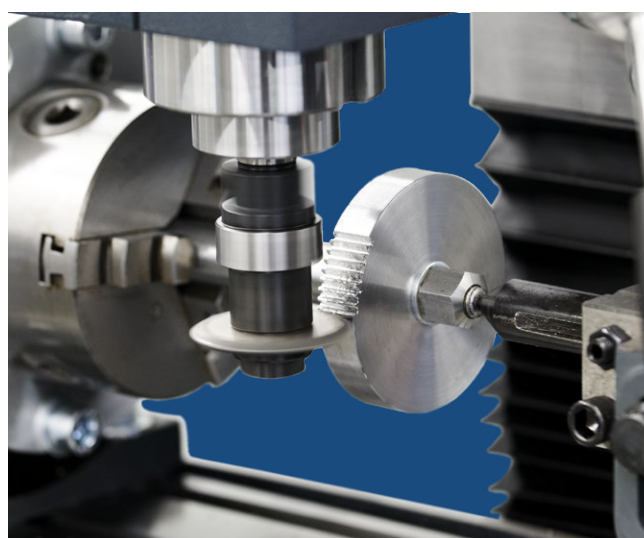
order no. 16402V

7,599.00 € | 9,996.00-€

Drilling and milling machine F1420 LF HS
with tool holder **ISO30**
main drive motor **2.5 kW**

order no. 16416V

7,749.00 € | 10,115.00-€



AUTOMATIC FEEDS

FOR DRILLING AND MILLING MACHINES

CONTROL UNIT AND ELECTRONIC HANDHELD CONTROL PANEL FOR AUTOMATIC FEEDS

- the control unit and electronic handheld control panel can be used to control the automatic feeds of the X, Y, and/or Z axes
- selection between automatic feed and manual operation
- improved surface quality due to constant feed rate

CONTROL UNIT

- 230V, 50/60 Hz
- ON/OFF switch
- 3 plug connections for X-, Y- and Z-axis
- 1 plug connection for the electronic handheld control panel
- high-quality aluminum housing

ELECTRONIC HANDHELD CONTROL PANEL

- potentiometer for adjusting the travel speed
- 5 - 1600 mm/min travel speed with trapezoidal thread spindles
- 5 - 2000 mm/min travel speed with ball screws
- selector switch for X-, Y- and Z-axes
- push button for selection of the traversal direction
- for safety reasons, the milling machine will only traverse if the push button is pressed
- robust aluminum console housing

NEW



NEW



order no. 11280 **459.00 €** | 546.21-€

FEED MOTORS FOR AUTOMATIC FEEDS

- for X-, Y- and Z-axis
- powerful stepper motor for moving the axes
- each axis can be retrofitted individually



Autom. feed X-axis	order no. 11281	349.00 €	427.21-€
Autom. feed Y-axis	order no. 11282	349.00 €	427.21-€
Autom. feed Z-axis	order no. 11283	349.00 €	427.21-€
Factory installation price per axis	order no. 11284	59.00 €	71.40-€

PRECISE POSITIONING & MACHINING

DIGITAL MEASURING SYSTEMS

MOUNTABLE DIGITAL VERNIER SCALES

X-, Y- AND Z-AXIS

- factory installed

Application

- for precise machining of the workpieces
- for precise and exact positioning

Mountable digital vernier scales

- 5-digit LCD display
- 0.01 mm reading accuracy
- reversible metric/inch
- zero position
- mini-USB interface for position readout
- made of hardened steel

order no. 11225 **419.00 €** | 454.58-€

F1200

F1202 HS

order no. 11425 **449.00 €** | 505.75-€

F1210

F1220 HS



CUSTOMER INSTALLATION

MOUNTABLE DIGITAL VERNIER SCALES

- holes and threads must be attached to the milling machine by the customer

included in delivery

- mountable digital vernier scale X-Achse
- mountable digital vernier scale Y-Achse
- mountable digital vernier scale Z-Achse
- mounting kit for mountable vernier scales

order no. 11297 **319.00 €** | 335.58-€

F1200

F1202 HS

order no. 11497 **349.00 €** | 386.75-€

F1210

F1220 HS

PRECISE POSITIONING & MACHINING

DIGITAL MEASURING SYSTEMS

DIGITAL POSITION READOUT (DRO) AND OPTICAL SCALES

X-, Y- AND Z-AXIS

- factory installed

Application

- for exact positioning of the workpieces
- absolute repeatability
- for precise, fast and safe manufacturing
- quick set up due to exact positioning

Digital position readout (DRO)

- diameter or radius display
- color display, 7-digit position indicator, resolution 0.005 mm
- reversible metric/inch
- reversible count direction by means of operation sign change
- coordinate value setting or zero setting
- incremental or absolute measurement input
- tool memory for 100 tools
- the data remains stored in the read-only memory in the event of a power failure
- function for lathes and milling machines
- optical scales protected against shock and dirt
- ergonomically designed folio keyboard, protected against dust and splash water
- trigonometric functions (sin, cos, tan)
- pitch circle calculation with indication of individual coordinates



order no. 11226	1,049.00 € 1,309.00-€	F1200	F1202 HS
order no. 11426	1,099.00 € 1,404.20-€	F1210	F1220 HS
order no. 16426	1,099.00 € 1,404.20-€	F1410	F1420 HS

CUSTOMER INSTALLATION

DIGITAL POSITION READOUT (DRO) AND OPTICAL SCALES

- holes and threads must be attached to the milling machine by the customer

included in delivery

- digital position readout (DRO)
- optical scale X-axis
- optical scale Y-axis
- optical scale Z-axis
- mounting kit for digital position readout and optical scales

order no. 11287	949.00 € 1,190.00-€	F1200	F1202 HS
order no. 11487	999.00 € 1,285.20-€	F1210	F1220 HS
order no. 16487	999.00 € 1,285.20-€	F1410	F1420 HS

SPECIAL EQUIPMENT

DRILLING AND MILLING MACHINES

BALL SCREWS

X- AND Y-AXIS

- factory installed
- not retrofittable
- high precision pitch and positioning accuracy
- wear-free
- synchronous and up-cut milling
- free of play

order no. 11244	550.00 €		737.80 €	F1200	F1202 HS
order no. 11444	650.00 €		849.66 €	F1210	F1220 HS
order no. 16444	840.00 €		1,094.80 €	F1410	F1420 HS



BALL SCREWS

X-, Y- AND Z-AXIS

- factory installed
- not retrofittable
- high precision pitch and positioning accuracy
- wear-free
- synchronous and up-cut milling
- free of play

F1410 LF | F1420 LF HS

- with counterbalance adjustment in the Z-axis

order no. 11245	850.00 €		1,094.80 €	F1200	F1202 HS
order no. 11445	950.00 €		1,206.66 €	F1210	F1220 HS
order no. 16445	1,350.00 €		1,689.80 €	F1410	F1420 HS



CLOCKWISE AND COUNTER CLOCKWISE ROTATION OF THE WORK SPINDLE

- factory installed
 - retrofittable
- Application**
- for thread cutting

order no. 11234	79.00 €		90.44 €	only with 1.4 kW motor
-----------------	----------------	--	---------	-------------------------------



SPECIAL EQUIPMENT

DRILLING AND MILLING MACHINES

Y-EXTENSION FOR EXTENDED Y-TRAVEL

- factory installed
- not retrofittable

Application

- max. travel path 180 mm
- for a larger working range

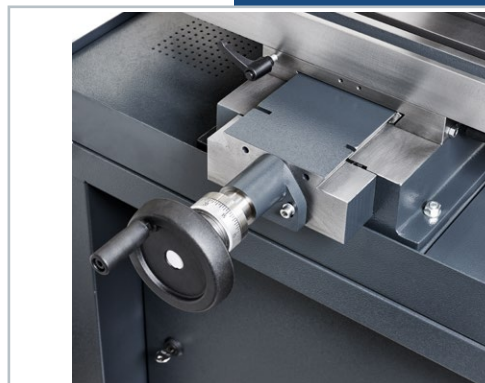
order no. 11235 **399.00 €** | ~~476.00 €~~

F1200

F1202 HS

F1210

F1220 HS



CHIP TRAY

- dimensions W700 x D465 x H19 mm
- weight 5.6 kg

Application

- for the containing of swarfs and coolant lubricants at the working range of the milling machine

order no. 11262 **69.00 €** | ~~94.01 €~~

NEW



fig. chip tray with splash guard

SPLASH GUARD

- dimensions W697 x D50 x H450 mm
- weight 4.3 kg

Application

- for the containing of swarfs and coolant lubricants at the working range of the milling machine

suitable for

- Chip tray order no. 11262
- Coolant unit order no. 11264

order no. 11263 **69.00 €** | ~~94.01 €~~

COOLANT UNIT

- with feed pump 230 V, 50/60 Hz
- flexible hose with stop valve and nozzle
- capacity coolant: 13 liters
- dimensions W700 x D445 x H258 mm
- weight 20 kg

Application

- for cooling and lubrication
- e.g. when processing high-alloy steel and aluminum, improves the surface finish, increases tool endurance, prevents build-up edges

order no. 11264 **459.00 €** | ~~618.80 €~~



COOLANT RETURN PLATE

- dimensions W285 x D300 x H17.5 mm

Application

- is hooked into the coolant unit
- the coolant is returned to the coolant unit

order no. 11265 **49.00 €** | ~~55.93-€~~

F1210

F1220 HS

F1410

F1420 HS



MACHINE BASE CABINET

- with lockable door and 1 shelf
- dimensions W700 x D445 x H850 mm
- weight 46 kg

order no. 11267 **499.00 €** | ~~593.81-€~~



LEVELLING ELEMENT

- vibration pick-up and absorption element
- for precise height adjustment on uneven grounds
- Ø 80 mm, thread M10
- prevents the machine base cabinet from moving
- 4 levelling elements per machine base cabinet
- PU: 1 piece

order no. 10268 **19.00 €** | ~~24.99-€~~



MOUNTING BRACKET FOR DRIVE UNITS

- mounting bracket with Euronorm mounting Ø 43 mm
- swiveling feature 90° in both directions (-90° to +90°)
- outreach 185 mm
- dimensions W120 x D235 x H120 mm

Application

- for the mounting of high speed motors, high frequency spindles, drilling machines etc. (not part of the delivery)
- for the use of very small tools
- areas of application are miniature modelling, production of printed circuit boards, dental technology etc.

order no. 11238 **195.00 €** | ~~240.38-€~~



ACCESSORIES

DRILLING AND MILLING MACHINES

TOOL SET

- toolmakers vice, jaw width 63 mm
- step clamp set 58 pieces
for 12 mm T-slot and M10 thread
- mill set „TITANIUM“-coated 12 pieces
- collet chuck with key
- 3 collets Ø 6, 10 and 12 mm

Tool set - MT2

for all milling machines with tool holder MT2

- collet chuck MT2 tightening thread M10

order no. 11999 **230.00 €** | 321.30-€

Tool set - ISO30

for all milling machines with tool holder ISO30

- collet chuck ISO30 tightening thread M12

order no. 11998 **236.00 €** | 333.20-€



fig. MT2

TOOL SET

- 1-axis machine vice 100 mm
- mill set „TITANIUM“-coated 20 pieces
- collet set with collet chuck 16 pieces
- step clamp set 58 pieces
for 12 mm T-slot and M10 thread
- quick-action drill chuck clamping width 1 - 13 mm, inner taper B16
with drill chuck arbor

Tool set - MT2

for all milling machines with tool holder MT2

- collet chuck MT2 tightening thread M10
- drill chuck arbor MT2 tightening thread M10

order no. 11997 **403.00 €** | 571.20-€

Tool set - ISO30

for all milling machines with tool holder ISO30

- collet chuck ISO30 tightening thread M12
- drill chuck arbor ISO30 tightening thread M12

order no. 11996 **423.00 €** | 606.90-€

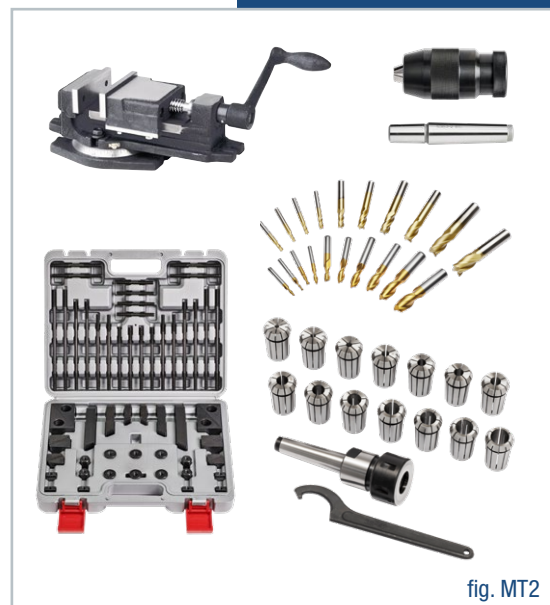


fig. MT2

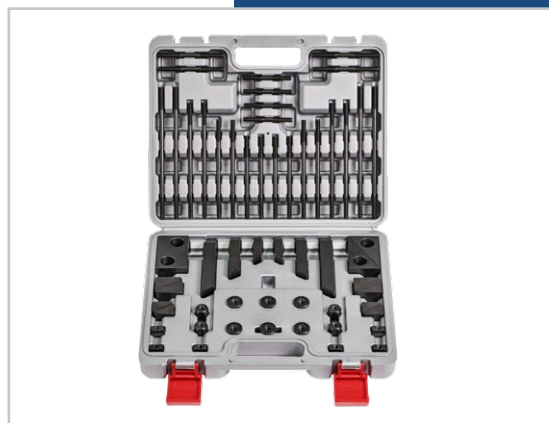
STEP CLAMP SET 58 PIECES

- for 12 mm T-slot width and M10 thread

included in delivery

- 12 step blocks with stepped teeth
- 6 step clamps
- 6 flange nuts
- 6 T-slot nuts
- 24 studs
- 4 extension nuts

order no. 24413 **39.99 €** | ~~52.36 €~~



1-AXIS MACHINE VICE

- Original Vertex
- made of high-quality cast iron
- with adjustable guides
- hardened and ground steel jaws
- ground guiding surface
- 1 axis with degree scale
- rotating by 360°

jaw width	100 mm
clamping width	65 mm
jaw height	36 mm
weight	9.6 kg

order no. 40540 **198.99 €** | ~~255.85 €~~



TOOLMAKERS VICES

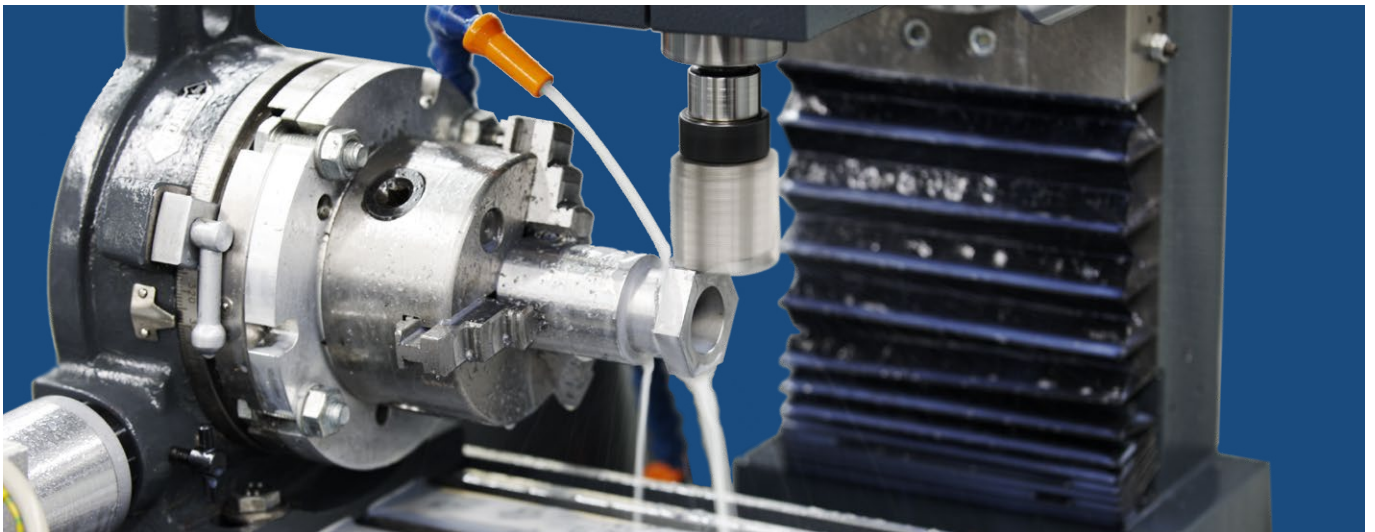
- made of hardened steel
- all sides ground
- with prism jaw
- accuracy 0.005 mm



	no. 40588	no. 40590	no. 40591	no. 40592	no. 40594
jaw width	25 mm	50 mm	63 mm	88 mm	125 mm
clamping width	20 mm	70 mm	87 mm	125 mm	160 mm
jaw height	9 mm	25 mm	32 mm	40 mm	50 mm
weight	0.2 kg	1.5 kg	2.8 kg	6.7 kg	14.5 kg
	27.99 €	39.99 €	46.49 €	89.49 €	199.99 €
	46.41 €	71.40 €	77.35 €	151.13 €	285.60 €

PRECISION CNC MILLING MACHINES

EXAMPLES OF USE





PRECISION CNC MILLING MACHINES

TECHNICAL DETAILS

WABECO - MADE IN GERMANY

- WABECO quality – durable, innovative, reliable
- developed and manufactured in Germany
- highest precision for industry, workshops, education, hobbies, and model making
- In special machine construction, we realize individual requirements with technical expertise and passion.

VERTICAL CNC MILLING MACHINES

- for processing metal, non-ferrous metal and plastics

ADVANTAGE

- **the milling machines can be used in conventional as well as in CNC mode**

MACHINE PRECISION

- according to DIN 8615

MAIN DRIVE MOTORS

- with overload protection
- dynamic torque throughout the entire speed range
- high torque even in the lowest speed range, e.g. for machining difficult-to-cut materials

1.4 kW, 230 V, 50/60 Hz

- single-phase series-wound motor as direct current model
- with closed loop rpm control system
- electronically infinitely variable drive **140 - 3000 rpm**

2.5 kW, 230 V, 50/60 Hz

- servo motor with frequency converter
- due to high speed suitable for small tools e.g. engraving work
- brushless
- left-right rotation for thread cutting
- electronically infinitely variable drive **100 - 7500 rpm**

SILENT RUNNING

- extremely silent running due to innovative belt drive

DRIVE TECHNOLOGY

- with multiple fault monitoring circuit
e.g. milling in steel with a shank cutter Ø 10 mm with one infeed approx. 10 mm

MILLING HEAD

- milling head can be swivelled through 90° on both sides (-90° to +90°)
- angle position easily read off of the large scale
- vertical position can be preset by means of a hardened and ground conical index pin
- protective hood

QUILL STROKE

- quill stroke with drilling depth stop
- form-fit clamping of the quill over the entire lateral surface

TOOL SPINDLE

- with readjustable anti-friction bearings arranged in a large dimensioned drilling- and milling quill
- wide toothed belt between motor and tool spindle ensures a slip-free drive and a smooth running

TOOL HOLDER

- **MT2** with tightening thread M10
- **steep taper ISO30** (DIN 2080) with tightening thread M12

TOOL CLAMPING AND EJECTING SYSTEM

- for clamping and ejecting the tools without extra effort

Z-COLUMN AND BASE PLATE

- made of ribbed gray cast iron

FINE FEED Z-AXIS

GUIDES

Dovetail guides

- free of play adjustable in all axes
- high workpiece accuracy
- 2 folding bellows for guide protection

Linear guides

- maintenance-free
- hardened and ground in all axes
- 2 with free of play ball guides
- high precision and rigidity
- very high workpiece accuracy
- 4 folding bellows for guide protection

FEED SCREWS

Trapezoidal thread spindles

- readjustable by means of adjustable bronze double nuts
- reading accuracy of the scale rings 0.05 mm

Ball screws

- high precision pitch and positioning accuracy
- wear-free, free of play
- synchronous and up-cut milling
- reading accuracy of the scale rings 0.05 mm
- counterbalance adjustment in the Z-axis with CNC milling machines with linear guides

AXES LOCKING DEVICE

- clean milling surface by fixing the individual axes

HIGH-PERFORMANCE STEPPER MOTORS

- maintenance-free
- high feed and acceleration values
- high holding torque

TRAVEL SPEED (RAPID TRAVERSE)

nccad BASIC

- X- and Y-axis 30 - 600 mm/min
- Z-axis 30 - 400 mm/min

nccad PROFI

- X- and Y-Achse 30 - 1200 mm/min
- Z-axis 30 - 800 mm/min

MACHINE CONTROL PANEL

- with integrated machine operating elements

FURTHER TECHNICAL DATA

- can be found starting on page 72

WARRANTY

- 2 years warranty - not for wearing parts
- delivery of spare parts guaranteed even after years

NCCAD CONTROLLER AND MILLING SOFTWARE

nccad BASIC

- import and editing of 2D models
- 2½ D interpolation, i.e., 2 axes move simultaneously, the 3rd axis is fed
- the nccad CAM module is used to create a CNC program graphically
- contour creation with the nccad CAD module
- graphical simulation

nccad PROFI

- import and editing of 3D models
- 2½ D interpolation, i.e., 2 axes move simultaneously, the 3rd axis is fed
- control of the 4th axis
- the nccad CAM module is used to create a CNC program graphically
- contour creation with the nccad CAD module
- graphical simulation with 3D view
- automation and robotics - easy integration into automated production chains thanks to additional inputs and outputs, e.g., for controlling a pneumatic vice or a sliding door

PROGRAM CREATION (PC CONTROL)

- program creation and machine control of the CNC machine are carried out via a PC (PCs are not part of the delivery)
- the PC assumes the program creation, the program administration and the data archiving
- CNC programs can be created on several PCs independently from the CNC machine
- the user-friendly interface of the nccad software supports simple and fast program creation

DETAILED SOFTWARE DESCRIPTION

- can be found starting on page 86

SPECIAL EQUIPMENT AND ACCESSORIES

- individually configurable
- Expandable. Customizable. Precisely tailored to your requirements.

MACHINE SAFETY CABIN

- with integrated coolant unit
- optional

MEASURING SYSTEM

DIGITAL POSITION READOUT (DRO) AND OPTICAL SCALES

- for exact positioning of the workpieces
- absolute repeatability
- for precise, fast and safe manufacturing
- quick set up due to exact positioning

NC-ROTARY TABLE

- for 4-axes machining
- optional with nccad PROFI

ELECTRONIC HANDWHEEL

- for manually moving the axes
- for positioning of the axes during the setup mode (workpiece zero point)
- optional with nccad PROFI

CNC MILLING MACHINES

TECHNICAL DATA

WORKING RANGE

longitudinal travel X-axis

transverse travel Y-axis

vertical travel Z-axis

quill stroke

distance milling table - tool spindle

outreach tool spindle - column

CLAMPING TABLE

clamping table

number of T-slots

width of T-slots

center distance between T-slots

MAIN DRIVE MOTOR

single-phase series-wound motor 230 V, 50/60 Hz

servo motor with frequency converter 230 V, 50/60 Hz

electronically infinitely variable drive

QUILL STROKE

reading accuracy scale ring - quill stroke

TOOL SPINDLE

true running accuracy of the tool spindle

TOOL HOLDER

morse taper MT2 with tightening thread M10

steep taper ISO30 (DIN 2080) with tightening thread M12

GUIDES

dovetail guides

linear guides

FEED SCREWS

trapezoidal thread spindles in all axes

ball screws in all axes

counterbalance adjustment in the Z-axis

HIGH-PERFORMANCE STEPPER MOTORS

in X-, Y- and Z-axis

maintenance-free

high feed and acceleration values

high holding torque

subject to technical changes

CC-F1210	CC-F1220 HS	CC-F1410 LF	CC-F1420 LF HS
----------	-------------	-------------	----------------

500 mm	500 mm
150 mm	200 mm
optional 180 mm	
280 mm	280 mm
55 mm	55 mm
min. 90 mm - max. 370 mm	min. 60 mm - max. 340 mm
185 mm	185 mm

700 x 180 mm	700 x 180 mm
3	3
12 mm	12 mm
50 mm	50 mm

1.4 kW	☐	1.4 kW	☐
☐	2.5 kW	☐	2.5 kW
140 - 3000 rpm	100 - 7500 rpm	140 - 3000 rpm	100 - 7500 rpm

0.1 mm	0.1 mm
--------	--------

0.01 mm	0.01 mm
---------	---------

☒	☒
optional	optional

☒	☐
☐	☒

with nccad BASIC	with nccad BASIC
with nccad PROFI	with nccad PROFI
☐	☒

☒	☒
☒	☒
☒	☒
☒	☒

☒ yes ☐ no

CNC MILLING MACHINES

TECHNICAL DATA

TRAVEL SPEED (RAPID TRAVERSE)

X- and Y-axis mm/min

Z-axis mm/min

X- and Y-axis mm/min

Z-axis mm/min

LIMIT SWITCHES

in X-, Y- and Z-axis

mechanical single limit switches

DIMENSIONS AND WEIGHT

machine dimensions without packaging

weight without packaging

subject to technical changes

MACHINE SAFETY CABIN (OPTIONAL)

capacity coolant

dimensions without packaging

weight without packaging

NC-ROTARY TABLE (OPTIONAL)

table diameter

height

T-slot width

number of T-slots

spindle bore continuous

true running accuracy

weight without packaging

subject to technical changes

CC-F1210	CC-F1220 HS	CC-F1410 LF	CC-F1420 LF HS
----------	-------------	-------------	----------------

nccad BASIC 30 - 600	nccad BASIC 30 - 600
nccad BASIC 30 - 400	nccad BASIC 30 - 400
nccad PROFI 30 - 1200	nccad PROFI 30 - 1200
nccad PROFI 30 - 800	nccad PROFI 30 - 800

●	●
●	●

W900 x D625 x H700 mm	W900 x D625 x H900 mm	W940 x D890 x H770 mm	W940 x D890 x H900 mm
129 kg	140 kg	146 kg	155 kg

● yes ○ no

42 liters	58 liters
W1500 x D700 x H475 mm	W1530 x D950 x H475 mm
83 kg	109 kg

150 mm	150 mm
80 mm	80 mm
10 mm	10 mm
3	3
MT2	MT2
0.02 mm	0.02 mm
14 kg	14 kg

● yes ○ no

CNC MILLING MACHINES CC-F1210

WITH DOVETAIL GUIDES

CNC MILLING MACHINES CC-F1210

- **CC-F1210 BASIC**
nccad BASIC controller and milling software
with trapezoidal thread spindles
- **CC-F1210 PROFI**
nccad PROFI controller and milling software
with ball screws
- with dovetail guides
- **1.4 kW, 140 - 3000 rpm**
single-phase series-wound motor
- tool holder **MT2**
tool holder **ISO30**
- clamping table 700 x 180 mm
- longitudinal travel X-axis 500 mm
- transverse travel Y-axis 150 mm
- vertical travel Z-axis 280 mm
- **milling machine can be used in conventional
as well as in CNC mode**



CC-F1210 BASIC

CNC milling machine CC-F1210
with tool holder **MT2**
trapezoidal thread spindles

order no. 1140050V

6,550.00 € | 7,723.10 €

CNC milling machine CC-F1210
with tool holder **ISO30**
trapezoidal thread spindles

order no. 1140051V

6,700.00 € | 7,901.60 €

CC-F1210 PROFI

CNC milling machine CC-F1210 KRS
with tool holder **MT2**
ball screws

order no. 1140011V

8,990.00 € | 10,579.10 €

CNC milling machine CC-F1210 KRS
with tool holder **ISO30**
ball screws

order no. 1140012V

9,140.00 € | 10,757.60 €

CNC MILLING MACHINES CC-F1220 HS

WITH DOVETAIL GUIDES

CNC MILLING MACHINES CC-F1220 HS

- **CC-F1220 HS BASIC**
nccad BASIC controller and milling software
with trapezoidal thread spindles
- **CC-F1220 HS PROFI**
nccad PROFI controller and milling software
with ball screws
- with dovetail guides
- **2.5 kW, 100 - 7500 rpm**
servo motor with frequency converter
- tool holder **MT2**
tool holder **ISO30**
- clamping table 700 x 180 mm
- longitudinal travel X-axis 500 mm
- transverse travel Y-axis 150 mm
- vertical travel Z-axis 280 mm
- **milling machine can be used in conventional
as well as in CNC mode**



CC-F1220 HS BASIC

CNC milling machine CC-F1220 HS
with tool holder **MT2**
trapezoidal thread spindles

order no. 1140052V

8,380.00 € | 9,865.10 €

CNC milling machine CC-F1220 HS
with tool holder **ISO30**
trapezoidal thread spindles

order no. 1140053V

8,530.00 € | 10,043.60 €

CC-F1220 HS PROFI

CNC milling machine CC-F1220 HS KRS
with tool holder **MT2**
ball screws

order no. 1140013V

10,810.00 € | 12,721.10 €

CNC milling machine CC-F1220 HS KRS
with tool holder **ISO30**
ball screws

order no. 1140014V

10,960.00 € | 12,899.60 €

CNC MILLING MACHINES CC-F1410 LF WITH LINEAR GUIDES

CNC MILLING MACHINES CC-F1410 LF

- **CC-F1410 LF BASIC**
nccad BASIC controller and milling software
with trapezoidal thread spindles
- **CC-F1410 LF PROFI**
nccad PROFI controller and milling software
with ball screws
- with linear guides
- **1.4 kW, 140 - 3000 rpm**
single-phase series-wound motor
- tool holder **MT2**
tool holder **ISO30**
- clamping table 700 x 180 mm
- longitudinal travel X-axis 500 mm
- transverse travel Y-axis 200 mm
- vertical travel Z-axis 280 mm
- **milling machine can be used in conventional
as well as in CNC mode**



CC-F1410 LF BASIC

CNC milling machine CC-F1410 LF
with tool holder **MT2**
trapezoidal thread spindles

order no. 1640050V

8,380.00 € | 9,865.10 €

CNC milling machine CC-F1410 LF
with tool holder **ISO30**
trapezoidal thread spindles

order no. 1640051V

8,530.00 € | 10,043.60 €

CC-F1410 LF PROFI

CNC milling machine CC-F1410 LF KRS
with tool holder **MT2**
ball screws

order no. 1640011V

12,020.00 € | 12,959.10 €

CNC milling machine CC-F1410 LF KRS
with tool holder **ISO30**
ball screws

order no. 1640012V

12,170.00 € | 13,137.60 €

CNC MILLING MACHINES CC-F1420 LF HS WITH LINEAR GUIDES

CNC MILLING MACHINES CC-F1420 LF HS

- **CC-F1420 LF HS BASIC**
nccad BASIC controller and milling software
with trapezoidal thread spindles
- **CC-F1420 LF HS PROFI**
nccad PROFI controller and milling software
mit Kugelrollspindel
- with linear guides
- **2.5 kW, 100 - 7500 rpm**
servo motor with frequency converter
- tool holder **MT2**
tool holder **ISO30**
- clamping table 700 x 180 mm
- longitudinal travel X-axis 500 mm
- transverse travel Y-axis 200 mm
- vertical travel Z-axis 280 mm
- **milling machine can be used in conventional
as well as in CNC mode**



CC-F1420 LF HS BASIC

CNC milling machine CC-F1420 LF HS
with tool holder **MT2**
trapezoidal thread spindles

order no. 1640052V

10,200.00 € | 11,911.90 €

CNC milling machine CC-F1420 LF HS
with tool holder **ISO30**
trapezoidal thread spindles

order no. 1640053V

10,350.00 € | 12,090.40 €

CC-F1420 LF HS PROFI

CNC milling machine CC-F1420 LF HS KRS
with tool holder **MT2**
ball screws

order no. 1640013V

13,840.00 € | 14,994.00 €

CNC milling machine CC-F1420 LF HS KRS
with tool holder **ISO30**
ball screws

order no. 1640014V

13,990.00 € | 15,172.50 €

SPECIAL EQUIPMENT

CNC MILLING MACHINES

BALL SCREWS

X-, Y- AND Z-AXIS

- factory installed
- not retrofittable
- high precision pitch and positioning accuracy
- wear-free
- synchronous and up-cut milling
- free of play

CC-F1410 LF | CC-F1420 LF HS

- with counterbalance adjustment in the Z-axis

order no. 1140445 **950.00 €** | 1,206.66-€

CC-F1210

CC-F1220 HS

order no. 1640445 **1,350.00 €** | 1,689.80-€

CC-F1410

CC-F1420 HS



Y-EXTENSION FOR EXTENDED Y-TRAVEL

- factory installed
- not retrofittable

Application

- max. travel path 180 mm
- for a larger working range

order no. 11235 **399.00 €** | 476.00-€

CC-F1210

CC-F1220 HS



NC-ROTARY TABLE

- table Ø 150 mm
- true running accuracy 0.02 mm
- only with machine safety cabin

Application

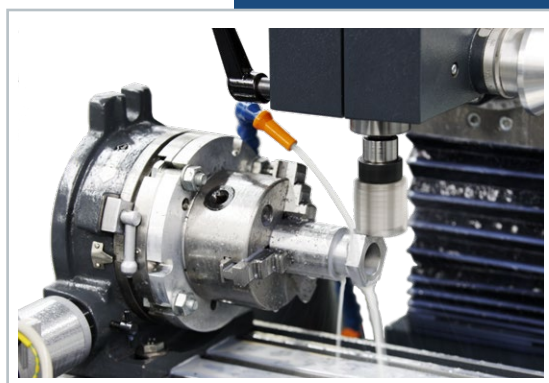
- for 4-axes machining
- essential for all-round machining in a single clamping operation
- can be mounted vertically or horizontally on the clamping table

Technical data

- see page 74

order no. 1140085 **899.00 €** | 1,059.10-€

nur PROFI



DIGITAL POSITION READOUT (DRO) AND OPTICAL SCALES X-, Y- AND Z-AXIS

- factory installed

Application

- for exact positioning of the workpieces
- absolute repeatability
- for precise, fast and safe manufacturing
- quick set up due to exact positioning

Digital position readout (DRO)

- diameter or radius display
- color display, 7-digit position indicator, resolution 0.005 mm
- reversible metric/inch
- reversible count direction by means of operation sign change
- coordinate value setting or zero setting
- incremental or absolute measurement input
- tool memory for 100 tools
- the data remains stored in the read-only memory in the event of a power failure
- function for lathes and milling machines
- optical scales protected against shock and dirt
- ergonomically designed folio keyboard, protected against dust and splash water
- trigonometric functions (sin, cos, tan)
- pitch circle calculation with indication of individual coordinates



order no. 1140426	1.099.00 € 1,404.20-€	CC-F1210	CC-F1220 HS
order no. 1640426	1.099.00 € 1,404.20-€	CC-F1410	CC-F1420 HS

CUSTOMER INSTALLATION

DIGITAL POSITION READOUT (DRO) AND OPTICAL SCALES

- holes and threads must be attached to the CNC milling machine by the customer

included in delivery

- digital position readout (DRO)
- optical scale X-axis
- optical scale Y-axis
- optical scale Z-axis
- mounting kit for position readout and optical scales

order no. 1640087	999.00 € 1,285.20-€	CC-F1410	CC-F1420 HS
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SPECIAL EQUIPMENT

CNC MILLING MACHINES

ELECTRONIC HANDWHEEL

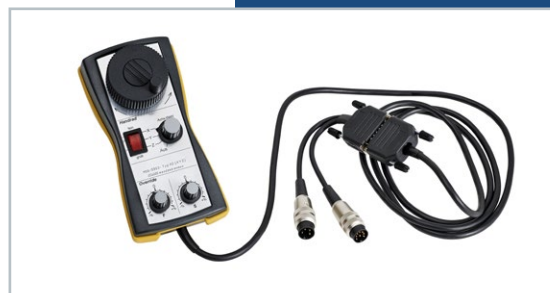
- electronic handwheel for X-, Y- and Z-axis

Application

- for manually moving the axes
- for positioning of the axes during the setup mode (workpiece zero point)

order no. 1140130 **669.00 €** | 772.31 €

nur PROFI



MACHINE SAFETY CABIN

- to prevent accidents
- with integrated coolant unit
- factory installed
- not retrofittable

Technical data

- see page 74

NOTE

- By connection the nccad controller to a PC by the customer and installing the nccad milling software, the conventional WABECO milling machine turns into a CNC milling machine. The milling machine connected in this way only fulfils the legal requirements when installed in a machine safety cabin. Without a machine safety cabin, the CNC milling machine is incomplete and therefore does not fulfil the CE directive. **An operation without a machine safety cabin involves considerable risks.**

order no. 1140090 **1,949.00 €** | 2,415.70 €

CC-F1210

CC-F1220 HS

order no. 1640090 **2,449.00 €** | 3,034.50 €

CC-F1410

CC-F1420 HS



ACCESSORIES

CNC MILLING MACHINES

MACHINE BASE CABINET

- with lockable door and 1 shelf
- dimensions W700 x D445 x H850 mm
- weight 46 kg

order no. 11267 **499.00 €** | 593.81-€



MACHINE BASE CABINET

- with 2 lockable doors and 1 shelf
 - dimensions W1060 x D445 x H850 mm
 - weight 58 kg
- suitable for
- WABECO CNC milling machines CC-F1210 | CC-F1220 HS with machine safety cabin

order no. 10267 **699.00 €** | 831.81-€

CC-F1210

CC-F1220 HS



MACHINE BASE CABINET

- with 2 lockable doors and 1 shelf
 - dimensions W1000 x D700 x H850 mm
 - weight 76 kg
- suitable for
- WABECO CNC milling machines CC-F1410 LF | CC-F1420 LF HS with machine safety cabin

order no. 11270 **949.00 €** | 1,069.81-€

CC-F1410

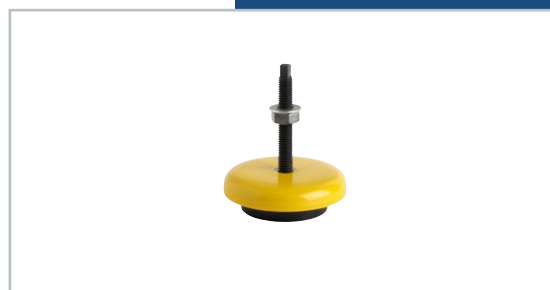
CC-F1420 HS



LEVELLING ELEMENT

- vibration pick-up and absorption element
- for precise height adjustment on uneven grounds
- Ø 80 mm, thread M10
- prevents the machine base cabinet from moving
- 4 levelling elements per machine base cabinet
- PU: 1 piece

order no. 10268 **19.00 €** | 24.99-€



ACCESSORIES

CNC MILLING MACHINES

TOOL SET

- toolmakers vice, jaw width 63 mm
- step clamp set 58 pieces
for 12 mm T-slot and M10 thread
- mill set „TITANIUM“-coated 12 pieces
- collet chuck with key
- 3 collets Ø 6, 10 and 12 mm

Tool set - MT2

for all milling machines with tool holder MT2

- collet chuck MT2 tightening thread M10

order no. 11999	230.00 €		321.30 €
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Tool set - ISO30

for all milling machines with tool holder ISO30

- collet chuck ISO30 tightening thread M12

order no. 11998	236.00 €		333.20 €
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fig. MT2

TOOL SET

- 1-axis machine vice 100 mm
- mill set „TITANIUM“-coated 20 pieces
- collet set with collet chuck 16 pieces
- step clamp set 58 pieces
for 12 mm T-slot and M10 thread
- quick-action drill chuck clamping width 1 - 13 mm, inner taper B16
with drill chuck arbor

Tool set - MT2

for all milling machines with tool holder MT2

- collet chuck MT2 tightening thread M10
- drill chuck arbor MT2 tightening thread M10

order no. 11997	403.00 €		571.20 €
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Tool set - ISO30

for all milling machines with tool holder ISO30

- collet chuck ISO30 tightening thread M12
- drill chuck arbor ISO30 tightening thread M12

order no. 11996	423.00 €		606.90 €
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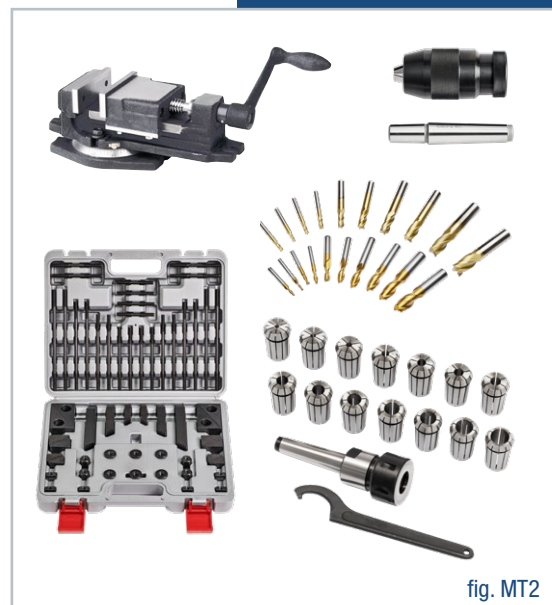


fig. MT2

1-AXIS MACHINE VICE

- original Vertex
- made of high-quality cast iron
- with adjustable guides
- hardened and ground steel jaws
- ground guiding surface
- 1 axis with degree scale
- rotating by 360°

jaw width	100 mm
clamping width	65 mm
jaw height	36 mm
weight	9.6 kg

order no. 40540 **198.99 €** | ~~255.85-€~~



TOOLMAKERS VICES

- made of hardened steel
- all sides ground
- with prism jaw
- accuracy 0.005 mm



	no. 40588	no. 40590	no. 40591	no. 40592	no. 40594
jaw width	25 mm	50 mm	63 mm	88 mm	125 mm
clamping width	20 mm	70 mm	87 mm	125 mm	160 mm
jaw height	9 mm	25 mm	32 mm	40 mm	50 mm
weight	0.2 kg	1.5 kg	2.8 kg	6.7 kg	14.5 kg
	27.99 €	39.99 €	46.49 €	89.49 €	199.99 €
	46.41-€	71.40-€	77.35-€	151.13-€	285.60-€

NCCAD CONTROLLER AND MILLING SOFTWARE

CNC MILLING MACHINES

NCCAD CONTROLLER	BASIC	PROFI
2½ D interpolation, i.e. 2 axes move simultaneously, the 3rd axis is fed	●	●
control of the 4th axis (NC-rotary table optional)	○	●
main spindle connectable via the control unit	●	●
manufacturing complex shapes	●	●
electronic handwheel (optional)	○	●
support of microstepping, i.e. smooth run and high position resolution	●	●
automation and robotics - easy integration into automated production chains thanks to additional inputs and outputs, e.g., for controlling a pneumatic vice or a sliding door	○	●
upgrade to nccad PROFI controller (prerequisite ball screws)	●	○

NCCAD MILLING SOFTWARE	BASIC	PROFI
DIALOG-ORIENTED OPERATOR GUIDANCE		
dialog-oriented operator guidance	●	●
PROGRAM INPUT		
manual program input according to DIN 66025 with G- and M-functions	●	●
the nccad CAM module is used to create a CNC program graphically according to DIN 66025 based on a previously created contour	●	●
CONTOUR CREATION BY USING THE INTEGRATED NCCAD CAD MODULE		
drawings can be created directly	●	●
coordinates can be entered or edited, e.g. commands can be changed, added and/or deleted	●	●
EDITING AND DATA TRANSFER		
import and editing of 2D models aus DXF files from a CAD system	●	●
import and editing of 2D models from HPGL files	●	●
import and editing of 3D models in STL format	○	●
CONTOUR CREATION BY USING AN EXTERNAL CAD SOFTWARE		
drawings can be created in any CAD program	●	●

NCCAD MILLING SOFTWARE	BASIC	PROFI
TECHNOLOGY VALUES		
input of technology values for the drawn contour e.g. feed, tool Ø, total depth, part in-feed, the lap- ping factor of the tool in the case of pocket milling, processing sequence etc., machining via single part, pocket angle parallel and contour parallel, track correction inside or outside	●	●
GRAPHICAL SIMULATION		
for easy checking of programming errors	●	●
GRAPHICAL SIMULATION WITH 3D VIEW		
simulation with the represented tool	○	●
for easy checking of programming errors	○	●
workpiece can be rotated during the simulation for a better view	○	●
MACHINE ZERO POINT		
machine zero point is interrogated by means of a reference travel via limit switches	●	●
WORKPIECE ZERO POINTS		
19 workpiece zero points can arbitrarily be set	●	●
TOOL ADMINISTRATION		
administration of up to max. 20 tools	○	●
definition of tools e.g. diameter, cutting edge length	○	●
MANUAL CONTROL PANEL		
for displacing the individual axes without inputting a program	●	●
direct input of the travel value either by means of the keyboard or the arrow keys in the manual control panel	●	●
display of the current values on the screen	●	●
NC-ROTARY TABLE - OPTIONAL		
programmable	○	●
NETWORK		
compatible	●	●
HELP		
manual integrated in the software	●	●
direct help via the F1 key for the functions displayed in the menu bar	●	●
SYSTEM REQUIREMENTS		
serial interface (RS232) recommended	●	●
graphic resolution 1024x768, operating system from Windows 8 onwards	●	●

many more offers and additional information

wabeco-remscheid.de

Special machine construction

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Visit us in Remscheid or Neuerburg and see the quality and precision of WABECO machines for yourself.

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WABECO

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