



EN

**FLOTT**  
Werkzeugmaschinen



**2023**  
**GENERAL CATALOG**



# MADE IN GERMANY

## High Quality. By Tradition.

In 1854, a small family company was set up in Remscheid which developed braces and breast drill machines of the highest quality and produced these for the German market.

With these products, the Arnz FLOTT company wrote industrial history and is therefore regarded in industry circles as a "pioneer" of drilling technology. Today, due to its formidable experience and product quality, the company enjoys a noted position on the international market. Always close to its customers. Because with its partners in Europe, FLOTT is not only one of the most traditional, but also Europe's leading manufacturer of state-of-the-art, high quality drilling, grinding and sawing machines.

## Tradition demands – innovation.

FLOTT never idles. As a future- and user-oriented company, FLOTT continuously invests nearly 5% of its annual turnover in its own research and development projects.

Permanent optimisations and, above all, intelligent, industry-oriented innovations in drilling, grinding and sawing technology – as evidenced by numerous patents, property rights, customer and design awards – are more than clear proof of the innovative strength and the legendary pioneering spirit of the company.

For the customers, the acquisition of a FLOTT machine, means being able to rely on having purchased a perfectly mature piece of drilling, grinding and sawing technology. The product always reflects the most state-of-the-art production technology. With a winning warranty thrown in: traditionally highest quality and service.

## Service determines – customer satisfaction.

Our experienced employees are ready for action every day to ensure that machines and devices are always up to date – or in the event of a repair that downtimes are reduced to a minimum.



# CONTENTS

## DRILLING TECHNOLOGY

Overview drilling machines .....	6-7
Drilling technology explanations .....	8-9
Vices [felix] 2.0 .....	10-11
Plus Series drilling machines .....	12-43
Classic drilling machines .....	44-57
Gear drilling machine .....	58-59
Multi-head drilling machines .....	60-61
Special equipment/accessories .....	62-71
Warranty extensions .....	72-73

## GRINDING TECHNOLOGY

Overview grinding machines .....	74-75
Double grinding machines .....	76-83
Combi belt grinder/grinder .....	84-85
Belt grinders .....	86-91
Brush deburring machines .....	92-95

## SAWING TECHNOLOGY

Overview saws .....	96-97
Horizontal band saws .....	98-115
Vertical band saw .....	116-117
Circular saw .....	118-119
Portable band saw .....	120-121
Accessories .....	122-123

## FLOTT INFORMATION

Overview information .....	124-125
FLOTT Safety .....	126
FLOTT Demonstration centres/Training centres/	
Service points .....	128
FLOTT Area support .....	129
FLOTT Service .....	130
FLOTT Extract/Terms of sale .....	131

# FLOTT-FAN ARTICLES

[www.flott.shop](http://www.flott.shop)



- ▶ In our new FLOTT-FAN SHOP you will find everything you need for your workshop. Mugs, folding rulers, pens, pads - pick out something you fancy!



A bench drill

# BEER TAP

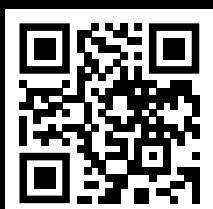
Ever seen one of those before?

- For all FLOTT fans, there is now the perfect addition to the workshop. You can get a freshly tapped, cool beer from our new table tap. The highlight for every party.
- The TZA 18 is a professional dispensing system with a cooling capacity of 18 litres of beer per hour.
- The system is supplied with an under-table unit, where there is plenty of room for the beer keg and the technology.



Only here: [www.flott.shop](http://www.flott.shop)

## THE TZA18



## Overview drilling machines

Machine	Drilling capacity/normal drilling performance in mm	Thread cutting performance	Revolutions per minute 1/min	Motor/FU kW	Page
<b>Drilling machines-Vice [felix] 2.0</b>					10
<b>TB 10 Eco Plus</b>	12		250-3,000	0.45 AC 230 V	14
<b>TB 10 Basic Plus</b>	12		250-3,000	0.45 AC 230 V	16
<b>TB 10 Plus</b>	10/12	max. M6	60-6,000	0.54 three-phase current, frequency-controlled, (network connection 230 V)	18
<b>Turbo drill</b>	6/8	max. M5	100-10,000	0.54 three-phase current, frequency-controlled, (network connection 230 V)	20
<b>TB/TBZ/SB 13 Plus</b>	13/15	max. M10	40-4,000	0.54 three-phase current, frequency-controlled, (network connection 230 V)	22
<b>TB/TBZ/SB 15 Plus</b>	15/18	max. M12	40-4,000	0.75 three-phase current, frequency-controlled, (network connection 230 V)	24
<b>TB/TBZ/SB 18 Plus</b>	18/20	max. M12	30-3,000	0.75 three-phase current, frequency-controlled, (network connection 230 V)	26
<b>TB/TBZ/SB 20 Plus</b>	20/23	max. M14	40-4,000	1.5 three-phase current, frequency-controlled, (400 V)	28
<b>TB/TBZ/SB 23 Plus</b>	R1 23/25 R2 20/23	R1 max. M16x 1 R2 max. M12	20-2,000 R1 30-3,000 R2	1.5 three-phase current, frequency-controlled, (400 V)	30
<b>TB/TBZ/SB 25 Plus</b>	R1 23/25 R2 20/23	R1 max. M16x1 R2 max. M12	20-2,000 R1 30-3,000 R2	1.5 three-phase current, frequency-controlled, (400 V)	32
<b>SB 30 Plus</b>	R1 27/32 R2 25/30 R3 30/35	R1 max. M24x3 R2 max. M20x2.5 R3 max. M30x3.5	0-1,000 R1 0-1,600 R2 0-4,000 R3	3.0 three-phase current, frequency-controlled, (400 V)	34
<b>SB 30 MV Plus</b>	R1 27/32 R2 25/30 R3 30/35	R1 max. M24x3 R2 max. M20x2.5 R3 max. M30x3.5	0-1,000 R1 0-1,600 R2 0-4,000 R3	3.0 three-phase current, frequency-controlled, (400 V)	34
<b>SB 30 NC Plus</b>	R1 27/32 R2 25/30 R3 30/35	R1 max. M24x3 R2 max. M20x2.5 R3 max. M30x3.6	0-1,000 R1 0-1,600 R2 0-4,000 R3	3.0 three-phase current, frequency-controlled, (400 V)	36
<b>SB 40 Plus</b>	R1 27/32 R2 25/30 R3 30/35	R1 max. M30x3.5 R2 max. M24x3 R3 max. M36x4	0-1,000 R1 0-1,600 R2 0-4,000 R3	4.0 three-phase current, frequency-controlled, (400 V)	38
<b>SB 40 MV Plus</b>	R1 27/32 R2 25/30 R3 30/35	R1 max. M30x3.5 R2 max. M24x3 R3 max. M36x4	0-1,000 R1 0-1,600 R2 0-4,000 R3	4.0 three-phase current, frequency-controlled, (400 V)	38
<b>SB 40 NC Plus</b>	R1 27/32 R2 25/30 R3 30/35	R1 max. M30x3.5 R2 max. M24x3 R3 max. M36x4	0-1,000 R1 0-1,600 R2 0-4,000 R3	4.0 three-phase current, frequency-controlled, (400 V)	40
<b>SB 20 FB Plus</b>		M12	40-4,000	1.5 three-phase current, frequency-controlled, (400 V)	42
<b>SB M3 ST</b>	25/30	max. M20	125-4,000	0.9/1.45 three-phase current 400 pole-changeable	46
<b>SB M5 ST</b>	35/40	max. M30	100-2,000	1.5/3.0 three-phase current 400 V, pole-changeable	48
<b>SB P30 ST</b>	25/30	max. M20	125-4,000	0.9/1.45 three-phase current 400 pole-changeable	50
<b>SB P30 STG PV</b>	25/30	max. M20	125-4,000	0.9/1.45 three-phase current 400 pole-changeable	52
<b>SB P40 ST</b>	35/40	max. M30	100-2,000 R1 70-1,400 R2	1.5/3.0 three-phase current 400 V, pole-changeable	54
<b>SB P40 STG PV</b>	35/40	max. M30	100-2,000 70-1,400 R2	1.5/3.0 three-phase current 400 V, pole-changeable	56
<b>GB 50 MV</b>	50	max. M36	Gear stages	3.0 three-phase current 400 V	58
<b>Multi-head drilling machine</b>	on request				60

### Colour description

Plus series	
Classic machines	
Gear drilling machines	

# DRILLING TECHNOLOGY

Drilling technology explanations .....	8-9
Vices [felix] 2.0 .....	10-11
Plus series drilling machines .....	12-43
Classic drilling machines .....	44-57
Gear drilling machine .....	58-59
Multi-head drilling machines .....	60-61
Special equipment/accessories .....	62-71
Warranty extensions .....	72-73



- 3-year warranty for single-shift operation (except GB 50 MV)
- Warranty extension to 4 or 5 years available! See 72-73

## FLOTT Drilling Technology / Explanations

With its newly developed PLUS range of drilling machines, FLOTT offers a modular system that provides the user with an optimum selection in the drilling range from 0.5 to 50 mm.

The drilling machine types are **sorted** according to drilling or thread cutting capacity. The key **accessories / special equipment** are listed for the assemblies.

The FLOTT machines are characterised by modern, ergonomic **design**, and the technical progress has been documented with numerous **industrial property rights**.

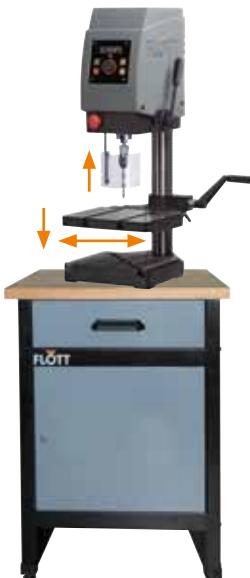
**Modern electronics** such as **digital** depth and speed indicators and **electronic stepless** drives, have been part of FLOTT's standard equipment for years.

**The robust construction** and **durability** of our drilling machines are appreciated worldwide.

**Safety** has always been a top priority at FLOTT. That's why we observe all the current safety requirements.

**Do you have any questions?** The FLOTT team will be happy to advise you on your individual requirements!

### Models



**TB**

Bench drill  
with intermediate table  
and optional base cabinet



**TBZ**

Bench drill  
without intermediate table  
with optional base cabinet



**SB**

Column drill press

### Explanation of abbreviations

Flow forming  
Mechanical feed, with electromagnetic clutch  
Programmable feed with electromagnetic feed clutch, electronically controlled; digital multifunction display  
Gear drilling machine  
Controlled z-axis (feed/return)

**FB**  
**MV**  
**PV-electronic**  
**GB**  
**NC**

## FLOTT drilling technology / control panel

### The control panel with display (only for Plus Series)

- ▶ Clear control panel with central knob
- ▶ OLED display (Organic Light Emitting Diode)  
Dust-protected with sealing lip in encased Hood cut-out

#### The menu functions

- ▶ Clear input menu that is easy to understand
- ▶ Selectable mode of operation: drilling/thread cutting
- ▶ Set the speed using the central knob
- ▶ Precisedisplay of drilling depth (target, actual), speed
- ▶ Counting function for drilling stroke
- ▶ Intelligent memory function for the parameters
- ▶ Energy-saving mode
- ▶ Spindle stop



### The additional panel with touch operation (only for NC)

- ▶ Plus technology
- ▶ Programmable z-axis NC-Plus
- ▶ The 4.3" touch display is a convenient manmachine interface for programming the Z-axis (feed/reverse stroke).

#### It allows the selection of the following operating modes

- ▶ Drilling
- ▶ Reaming
- ▶ Countersinking
- ▶ Flow forming
- ▶ Thread cutting

In addition, there is the possibility of free programming



### The (new) control panel with display (only for PV electronic)

- ▶ Overview of the most important functions, shown graphically
- ▶ Selectable mode of operation: drilling/thread cutting/drill feed
- ▶ Precise display of drilling depth (target, actual, speed)
- ▶ Optional additional functions can be easily activated and deactivated



## Drilling machines- Vice [felix] 2.0

**FLOTT [felix] 2.0**

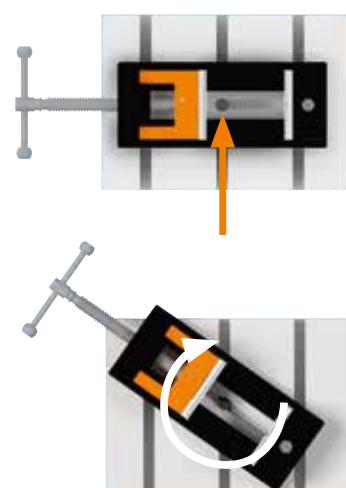
The drilling machine vice for free adjustable clamping of the workpiece.

Easy, fast, safe and better to use. The vice is clamped on the worktable in two easy steps, precisely adjusted and secured.



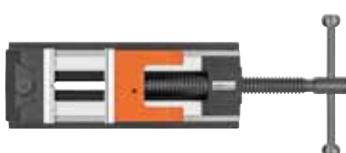
### PLUS POINTS +++

- ▶ Patented clamping mechanism ensures that the vice can be clamped in one easy step
- ▶ No banging or turning of the vice, due to full work safety feature (anti-twist function)
- ▶ Freely positionable and full vice mobility
- ▶ **Short set-up time, fast clamping (up to 95 % time saving)**
- ▶ Increased travel and span

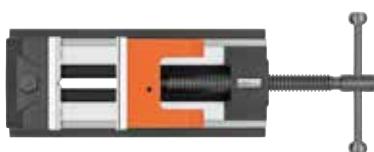


## Standard equipment

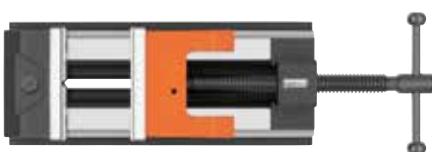
- Prism jaws with shoulder, as well as horizontal and vertical recesses for clamping a wide range of workpieces
- Hardened and precision ground clamping jaws
- No additional clamping devices necessary



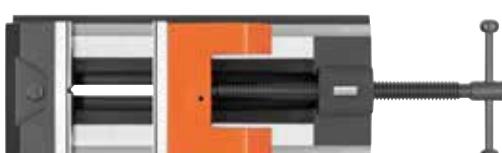
(felix) 80 2.0



(felix) 100 2.0



(felix) 120 2.0



(felix) 150 2.0

## Technical data

### Flott (felix) 80 2.0

Jaw width (mm)	80
Span width (mm)	0 - 120
Jaw height (mm)	28
Travel (mm)	150
Weight (kg)	11.6
Dimensions WxLxH (mm)	95 x 280 x 78
Order no.	<b>281.140</b>

### Flott (felix) 100 2.0

Jaw width (mm)	100
Span width (mm)	0 - 135
Jaw height (mm)	32
Travel (mm)	165
Weight (kg)	12.8
Dimensions WxLxH (mm)	122 x 343 x 85
Order no.	<b>281.141</b>

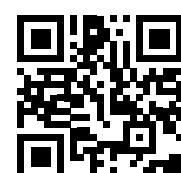
### Flott (felix) 120 2.0

Jaw width (mm)	120
Span width (mm)	0 - 168
Jaw height (mm)	40
Travel (mm)	200
Weight (kg)	20.3
Dimensions WxLxH (mm)	140 x 395 x 105
Order no.	<b>281.142</b>

### Flott (felix) 150 2.0

Jaw width (mm)	150
Span width (mm)	0 - 200
Jaw height (mm)	40
Travel (mm)	220
Weight (kg)	32.4
Dimensions WxLxH (mm)	170 x 451 x 103
Order no.	<b>281.143</b>

For further explanation, check our YouTube video!



# PLUS POINTS +++ OUR SB P40 NC PLUS



## Control panel with display

Convenient operation via 4.3" touch display.

## Main switch

## Additional panel with touch operation

Programmable Z-axis NC PLus  
Operating modes:

Drilling  
Reaming  
Countersinking  
Flow forming  
Thread cutting  
Free programming

## Large table surface working area

## Optional machined base plate with integrated coolant system

## High quality hood

Robust, high-quality hood, hinged at the side with ergonomically inclined front panel for better reading and input of machine and process parameters.

## Automatic feed drive with motor

This precise drive allows the cutting of M1.5 threads without a compensating chuck via synchronisation with the spindle speed.

## Switch lever automatic/manual

## LED illumination

All machines have LED lighting as standard.

Optionally, there is another LED luminaire with articulated arm.

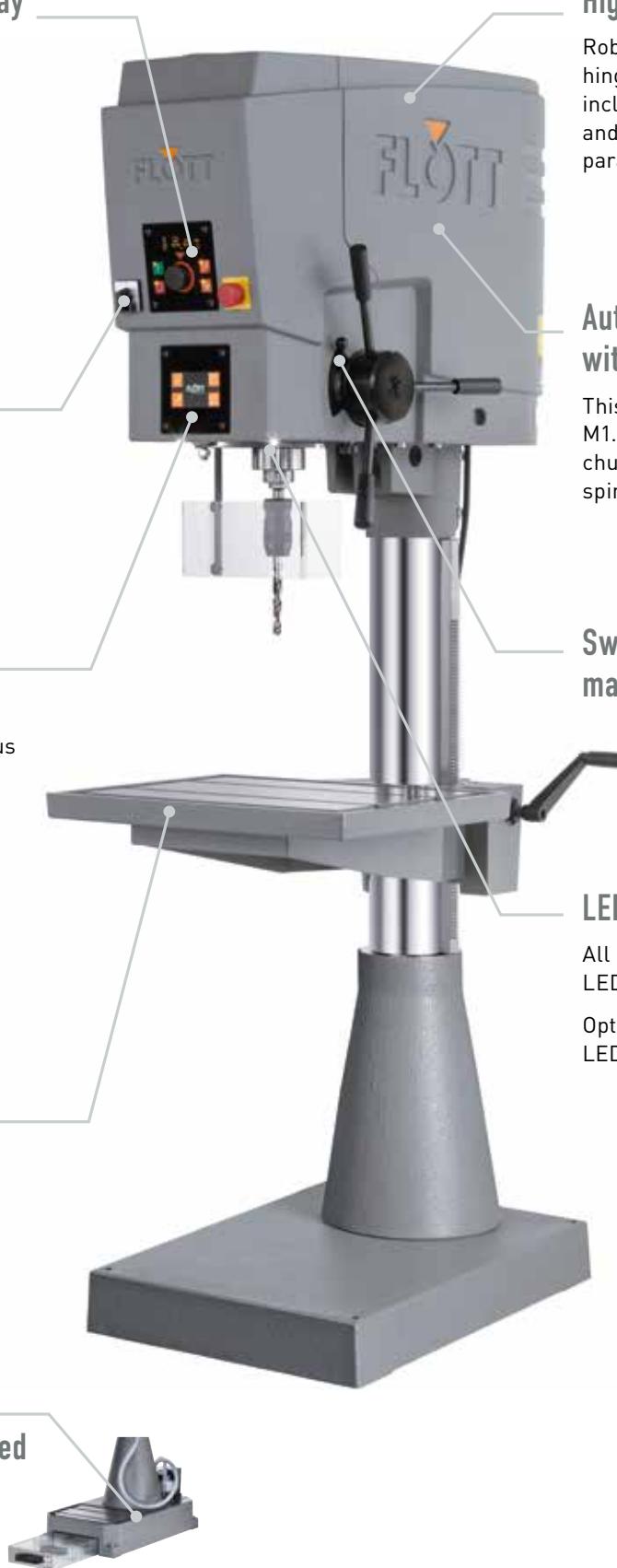


Fig.: SB 40 NC Plus with option

# PLUS SERIES DRILLING MACHINES

Our Plus series drills with their sophisticated technology, stand for simple, intuitive operation and many new functions.

The control system with display and rotary knob is consistent across all the Plus drilling machines. Once trained, an operator can work on any machine immediately.

The belt drive\* paired with German quality motors, frequency converters and innovative electronics result in powerful drills with high torques and a variable speed range.

The machines have a 3-year manufacturer's warranty for single-shift operation (optionally extendable on request).

The Plus Series is divided into three platforms:

- ▶ Small  
bench and column drilling machines 10 - 15 Plus
- ▶ Medium  
bench and column drilling machines 18 - 25 Plus
- ▶ Large  
column drilling machines 30 - 40 Plus



\* Optionally with electromagnetic double clutch (speed series R3)



# Bench drill in AC design TB 10 Eco ▶ Plus



- ▶ 3-year warranty for single-shift operation
- ▶ Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: TB 10 Eco ▶ Plus with special equipment

## Standard equipment

- ▶ Robust, high-quality inclined rotary hood for easy reading of the speed
- ▶ LED lighting
- ▶ Quick-adjust ergonomic depth stop
- ▶ Stepless speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Under-voltage release
- ▶ Drill protection with electrical fuse
- ▶ Connecting cable with two-pin earthed plug (1.2 m)

## Special equipment

- ▶ Height adjustment via threaded spindle

**Order no. 290.302**

## Accessories

- ▶ Machine cabinet with door and intermediate plate  
Height: 800 mm  
Weight: 20 kg  
**Order no. 213.168**
- ▶ Vice (felix) 80 2.0  
Jaw width: 80 mm  
Span: 0-120 mm  
**Order no. 281.140**
- ▶ Twist drill set, DIN 338 HSSG  
25-piece, ground, Split point 135°, Ø 1.0-13.0 x 0.5 mm  
**Order no. 285.124**
- ▶ Quick-change drill chuck (1-13 mm), B16  
rotational accuracy: 0.17 mm  
**Order no. 285.133**
- ▶ Precision quick-change drill chuck ground, self-tightening, for clockwise/anti-clockwise rotation max. 8,000 1/min.  
Span 1-13 mm  
Socket B16  
Rotational accuracy: 0.06 mm  
**Order no. 285.064**

## Drill package 1 (for B16)

- ▶ Vice (felix) 80 2.0
- ▶ Quick-change drill chuck B16 1-13 mm (accuracy 0.17 mm)  
**Order no. 296.590**

## Technical data

Drilling capacity/normal drilling performance (mm)	10/12 (in E335/ST60)
Spindle	B16
Drilling depth (mm)	50
Distance column-spindle (mm)	180
Column diameter (mm)	50
Useable table surface (W x L) (mm)	300 x 200
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 100, 12/20
Speed indicator	digital
Drilling depth indicator	scale
Drilling depth stop	Quick-adjust thrust ring
Feed	by hand
Head/height adjustment	by hand
Three-phase current motor 230 V with frequency converter (kW)	0.45
Spindle speed, stepless (1/min)	250-3,000

## TB 10 Eco Plus

Distance spindle/working surface (mm)	105-245
Machine dimensions without VP (mm)	400 x 248 x 460
Machine dimensions with VP (mm)	430 x 680 x 810
Weight (kg)	30
<b>Order no.</b>	<b>217.200</b>

**Additional accessories** **from page 62**





# Bench drill

## TB 10 Basic ▶ Plus



- ▶ 3-year warranty for single-shift operation
- ▶ Warranty extension to 4 or 5 years available!  
See page 72-73



Fig.: TB 10 Basic ▶ Plus with special equipment

Fig.: TB 10 Basic ▶ Plus optional with intermediate table

## Standard equipment

- Robust, high-quality inclined rotary hood for easy reading of the speed
- LED lighting
- Quick-adjust ergonomic depth stop
- Stepless speed regulation via the central knob
- Emergency stop button
- Thermal overload protection
- Under-voltage release
- Drill protection with electrical fuse
- Connecting cable with two-pin earthed plug (1.2 m)

## Special equipment

- Drill depth fixed stop for optimum repetition accuracy

**Order no. 212.716**

## Accessories

- Machine cabinet with door and drawer  
Height: 840 mm  
Weight: 28 kg  
**Order no. 250.208**
- Vice  
(felix) 80 2.0  
Jaw width: 80 mm  
Span: 0-120 mm  
**Order no. 281.140**
- Quick-change drill chuck B16  
Span range 1-13 mm  
Rotational accuracy: 0.17 mm  
**Order no. 285.133**
- Precision quick-change ground drill chuck  
self-tightening,  
for clockwise/anti-clockwise rotation max. 8,000 1/min.  
Span range 1-13 mm  
Socket B16  
Rotational accuracy: 0.06 mm  
**Order no. 285.064**

## Drill package 1 (for B16)

- Vice [felix] 80 2.0
- Quick-change drill chuck B16  
1-13 mm (accuracy 0.17 mm)  
**Order no. 296.590**



## Technical data

Drilling capacity/normal drilling performance (mm)	12 (in E335/ST60)
Spindle	B16
Drilling depth (mm)	60
Distance column-spindle (mm)	220
Column diameter (mm)	70
Useable table surface (W x L) (mm)	300 x 250
T-slot size (arm), distance (mm), width measurement (mm)	Cross slots, quantity 2, 14/26
Speed indicator	digital
Drilling depth indicator	scale
Drilling depth stop	Quick-adjust thrust ring
Feed	by hand
Head/height adjustment	by hand
Three-phase current motor 230 V with (kW)	0.45
Spindle speed, stepless (1/min)	250-3,000

## TB 10 Basic Plus

Distance spindle/working surface (mm)	105-245
Machine dimensions without VP (mm)	320 x 520 x 820
Machine dimensions with VP (mm)	452 x 700 x 1,130
Weight (kg)	44
<b>Order no.</b> (with drill head height adjustment)	<b>217.400</b>
<b>Order no.</b> (with intermediate table and table height adjustment via toothed rack)	<b>217.410</b>

**Additional accessories** **from page 62**



# Bench drill

## TB 10 ▶Plus



- ▶ 3-year warranty for single-shift operation
- ▶ Warranty extension to 4 or 5 years available!  
See page 72-73



Fig.: TB 10 ▶Plus with special equipment

Fig.: TB 10 ▶Plus optional with intermediate table

## Standard equipment

- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head hood with ergonomically tilted front
- ▶ LED lighting
- ▶ Quick-adjust ergonomic depth stop
- ▶ Stepless speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electrical fuse
- ▶ Connecting cable with two-pin earthed plug

## Special equipment

- ▶ Table height adjustment via toothed rack table with T-slots (instead of head height adjustment)  
Useable table surface (W x L): 300 x 250 mm  
**Order no. 290.521**
- ▶ Drill depth fixed stop  
for optimum repetition accuracy  
**Order no. 212.716**

## Accessories

- ▶ Machine cabinet with door and drawer  
Height: 840 mm  
Weight: 28 kg  
**Order no. 250.208**
- ▶ Vice  
(felix) 80 2.0  
Jaw width: 80 mm  
Span: 0-120 mm  
**Order no. 281.140**
- ▶ Quick-change drill chuck B16  
Span range 1-13 mm  
Rotational accuracy: 0.17 mm  
**Order no. 285.133**
- ▶ Precision quick-change ground drill chuck  
self-tightening,  
for clockwise/anti-clockwise rotation max. 8,000 1/min.  
Span range 1-13 mm  
Socket B16  
Rotational accuracy: 0.06 mm  
**Order no. 285.064**
- ▶ Tap holder M4-M12 DIN 371  
Span: 1-10 mm  
Socket: B16  
Total length: 80 mm  
**Order no. 285.109**

## Technical data

Drilling capacity/normal drilling performance (mm)	10/12 (in E335/ST60)
Thread-cutting performance (depending on gradient) max.	M6
Spindle	B16
Drilling depth (mm)	60
Distance column-spindle (mm)	220
Column diameter (mm)	70
Useable table surface (W x L) (mm)	300 x 250
T-slot size (arm), distance (mm), width measurement (mm)	Cross slots, quantity 2, 14/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Stop ring (positive-locking)
Feed	by hand
Head/height adjustment	by hand
Three-phase current motor 230 V with frequency converter (kW)	0.54
Spindle speed, stepless (1/min)	60-6,000

## TB 10 Plus\*

Distance spindle/working surface (mm)	140-315
Machine dimensions without VP (mm)	320 x 520 x 820
Machine dimensions with VP (mm)	452 x 700 x 1,130
Weight (kg)	44
<b>Order no.</b>	<b>212.505</b>

**Additional accessories** **from page 62**

\* The drilling machine is fitted with a frequency converter and complies with the standards DIN EN 55011:2016 & A1:2017.

## Drill package 1 (for B16)

- ▶ Vice (felix) 80 2.0
- ▶ Quick-change drill chuck B16 1-13 mm (accuracy 0.17 mm)  
**Order no. 296.590**





# Bench drill

## Turbo drill



- 3-year warranty for single-shift operation
- Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: Turbo drill with special equipment



Fig.: Turbo drill optional with intermediate table

## Standard equipment

- Thread cutting system
- Control panel with OLED display
- Robust, high-quality drill head hood with ergonomically tilted front
- LED lighting
- Quick-adjust ergonomic depth stop
- Stepless speed regulation via the central knob
- Emergency stop button
- Thermal overload protection
- Spindle stop
- Drill protection with electrical fuse
- Connecting cable with two-pin earthed plug

## Special equipment

- Table height adjustment via toothed rack table with T-slots (instead of head height adjustment)  
Useable table surface (W x L): 300 x 250 mm  
**Order no. 290.521**
- Drill depth fixed stop  
for optimum repetition accuracy  
**Order no. 212.716**

## Accessories

- Machine cabinet with door and drawer  
Height: 840 mm  
Weight: 28 kg  
**Order no. 250.208**
- Vice  
(felix) 80 2.0  
Jaw width: 80 mm  
Span: 0-120 mm  
**Order no. 281.140**
- Gear rimmed drill chuck for Turbo drill, B12  
Span 0.5-8 mm  
Rotational accuracy: 0.20 mm  
**Order no. 285.103**
- Precision quick-change drill chuck for Turbo drill, B12  
Span 0.5-6 mm  
Rotational accuracy: 0.05 mm  
**Order no. 285.104**

## Technical data

Drilling capacity/normal drilling performance (mm)	6/8 (in E335/ST60)
Thread-cutting performance (depending on gradient) max.	M5
Spindle	B12
Drilling depth (mm)	60
Distance column-spindle (mm)	220
Column diameter (mm)	70
Useable table surface (W x L) (mm)	300 x 250
T-slot size (arm), distance (mm), width measurement (mm)	Cross slots, quantity 2, 14/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Stop ring (positive-locking)
Feed	by hand
Head/height adjustment	by hand
Three-phase current motor 230 V with frequency converter (kW)	0.54
Spindle speed, stepless (1/min)	100 -10,000

## Turbo drill\*

Distance spindle/working surface (mm)	140-315
Machine dimensions without VP (mm)	320 x 520 x 820
Machine dimensions with VP (mm)	452 x 700 x 1,130
Weight (kg)	44
<b>Order no.</b>	<b>212.506</b>
<b>Additional accessories</b>	<b>from page 62</b>

\* The drilling machine is fitted with a frequency converter and complies with the standards DIN EN 55011:2016 & A1:2017.



# Bench drill and column drill

**TB 13 ▶Plus**

**TBZ 13 ▶Plus**

**SB 13 ▶Plus**



- ▶ 3-year warranty for single-shift operation
- ▶ Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: TB 13 ▶Plus with B16 and special equipment

## Standard equipment

- Thread cutting system
- Control panel with OLED display
- Robust, high-quality drill head hood with ergonomically tilted front
- LED lighting
- Quick-adjust ergonomic depth stop
- Stepless speed regulation via the central knob
- Emergency stop button
- Thermal overload protection
- Spindle stop
- Drill protection with electrical fuse
- Connecting cable with two-pin earthed plug

## Special equipment

- Drill depth fixed stop for optimum repetition accuracy

**Order no. 212.716**

## Accessories

- Machine cabinet with door and drawer (only for TB 13 Plus)  
Height: 840 mm  
Weight: 28 kg  
**Order no. 250.208**
- Machine cabinet with door for TB/TBZ and intermediate plate  
Height: 800 mm, weight: 36 kg  
**Order no. 212.860 (TB)**  
**Order no. 201.160 (TBZ)**

### Drill package 1 (for B16)

- Vice [felix] 80 2.0
- Quick-change drill chuck B16 1-13 mm (accuracy 0.17 mm)  
**Order no. 296.590**



### Drill package 2 (for MK II)

- Vice [felix] 80 2.0
- Taper mandrel MK II/B16
- Reduction sleeve MK II/MK I
- Quick-change drill chuck B16 1-13 mm (accuracy 0.17 mm)  
**Order no. 296.591**



## Technical data

Drilling capacity/normal drilling performance (mm)	13/15 (in E335/ST60) 12Nm
Thread-cutting performance (depending on gradient) max.	M10
Spindle	B16, optional MK II
Drilling depth (mm)	60
Distance column-spindle (mm)	220
Column diameter (mm)	70
Useable table surface (W x L) (mm)	300 x 250
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 125, 14/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Stop ring (positive-locking)
Feed	by hand
Table height adjustment	with toothed rack
Three-phase current motor 230 V with frequency converter (kW)	0.54
Spindle speed, stepless (1/min)	40-4,000

### TB 13 Plus\*

Distance spindle/working surface (mm)	85-370
Machine dimensions without VP (mm)	400 x 520 x 850
Machine dimensions with VP (mm)	452 x 700 x 1130
Weight (kg)	62
<b>Order no. B16</b>	<b>212.500</b>
<b>Order no. MKII</b>	<b>212.503</b>

### TBZ 13 Plus\*

Distance spindle/working surface (mm)	125-490
Centre offset	20 mm
Distance column-spindle (mm)	214
Column diameter (mm)	82
Machine dimensions (mm)	
with cabinet	370 x 495 x 1,800
with cabinet with VP	940 x 570 x 2,140
without cabinet	355 x 485 x 1,027
without cabinet with VP	940 x 570 x 1,600
Weight without cabinet (kg)	70
<b>Order no. B16</b>	<b>212.650</b>
<b>Order no. MKII</b>	<b>212.655</b>

### SB 13 Plus\*

Distance spindle/working surface (mm)	max. 750
Machine dimensions without VP (mm)	420 x 540 x 1,780 w
Machine dimensions with VP (mm)	572 x 936 x 2,142
T-slot size, distance (mm), width measurement (mm)	Quantity 2, 125, 13/26
Weight (kg)	85
<b>Order no. B16</b>	<b>212.502</b>
<b>Order no. MKII</b>	<b>212.504</b>
<b>Additional accessories</b>	<b>from page 62</b>

\* The drilling machine is fitted with a frequency converter and complies with the standards DIN EN 55011:2016 & A1:2017.



# Bench drill and column drill

**TB 15 ▶ Plus**

**TBZ 15 ▶ Plus**

**SB 15 ▶ Plus**



- ▶ 3-year warranty for single-shift operation
- ▶ Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: TB 15 ▶ Plus with special equipment

## Standard equipment

- Thread cutting system
- Control panel with OLED display
- Robust, high-quality drill head hood with ergonomically tilted front
- LED lighting
- Quick-adjust ergonomic depth stop
- Stepless speed regulation via the central knob
- Emergency stop button
- Thermal overload protection
- Spindle stop
- Drill protection with electrical fuse
- Connecting cable with two-pin earthed plug

## Special equipment

- Drill depth fixed stop for optimum repetition accuracy

**Order no. 212.716**

## Accessories

- Machine cabinet with door and drawer (only for TB 15 Plus)  
Height: 840 mm  
Weight: 28 kg  
**Order no. 250.208**
- Machine cabinet with door for TB/TBZ and intermediate plate  
Height: 800 mm, Weight: 36 kg  
**Order no. 212.860 (TB)**  
**Order no. 201.160 (TBZ)**
- Foot switch for clockwise and anti-clockwise rotation  
**Order no. 212.780**

## Drill package 2 (for MK II)

- Vice [felix] 80 2.0
- Taper mandrel MK II/B16
- Reduction sleeve MK II/MK I
- Quick-change drill chuck B16 1-13 mm (accuracy 0.17 mm)  
**Order no. 296.591**



## Technical data

Drilling capacity/normal drilling performance (mm)	15/18 (in E335/ST60) 17 Nm
Thread-cutting performance (depending on gradient) max.	MK12
Spindle	MK II
Drilling depth (mm)	70
Distance column-spindle (mm)	220
Column diameter (mm)	70
Useable table surface (W x L) (mm)	300 x 250
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 125, 14/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Stop ring (positive-locking)
Feed	by hand
Table height adjustment	with toothed rack
Three-phase current motor 230 V with frequency converter (kW)	0.75
Spindle speed, stepless (1/min)	40-4,000

## TB 15 Plus\*

Distance spindle/working surface (mm)	85-370
Machine dimensions without VP (mm)	400 x 520 x 850
Machine dimensions with VP (mm)	452 x 700 x 1130
Weight (kg)	65
<b>Order no.</b>	<b>212.755</b>

## TBZ 15 Plus\*

Distance spindle/working surface (mm)	125-490
Centre offset	20 mm
Distance column-spindle (mm)	214
Column diameter (mm)	82
Machine dimensions (mm)	
with cabinet	370 x 495 x 1,800
with cabinet with VP	940 x 570 x 2,140
without cabinet	355 x 485 x 1,027
without cabinet with VP	940 x 570 x 1,600
Weight without cabinet (kg)	73
<b>Order no.</b>	<b>212.765</b>

## SB 15 Plus\*

Distance spindle/working surface (mm)	max. 750
Useable table surface (W x L) (mm)	300 x 240
Machine dimensions without VP (mm)	420 x 540 x 1,780
Machine dimensions with VP (mm)	572 x 936 x 2,142
T-slot size, distance (mm), width measurement (mm)	Quantity 2, 125, 14/26
Weight (kg)	88
<b>Order no.</b>	<b>212.750</b>
<b>Additional accessories</b>	<b>from page 62</b>

\* The drilling machine is fitted with a frequency converter and complies with the standards DIN EN 55011:2016 & A1:2017.



## Bench drill and column drill

**TB 18 ▶Plus**

**TBZ 18 ▶Plus**

**SB 18 ▶Plus**



- ▶ 3-year warranty for single-shift operation
- ▶ Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: TB 18 ▶Plus with special equipment

Fig.: SB 18 ▶Plus

## Standard equipment

- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head hood with ergonomically tilted front
- ▶ LED lighting
- ▶ Quick-adjust ergonomic depth stop
- ▶ Stepless speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electrical fuse
- ▶ Connecting cable with two-pin earthed plug

## Special equipment

- ▶ LED lighting with articulated arm  
**Order no. 290.240**
- ▶ Machined base plate incl. integrated coolant system (only SB models)  
Filling quantity: max. 15 l  
Delivery rate: max. 30 l/min  
**Order no. 290.160A**
- ▶ Coolant system (separate container)  
Filling quantity: max. 15 l  
Delivery rate: max. 30 l/min  
**Order no. 290.340**

## Accessories

- ▶ Machine cabinet with door for TB/TBZ  
Height: 800 mm  
Weight: 36 kg  
**Order no. 201.160**
- ▶ Foot switch  
Drilling function: Spindle ON and OFF  
Thread cutting function: Clockwise/anti-clockwise rotation  
**Order no. 225.029**

## Drill package 3

- ▶ Vice [felix] 100 2.0
- ▶ Taper mandrel MK II/B18
- ▶ Reduction sleeve MK II/MK I
- ▶ Quick-change drill chuck B18 3-16 mm (accuracy 0.17 mm)  
**Order no. 296.592**



## Technical data

Drilling capacity/normal drilling performance (mm)	18/20 (in E335/ST 60) 22 Nm
Thread cutting performance max. (depending on gradient)	M12
Spindle	MK II
Drilling depth (mm)	100
Distance column-spindle (mm)	240
Column diameter (mm)	82
Useable table surface (W x L) (mm)	340 x 280
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 125, 13/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Quick-adjust thrust ring
Feed	by hand
Table height adjustment	with toothed rack
Three-phase current motor 230 V with frequency converter (kW)	0.75
Spindle speed, stepless (1/min)	30-3,000

## TB 18 Plus\*

Distance spindle - working surface (mm)	
Table	155-415
Base	155-550
Machine dimensions without VP (mm)	355 x 705 x 1,065
Machine dimensions with VP (mm)	570 x 940 x 1,612
Weight (kg)	170
<b>Order no.</b>	<b>218.303</b>

## TBZ 18 Plus\*

Distance spindle - working surface (mm)	
Base	155-550
Column diameter (mm)	82
Machine dimensions (mm)	
with cabinet	370 x 705 x 1,845
with cabinet with VP	572 x 940 x 2,140
without cabinet	355 x 705 x 1,045
without cabinet with VP	570 x 940 x 1,600
Weight without cabinet (kg)	155
<b>Order no.</b>	<b>218.309</b>

## SB 18 Plus\*

Spindle/table (mm)	160-880
Machine dimensions without VP (mm)	355 x 705 x 1,825
Machine dimensions with VP (mm)	572 x 936 x 2,142
Weight (kg)	195
<b>Order no.</b>	<b>218.308</b>

**Additional accessories** **from page 62**

\* The drilling machine is fitted with a frequency converter and complies with the standards DIN EN 55011:2016 & A1:2017.



# Bench drill and column drill

**TB 20 ▶Plus**

**TBZ 20 ▶Plus**

**SB 20 ▶Plus**



- ▶ 3-year warranty for single-shift operation
- ▶ Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: TB 20 ▶Plus with special equipment

Fig.: SB 20 ▶Plus with special equipment

## Standard equipment

- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head hood with ergonomically tilted front
- ▶ LED lighting
- ▶ Quick-adjust ergonomic depth stop
- ▶ Stepless speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electrical fuse
- ▶ Connecting cable with CEE plug

## Special equipment

- ▶ LED lighting with articulated arm  
**Order no. 290.240**
- ▶ Machined base plate incl. integrated coolant system (only SB models)  
Filling quantity: max. 15 l  
Delivery rate: max. 30 l/min  
**Order no. 290.160A**
- ▶ Coolant system (separate container)  
Filling quantity: max. 15 l  
Delivery rate: max. 30 l/min  
**Order no. 290.340**
- ▶ Foot switch  
Drilling function: Spindle ON and OFF  
Thread cutting function: Clockwise/anti-clockwise rotation  
**Order no. 225.029**

## Accessories

- ▶ Machine cabinet with door for TB/TBZ  
Height: 800 mm  
Weight: 36 kg  
**Order no. 201.160**

### Drill package 3

- ▶ Vice (felix) 100 2.0
- ▶ Taper mandrel MK II/B18
- ▶ Reduction sleeve MK II/MK I
- ▶ Quick-change drill chuck B18 3-16 mm (accuracy 0.17 mm)  
**Order no. 296.592**



## Technical data

Drilling capacity/normal drilling performance (mm)	20/23 (in E335/ST60)
Thread cutting performance max. (depending on gradient)	M12
Spindle	MK II
Drilling depth (mm)	100
Distance column-spindle (mm)	240
Column diameter (mm)	82
Useable table surface (W x L) (mm)	340 x 280
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 125, 13/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Quick-adjust thrust ring
Feed	by hand
Table height adjustment	with toothed rack
Three-phase current motor 400 V with frequency converter (kW)	1.5
Spindle speed, stepless (1/min)	40-4,000

### TB 20 Plus\*

Distance spindle - working surface (mm)	
Table	155-415
Base	155-550
Machine dimensions without VP (mm)	355 x 705 x 1,065
Machine dimensions with VP (mm)	570 x 940 x 1,612
Weight (kg)	170
<b>Order no.</b>	<b>220.105</b>

### TBZ 20 Plus\*

Distance spindle - working surface (mm)	
Base	155-550
Column diameter (mm)	82
Machine dimensions (mm)	
with cabinet	370 x 705 x 1,845
with cabinet with VP	572 x 940 x 2,140
without cabinet	355 x 705 x 1,045
without cabinet with VP	570 x 940 x 1,600
Weight without cabinet (kg)	155
<b>Order no.</b>	<b>220.110</b>

### SB 20 Plus\*

Spindle/table (mm)	160-880
Machine dimensions without VP (mm)	355 x 705 x 1,825
Machine dimensions with VP (mm)	572 x 936 x 2,142
Weight (kg)	195
<b>Order no.</b>	<b>220.100</b>

**Additional accessories** **from page 62**

\* The drilling machine is fitted with a frequency converter and complies with the standards DIN EN 55011:2016 & A1:2017.



# Bench drill and column drill

**TB 23 ▶Plus**

**TBZ 23 ▶Plus**

**SB 23 ▶Plus**



- ▶ 3-year warranty for single-shift operation
- ▶ Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: TBZ 23▶Plus with special equipment

Fig.: SB 23▶Plus with special equipment

## Standard equipment

- ▶ Main switch
- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head hood with ergonomically tilted front
- ▶ LED lighting
- ▶ Quick-adjust ergonomic depth stop
- ▶ Stepless speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electrical fuse
- ▶ Connecting cable with CEE plug

## Special equipment

- ▶ LED lighting with articulated arm  
**Order no. 290.240**
- ▶ Machined base plate incl. integrated Coolant device (SB version only)  
Filling capacity: max. 15 l  
Delivery rate: max. 30 l/min  
**Order no. 290.160B**
- ▶ Coolant system (separate container)  
Filling quantity: max. 15 l  
Delivery rate: max. 30 l/min  
**Order no. 290.340**
- ▶ Foot switch  
Drilling function: Spindle ON and OFF  
Thread cutting function: Clockwise/anti-clockwise rotation  
**Order no. 225.029**

## Accessories

- ▶ Machine cabinet with door for TB/TBZ  
Height: 800 mm, Weight: 36 kg  
**Order no. 205.160**

### Drill package 3

- ▶ Vice (felix) 100 2.0
- ▶ Taper mandrel MK II/B18
- ▶ Reduction sleeve MK II/MK I
- ▶ Quick-change drill chuck B18  
3-16 mm (accuracy 0.17 mm)  
**Order no. 296.592**



## Technical data

Drilling capacity/normal drilling performance (mm)	R1	23/25 (in E335/ST60)
	R2	20/23 (in E335/ST60)
Thread cutting capacity max. (depending on gradient)	R1	M16x1
	R2	M12
Spindle		MK II
Drilling depth (mm)		100
Distance column-spindle (mm)		260
Column diameter (mm)		110
Useable table surface (W x L) (mm)		420 x 340
T-slot size (arm), distance (mm), width measurement (mm)		Quantity 2, 125, 13/26
Speed indicator		digital
Drilling depth indicator		digital
Drilling depth stop		Quick-adjust thrust ring
Feed		by hand
Table height adjustment		with toothed rack
Three-phase current motor 400 V with frequency converter (kW)		1.5
Spindle speed, stepless (1/min) with gearing	R1	20-2,000
	R2	30-3,000

## TB 23 Plus\*

Distance spindle - working surface (mm)	
Table	230-590
Base	230-670
Machine dimensions without VP (mm)	430 x 715 x 1,250
Machine dimensions with VP (mm)	570 x 940 x 1,600
Weight (kg)	250
<b>Order no. R1</b>	<b>223.021</b>
<b>Order no. R2</b>	<b>223.026</b>

## TBZ 23 Plus\*

Distance spindle - working surface (mm)	
Base	230-730
Machine dimensions (mm)	
with cabinet	430 x 715 x 2,050
with cabinet with VP	637 x 1,096 x 2,120
without cabinet	430 x 715 x 1,250
without cabinet with VP	570 x 940 x 1,600
Weight without cabinet (kg)	235
<b>Order no. R1</b>	<b>223.022</b>
<b>Order no. R2</b>	<b>223.027</b>

## SB 23 Plus\*

Spindle/table	230-850
Machine dimensions without VP (mm)	430 x 715 x 1,800
Machine dimensions with VP (mm)	670 x 1,100 x 2,140
Weight (kg)	290
<b>Order no. R1</b>	<b>223.020</b>
<b>Order no. R2</b>	<b>223.025</b>
<b>Additional accessories</b>	<b>from page 62</b>

\* The drilling machine is fitted with a frequency converter and complies with the standards DIN EN 55011:2016 & A1:2017.



# Bench drill and column drill

**TB 25 ▶Plus**

**TBZ 25 ▶Plus**

**SB 25 ▶Plus**



- ▶ 3-year warranty for single-shift operation
- ▶ Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: TBZ 25▶Plus with special equipment

Fig.: SB 25▶Plus with special equipment

## Standard equipment

- ▶ Main switch
- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head hood with ergonomically tilted front
- ▶ LED lighting
- ▶ Quick-adjust ergonomic depth stop
- ▶ Stepless speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electrical fuse
- ▶ Connecting cable with CEE plug

## Special equipment

- ▶ LED lighting with articulated arm  
**Order no. 290.240**
- ▶ Machined base plate incl. integrated Coolant device (SB version only)  
Filling capacity: max. 15 l  
Delivery rate: max. 30 l/min  
**Order no. 290.160B**
- ▶ Coolant system (separate container)  
Filling quantity: max. 15 l  
Delivery rate: max. 30 l/min  
**Order no. 290.340**
- ▶ Foot switch  
Drilling function: Spindle ON and OFF  
Thread cutting function: Clockwise/anti-clockwise rotation  
**Order no. 225.029**

## Accessories

- ▶ Machine cabinet with door for TB/TBZ  
Height: 800 mm, Weight: 36 kg  
**Order no. 205.160**

### Drill package 4

- ▶ Vice [felix] 120 2.0
- ▶ Taper mandrel MK III/B18
- ▶ Reduction sleeve MK III/MK I
- ▶ Reduction sleeve MK III/MK II
- ▶ Quick-change drill chuck B18 3-16 mm (accuracy 0.17 mm)  
**Order no. 296.593**



\* The drilling machine is fitted with a frequency converter and complies with the standards DIN EN 55011:2016 & A1:2017.

## Technical data

Drilling capacity/normal drilling performance (mm)	R1	23/25 (in E335/ST 60)
	R2	20/23 (in E335/ST 60)
Thread cutting capacity max. (depending on gradient)	R1	M16x1
	R2	M12
Spindle		MK III
Drilling depth (mm)		115
Distance column-spindle (mm)		260
Column diameter (mm)		110
Useable table surface (W x L) (mm)		420 x 340
T-slot size (arm), distance (mm), width measurement (mm)		Quantity 2, 125, 13/26
Speed indicator		digital
Drilling depth indicator		digital
Drilling depth stop		Quick-adjust thrust ring
Feed		by hand
Table height adjustment		with toothed rack
Three-phase current motor 400 V with frequency converter (kW)		1.5
Spindle speed, stepless (1/min) with gearing	R1	20-2,000
	R2	30-3,000

## TB 25 Plus\*

Distance spindle - working surface (mm)	
Table	230-590
Base	230-670
Machine dimensions without VP (mm)	430 x 715 x 1,250
Machine dimensions with VP (mm)	570 x 940 x 1,600
Weight (kg)	250
<b>Order no. R1</b>	<b>225.011</b>
<b>Order no. R2</b>	<b>225.016</b>

## TBZ 25 Plus\*

Distance spindle - working surface (mm)	
Base	230-730
Machine dimensions (mm)	
with cabinet	430 x 715 x 2,050
with cabinet with VP	637 x 1,096 x 2,120
without cabinet	430 x 715 x 1,250
without cabinet with VP	570 x 940 x 1,600
Weight without cabinet (kg)	235
<b>Order no. R1</b>	<b>225.012</b>
<b>Order no. R2</b>	<b>225.017</b>

## SB 25 Plus\*

Spindle/table	230-850
Machine dimensions without VP (mm)	430 x 715 x 1,800
Machine dimensions with VP (mm)	670 x 1,100 x 2,140
Weight (kg)	290
<b>Order no. R1</b>	<b>225.010</b>
<b>Order no. R2</b>	<b>225.015</b>
<b>Additional accessories</b>	<b>from page 62</b>



# Column drill

**SB 30 ▶Plus**  
**SB 30 MV ▶Plus**



- ▶ 3-year warranty for single-shift operation
- ▶ Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: SB 30 ▶Plus with special equipment

Fig.: SB 30 MV ▶Plus with special equipment

## Standard equipment

- ▶ Main switch
- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head hood with ergonomically tilted front
- ▶ LED lighting
- ▶ Quick-adjust ergonomic depth stop
- ▶ Stepless speed regulation via the central knob
- ▶ Emergency stop switch
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electrical fuse
- ▶ Connecting cable with CEE plug
- ▶ Mechanical feed for z-axis incl. electromagnetic clutch for (3) feed speeds (only SB 30 MV Plus)
- ▶ Drill handle with push-button (on/off) for feed (only SB 30 MV Plus)
- ▶ In thread cutting mode: Right-left ventilation via drill handle button (only SB 30 MV Plus)

## Special equipment

- ▶ LED lighting with articulated arm  
**Order no. 290.240** for 230.500 and 230.501  
**Order no. 290.241** for 230.502 and 230.506 and 230.507
- ▶ Combi drilling table with vice and square table 360° rotatable with scale  
Jaw width 120 mm, span 105 mm  
Table surface 350 x 350 mm  
**Order no. 290.135**
- ▶ Machined foot plate  
**Order no. 290.175C**
- ▶ Machined foot plate incl. integrated coolant system  
Filling capacity: max. 15 l  
Delivery rate: max. 30 l/min  
**Order no. 290.160C**
- ▶ Coolant system (separate tank)  
Filling quantity: max. 15 l  
Delivery rate: max. 30 l/min  
**Order no. 290.340**
- ▶ Foot switch  
Drilling function: Spindle ON and OFF (for MV feed ON and OFF)  
Thread cutting function: Clockwise/anti-clockwise rotation  
**Order no. 231.000**
- ▶ Commissioning the machine and briefing the operating staff  
**Order no. 229.931**

## Technical data

Drilling capacity/normal drilling performance (mm)	
R1 (measured Torque Nm)	27/32 (in E335/ST60) (100)
R2 (measured torque Nm)	25/30 (in E335/ST60) (70)
R3 (measured torque Nm)	30/35 (in E335/ST60) (200)
Thread cutting performance max. (depending on gradient)	
R1	M24x3
R2	M20x2.5
R3	M30x3.5
Spindle	MK III
Drilling depth (mm)	125
Distance column-spindle (mm)	300
Column diameter (mm)	125
Useable table surface (W x L) (mm)	590 x 450
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	with fine tuning
Table height adjustment	with toothed rack
Spindle/table (mm)	150-700
Machine dimensions without VP (mm)	610 x 900 x 1,980
Machine dimensions with VP (mm)	670 x 1,100 x 2,140
Three-phase current motor 400 V with frequency converter (kW)	3.0
Spindle speed, stepless (1/min)	
R1 (1-stage)	0-1,000
R2 (1-stage)	0-1,600
R3 (2-stage with gearing)	0-4,000
<b>SB 30 Plus</b>	
Feed	by hand
Weight (kg)	370
<b>Order no. R1</b>	<b>230.500</b>
<b>Order no. R2</b>	<b>230.501</b>
<b>Order no. R3</b>	<b>230.502</b>
<b>SB 30 MV Plus</b>	
Feed (mm/rotation)	0.10/0.16/0.25
Weight (kg)	385
<b>Order no. R1</b>	<b>230.505</b>
<b>Order no. R2</b>	<b>230.506</b>
<b>Order no. R3</b>	<b>230.507</b>
<b>Additional accessories</b>	<b>from page 62</b>

## Accessories

### Drill package 5

- ▶ Vice [felix] 150 2.0
- ▶ Taper mandrel MK III/B18
- ▶ Reduction sleeve MK III/MK I
- ▶ Reduction sleeve MK III/MK II
- ▶ Quick-change drill chuck B18 3-16 mm (accuracy 0.17 mm)
- ▶ **Order no. 296.594**



\* The drilling machine is fitted with a frequency converter and complies with the standards DIN EN 55011:2016 & A1:2017.



# Column drill SB 30 NC ▶Plus



- 3-year warranty for single-shift operation
- Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: SB 30 NC ▶Plus with special equipment

## Standard equipment

- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head hood with ergonomically tilted front
- ▶ LED lighting
- ▶ Quick-adjust ergonomic depth stop
- ▶ Stepless speed regulation via the central knob
- ▶ Emergency stop switch
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electrical fuse
- ▶ Connecting cable with CEE plug
- ▶ Switch lever for manual/automatic mode
- ▶ Easy-read control panel with central metal knob
- ▶ Easily understandable input menu
- ▶ Selectable mode of operation: drilling/thread cutting
- ▶ Counting function for drilling stroke
- ▶ Additional panel for automatic mode (activation by moving switch lever to automatic)
- ▶ 4.3" touchscreen display
- ▶ Comfort operator/machine interface for programming the spindle sleeve feed
- ▶ Selectable mode of operation: Drilling, reaming, countersinking, flow forming, thread cutting
- ▶ Free-programming function
- ▶ Choice of machine settings

## Special equipment

- ▶ LED lighting with articulated arm  
**Order no. 290.241**
- ▶ Combi drilling table with vice and square table 360° rotatable with scale  
Jaw width 120 mm, span 105 mm  
Table surface 350 x 350 mm  
**Order no. 290.135**
- ▶ Machined foot plate  
**Order no. 290.175C**
- ▶ Machined foot plate incl. integrated coolant system  
Filling capacity: max. 15 l  
Delivery rate: max. 30 l/min  
**Order no. 290.160C**
- ▶ Coolant system (separate tank)  
Filling quantity: max. 30 l/min  
Delivery rate: max. 30 l/min  
**Order no. 290.340**
- ▶ Foot switch  
Drilling function: Spindle ON and OFF  
Thread cutting function: Clockwise/anti-clockwise rotation

## Technical data

Drilling capacity/normal drilling performance (mm)	
R1 (measured torque Nm)	27/32 (in E335/ST60) (100)
R2 (measured torque Nm)	25/30 (in E335/ST60) (70)
R3 (measured torque Nm)	30/35 (in E335/ST60) (200)
Thread cutting performance max. (depending on gradient)	
R1	M24x3
R2	M20x2.5
R3	M30x3.5
Spindle	MK III
Drilling depth (mm)	125
Distance column-spindle (mm)	300
Column diameter (mm)	125
Useable table surface (W x L) (mm)	590 x 450
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	with fine tuning
Table height adjustment	with toothed rack
Spindle/table (mm)	150-700
Machine dimensions without VP (mm)	610 x 900 x 1,980
Machine dimensions with VP (mm)	670 x 1,100 x 2,200
Three-phase current motor 400 V with frequency converter (kW)	3.0
Spindle speed, stepless (1/min)	
R1 (1-stage)	0-1,000
R2 (1-stage)	0-1,600
R3 (2-stage with gearing)	0-4,000

## SB 30 NC Plus

Feed/return stroke, infinitely variable (m/min)	0-1.5
Weight (kg)	400
<b>Order no. R1</b>	<b>230.510</b>
<b>Order no. R2</b>	<b>230.511</b>
<b>Order no. R3</b>	<b>230.512</b>

<b>Additional accessories</b>	<b>from page 62</b>
-------------------------------	---------------------

\* The drilling machine is fitted with a frequency converter and complies with the standards DIN EN 55011:2016 & A1:2017.

For AUTO: Programme start/stop

**Order no. 231.000**

- ▶ Commissioning the machine and briefing the operating staff

**Order no. 229.931**

## Accessories

### Drill package 5

- ▶ Vice (felix) 150 2.0
- ▶ Taper mandrel MK III/B18
- ▶ Reduction sleeve MK III/MK I
- ▶ Reduction sleeve MK III/MK II
- ▶ Quick-change drill chuck B18 3-16 mm (accuracy 0.17 mm)





# Column drill

## SB 40 ▶Plus

## SB 40 MV ▶Plus



- ▶ 3-year warranty for single-shift operation
- ▶ Warranty extension to 4 or 5 years available!  
See page 72-73



Fig.: SB 40 ▶Plus with special equipment

Fig.: SB 40 MV ▶Plus with special equipment

## Standard equipment

- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head hood with ergonomically tilted front
- ▶ LED lighting
- ▶ Quick-adjust ergonomic depth stop
- ▶ Stepless speed regulation via the central knob
- ▶ Emergency stop switch
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electrical fuse
- ▶ Connecting cable with CEE plug
- ▶ Mechanical feed for z-axis incl. electromagnetic clutch for (3) feed speeds (only 40 MV Plus)
- ▶ Drill handle with push-button (on/off) for feed (only 40 MV Plus)
- ▶ In thread cutting mode: Right-left ventilation via drill handle button (only SB 40 MV Plus)

## Special equipment

- ▶ LED lighting with articulated arm  
**Order no. 290.240** for 230.530 and 230.531  
**Order no. 290.241** for 230.532 and 230.536 and 230.537
- ▶ Machined foot plate  
**Order no. 290.175D**
- ▶ Combi drilling table with vice and square table 360° rotatable with scale, jaw width 120 mm, span 105 mm, column diameter 125 mm (deviating), table surface 350 x 350 mm  
**Order no. 290.138**
- ▶ Machined foot plate incl. integrated coolant system  
Filling capacity: max. 15 l  
Delivery rate: max. 30 l/min  
**Order no. 290.160D**
- ▶ Coolant system (separate tank)  
Filling quantity: max. 15 l  
Delivery rate: max. 30 l/min  
**Order no. 290.340**
- ▶ Foot switch  
Drilling function: Spindle ON and OFF (for MV feed ON and OFF)  
Thread cutting function: Clockwise/anti-clockwise rotation  
**Order no. 231.000**
- ▶ Commissioning the machine and briefing the operating staff  
**Order no. 229.931**

## Technical data

Drilling capacity/normal drilling performance (mm)	
R1 (measured torque Nm)	30/35 (in E335/ST60) (135)
R2 (measured torque Nm)	27/32 (in E335/ST60) (90)
R3 (measured torque Nm)	35/40 (in E335/ST60) (260)
Thread cutting performance max. (depending on gradient)	
R1	M30x3.5
R2	M24x3
R3	M36x4
Spindle	MK IV
Drilling depth (mm)	160
Distance column-spindle (mm)	300
Column diameter (mm)	140
Useable table surface (W x L) (mm)	590 x 450
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	with fine tuning
Table height adjustment	with toothed rack
Spindle/table (mm)	150-700
Machine dimensions without VP (mm)	610 x 900 x 1,980
Machine dimensions with VP (mm)	670 x 1,100 x 2,200
Three-phase current motor 400 V with frequency converter (kW)	4.0
Spindle speed, stepless (1/min)	
R1 (1-stage)	0-1,000
R2 (1-stage)	0-1,600
R3 (2-stage with gearing)	0-4,000
<b>SB 40 Plus</b>	
Feed	by hand
Weight (kg)	400
<b>Order no. R1</b>	<b>230.530</b>
<b>Order no. R2</b>	<b>230.531</b>
<b>Order no. R3</b>	<b>230.532</b>
<b>SB 40 MV Plus</b>	
Feed (mm/rotation)	0.10/0.16/0.25
Weight (kg)	420
<b>Order no. R1</b>	<b>230.535</b>
<b>Order no. R2</b>	<b>230.536</b>
<b>Order no. R3</b>	<b>230.537</b>
<b>Additional accessories</b>	<b>from page 62</b>

\* The drilling machine is fitted with a frequency converter and complies with the standards DIN EN 55011:2016 & A1:2017.

## Accessories

### Drill package 6

- ▶ Vice [felix] 150 2.0
- ▶ Taper mandrel MK IV/B18
- ▶ Reduction sleeve MK IV/MK III
- ▶ Reduction sleeve MK IV/MK II
- ▶ Quick-change drill chuck B18 3-16 mm (accuracy 0.17 mm)  
**Order no. 296.595**





# Column drill SB 40 NC ▶Plus



- ▶ 3-year warranty for single-shift operation
- ▶ Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: SB 40 NC ▶Plus with special equipment

## Standard equipment

- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head hood with ergonomically tilted front
- ▶ LED lighting
- ▶ Quick-adjust ergonomic depth stop
- ▶ Stepless speed regulation via the central knob
- ▶ Emergency stop switch
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electrical fuse
- ▶ Connecting cable with CEE plug
- ▶ Switch lever for manual/automatic mode
- ▶ Easy-read control panel with central metal knob
- ▶ Easily understandable input menu
- ▶ Selectable mode of operation: drilling/thread cutting
- ▶ Counting function for drilling stroke
- ▶ Additional panel for automatic mode (activation by moving switch lever to automatic)
- ▶ 4.3" touchscreen display
- ▶ Comfort operator/machine interface for programming the spindle sleeve feed
- ▶ Selectable mode of operation: Drilling, reaming, countersinking, flow forming, thread cutting
- ▶ Free-programming function
- ▶ Choice of machine settings

## Special equipment

- ▶ LED lighting with articulated arm  
**Order no. 290.241**
- ▶ Machined foot plate  
**Order no. 290.175D**
- ▶ Combi drilling table with vice and square table 360° rotatable with scale, jaw width 120 mm, span 105 mm, column diameter 125 mm (deviating), table surface 350 x 350 mm  
**Order no. 290.138**
- ▶ Machined foot plate incl. integrated coolant system  
Filling capacity: max. 15 l  
Delivery rate: max. 30 l/min  
**Order no. 290.160D**
- ▶ Coolant system (separate tank)  
Filling quantity: max. 30 l/min  
Delivery rate: max. 30 l/min  
**Order no. 290.340**
- ▶ Foot switch  
Drilling function: Spindle ON and OFF  
Thread cutting function: Clockwise/anti-clockwise rotation

## Technical data

Drilling capacity/normal drilling performance (mm)	
R1 (measured torque Nm)	30/35 (in E335/ST60) (135)
R2 (measured torque Nm)	27/32 (in E335/ST60) (90)
R3 (measured torque Nm)	35/40 (in E335/ST60) (260)
Thread cutting performance max. (depending on gradient)	
R1	M30x3.5
R2	M24x3
R3	M36x4
Spindle	MK IV
Drilling depth (mm)	160
Distance column-spindle (mm)	300
Column diameter (mm)	140
Useable table surface (W x L) (mm)	590 x 450
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	with fine tuning
Table height adjustment	with toothed rack
Spindle/table (mm)	150-700
Machine dimensions without VP (mm)	610 x 900 x 1,980
Machine dimensions with VP (mm)	670 x 1,100 x 2,200
Three-phase current motor 400 V with frequency converter (kW)	4.0
Spindle speed, stepless (1/min)	
R1 (1-stage)	0-1,000
R2 (1-stage)	0-1,600
R3 (2-stage with gearing)	0-4,000

## SB 40 NC Plus

Feed/return stroke, infinitely variable (m/min)	0-1.5
Weight (kg)	440 kg
<b>Order no. R1</b>	<b>230.540</b>
<b>Order no. R2</b>	<b>230.541</b>
<b>Order no. R3</b>	<b>230.542</b>
<b>Additional accessories</b>	<b>from page 62</b>

\* The drilling machine is fitted with a frequency converter and complies with the standards DIN EN 55011:2016 & A1:2017.

For AUTO: Programme start/stop

**Order no. 231.000**

- ▶ Commissioning the machine and briefing the operating staff

**Order no. 229.931**

## Accessories

### Drill package 6

- ▶ Vice [felix] 150 2.0
- ▶ Taper mandrel MK IV/B18
- ▶ Reduction sleeve MK IV/MK III
- ▶ Reduction sleeve MK IV/MK II
- ▶ Quick-change drill chuck B18 3-16 mm (accuracy 0.17 mm)





# Flow drilling machine SB 20 FB ▶Plus



- ▶ 3-year warranty for single-shift operation
- ▶ Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: SB 20 FB ▶Plus

## Standard equipment

- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head hood with ergonomically tilted front
- ▶ LED lighting
- ▶ Quick-adjust ergonomic depth stop
- ▶ Stepless speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electrical fuse
- ▶ Connecting cable with CEE plug

## Flow forming

Serves to produce extrusions in thin-walled metallic materials.

The flow forming procedure creates a sleeve in the existing material by reshaping it. This material extension increases the number of supporting threads to threefold to fivefold. The material is not machined but used to create durable connections.

## The advantages of flow forming are

- ▶ low cost per thread
- ▶ highly durable connections
- ▶ high-quality threads
- ▶ no special equipment
- ▶ low start-up costs
- ▶ no external material
- ▶ fewer production steps
- ▶ no chip disposal

## Accessories

- ▶ Vice [felix] 100 2.0  
**Order no. 281.106**



## Technical data

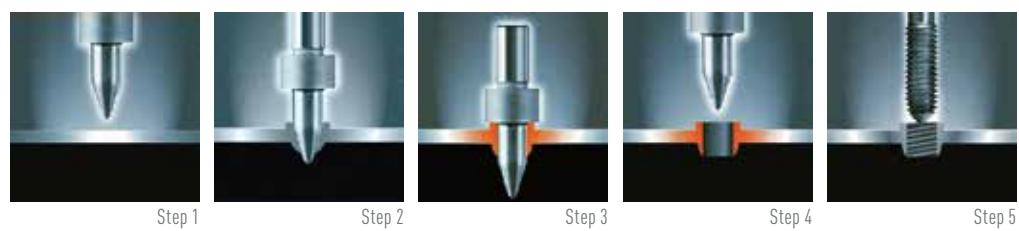
Flow forming at 3 mm sheet thickness (mm)	8
Spindle	MK II
Drilling depth (mm)	100
Distance column-spindle (mm)	240
Column diameter (mm)	82
Useable table surface (W x L) (mm)	340 x 280
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 125, 13/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Quick-adjust thrust ring
Feed	by hand
Table height adjustment	with toothed rack
Three-phase current motor 400 V with frequency converter (kW)	1.5
Spindle speed, stepless (1/min)	40-4,000

## SB 20 FB Plus

Spindle/table (mm)	160-880
Machine dimensions without VP (mm)	355 x 705 x 1,825
Machine dimensions with VP (mm)	572 x 936 x 2,142
Weight (kg)	195
<b>Order no.</b>	<b>220.115</b>

**Additional accessories** **from page 62**

\* The drilling machine is fitted with a frequency converter and complies with the standards DIN EN 55011:2016 & A1:2017.



# PROVEN AND GOOD +++ OUR SB P40 STG PV ELECTRONIC



## Touch display

New revised touch display.

All important information at a glance. Various possibilities to combine the different options (chip breaking mode, piece counter, spindle stop and snap action).

## Thread cutting device as standard

Adjustable via programmable depth indicator.

## Main switch

## Large table surface working area

## Optional machined base plate with integrated coolant system

## Transparent hood

Transparent hood (ideal for training and schools), optionally also available with grey hood.

## Stepless feed

With electromagnetic clutch.

## LED illumination

LED lighting as standard, behind the drill spindle.

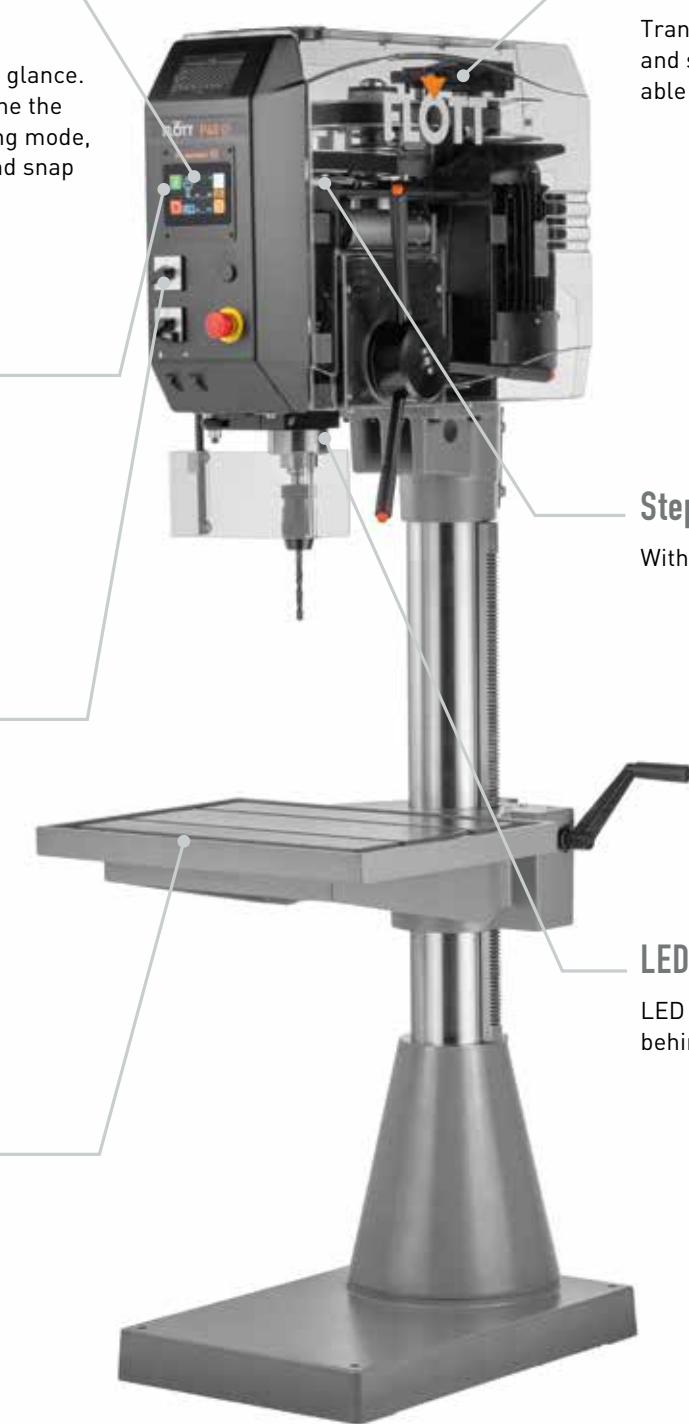


Fig. SB P40 STG PV electronic

# CLASSIC DRILLING MACHINES

Our proven classic drilling machines -like all other FLOTT products, they stand for a very long service life.

They are designed to run on a simple underlying concept, as the speed adjustment runs mechanically via the belt pulley.

The drills have a variety of selectable displays: with a simple scale (M3 ST/M5 ST), with a purely digital display for drilling depth and speed (P30 ST/P40 ST) or the modern version, with the new "touch display" (P30 STG PV/P40 STG PV).

Of course, all machines also have a 3-year warranty (optionally extendable to 5 years).





# Column drill SB M3 ST



- 3-year warranty for single-shift operation
- Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: SB M3 ST with special equipment

## Standard equipment

- Stepless speed control
- Emergency stop button
- Manual reversing switch for clockwise and anti-clockwise rotation
- Under-voltage release
- Table height adjustment via toothed rack
- Drilling depth stop with fine adjustment
- Connecting cable (1.5 m) with CEE plug
- Drill protection with electrical fuse
- Thermal overload protection

## Special equipment

- LED lighting with articulated arm  
**Order no. 290.240**
- LED lighting in head  
**Order no. 290.070**
- Machined base plate incl. integrated coolant system  
Filling quantity: max. 15 l, Delivery rate: max. 30 l/min  
**Order no. 290.160B**
- Machined foot plate  
**Order no. 290.175B**
- Combi drilling table with vice and square table  
360° rotatable with scale, jaw width 120 mm, span 105 mm, table surface 350 x 350 mm  
**Order no. 290.125**
- Coolant system (separate tank)  
Filling quantity: max. 15 l/min  
Delivery rate: max. 30 l/min  
**Order no. 290.340**
- Large base  
Column Ø 125 mm  
Usable table surface (WxL) 590 x 450 mm  
**Order no. 205.036**

## Accessories

### Drill package 4

- Vice [felix] 120 2.0
- Taper mandrel MK III/B18
- Reduction sleeve MK III/MK I
- Reduction sleeve MK III/MK II
- Quick-change drill chuck B18 3-16 mm (accuracy 0.17 mm)  
**Order no. 296.593**



## ► Our classic

### Technical data

Drilling capacity/normal drilling performance (mm)	25/30
Thread cutting performance max. (depending on gradient)	M20
Spindle	MK III
Drilling depth (mm)	125
Distance column-spindle (mm)	280
Column diameter (mm)	110
Useable table surface (W x L) (mm)	420 x 340 mm
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 125, 13/26
Speed indicator	scale
Drilling depth indicator	scale
Drilling depth stop	with fine tuning
Table height adjustment	with toothed rack
Machine dimensions without VP (mm)	520 x 820 x 1,900
Machine dimensions with VP (mm)	637 x 1,096 x 2,120
Three-phase current motor 400 V, pole-changeable (kW)	0.9/1.45
Spindle speeds with gearing, infinitely variable	
Revolutions per minute	125 - 4000 1/min
In 2 stages/stage 1 stage 2	125 - 2000 1/min, 250 - 4000 1/min
The step change takes place via belt-reversal	

### SB M3 ST

Spindle/table (mm)	240-790
Weight (kg)	275
<b>Order no.</b>	<b>205.180</b>

**Additional accessories** **from page 62**



# Column drill SB M5 ST



- 3-year warranty for single-shift operation
- Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: SB M5 ST with special equipment

## Standard equipment

- ▶ Stepless speed control
- ▶ Emergency stop button
- ▶ Manual reversing switch for clockwise and anti-clockwise rotation
- ▶ Under-voltage release
- ▶ Table height adjustment via toothed rack
- ▶ Drilling depth stop with fine adjustment
- ▶ Connecting cable (1.5 m) with CEE plug
- ▶ Spindle MK IV
- ▶ Drill protection with electrical fuse
- ▶ Thermal overload protection

## Special equipment

- ▶ LED lighting with articulated arm  
**Order no. 290.240**
- ▶ LED lighting in head  
**Order no. 290.070**
- ▶ Machined base plate incl. integrated coolant system  
Filling quantity: max. 15 l, Delivery rate: max. 30 l/min  
**Order no. 290.160C**
- ▶ Machined foot plate  
**Order no. 290.175C**
- ▶ Combi drilling table with vice and square table  
360° rotatable with scale, jaw width 120 mm, span 105 mm, table surface 350 x 350 mm  
**Order no. 290.135**
- ▶ Coolant system (separate tank)  
Filling quantity: max. 15 l/min  
Delivery rate: max. 30 l/min  
**Order no. 290.340**

## Accessories

### Drill package 6

- ▶ Vice [felix] 150 2.0
- ▶ Taper mandrel MK IV/B18
- ▶ Reduction sleeve MK IV/MK III
- ▶ Reduction sleeve MK IV/MK II
- ▶ Quick-change drill chuck B18  
3-16 mm (accuracy 0.17 mm)  
**Order no. 296.595**



## ► Our classic

### Technical data

Drilling capacity/normal drilling performance (mm)	35/40
Thread cutting performance max. (depending on gradient)	M30
Spindle	MK IV
Drilling depth (mm)	160
Distance column-spindle (mm)	300
Column diameter (mm)	125
Useable table surface (W x L) (mm)	590 x 450 mm
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 160, 14/26
Speed indicator	scale
Drilling depth indicator	scale
Drilling depth stop	with fine tuning
Table height adjustment	with toothed rack
Machine dimensions without VP (mm)	610 x 850 x 1,920
Machine dimensions with VP (mm)	672 x 1,096 x 2,142
Three-phase current motor 400 V, pole-changeable (kW)	1.5/3.0
Spindle speed, stepless (1/min) with gearing	
Revolutions per minute	100-2,000 rpm

### SB M5 ST

Spindle/table (mm)	150-700
Weight (kg)	440
<b>Order no.</b>	<b>205.204</b>
<b>Additional accessories</b>	<b>from page 62</b>



# Column drill SB P30 ST



- 3-year warranty for single-shift operation
- Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: SB P30 ST with special equipment

## Standard equipment

- Drill depth adjustment with fine tuning and under-voltage release
- Emergency stop button
- Manual reversing switch (not applicable with thread cutting system option)
- Stepless speed control
- Connecting cable (1.5 m) with CEE plug
- Drill protection with electrical fuse
- Thermal overload protection
- Digital drilling depth and speed display

## Special equipment

- Thread cutting system  
Thread cutting capacity max M20  
Adjusting the thread cutting depth via digital depth display  
**Order no. 290.622**
- Combi drilling table with vice and square table 360° rotatable with scale  
Jaw width 120 mm, span 105 mm  
Table surface 350 x 350 mm  
**Order no. 290.125**
- Machined foot plate  
**Order no. 290.175B**
- Machined base plate incl. integrated coolant device  
Filling capacity: max. 15 l, Delivery rate: max. 30 l/min  
**Order no. 290160B**
- LED lighting with articulated arm  
**Order no. 290.240**
- Coolant system (separate container)  
Filling quantity: max. 15 l, Delivery rate: max. 30 l/min  
**Order no. 290.340**

## Accessories

### Drill package 4

- Vice [felix] 120 2.0
- Taper mandrel MK III/B18
- Reduction sleeve MK III/MK I
- Reduction sleeve MK III/MK II
- Quick-change drill chuck B18 3-16 mm (accuracy 0.17 mm)  
**Order no. 296.593**



## ► Our classic

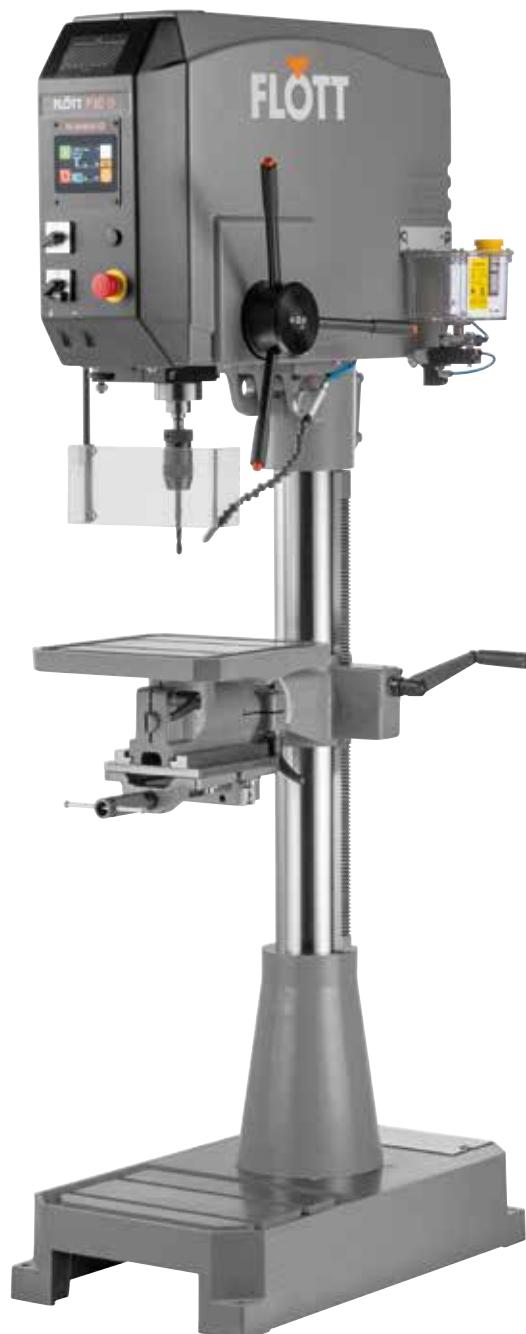
### Technical data

Drilling capacity/normal drilling performance (mm)	25/30
Thread cutting performance max. (depending on gradient)	M20
Spindle	MK III
Drilling depth (mm)	125
Distance column-spindle (mm)	280
Column diameter (mm)	110
Useable table surface (W x L) (mm)	420 x 340 mm
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 125, 13/26
Speed indicator	scale
Drilling depth indicator	scale
Drilling depth stop	with fine tuning
Table height adjustment	with toothed rack
Machine dimensions without VP (mm)	610 x 850 x 1,920
Machine dimensions with VP (mm)	637 x 1,096 x 2,120
Three-phase current motor 400 V, pole-changeable (kW)	1.5/3.0
<b>SB P30 ST</b>	
Spindle/table (mm)	240-790
Weight (kg)	275
<b>Order no.</b>	<b>205.181</b>
<b>Additional accessories</b>	<b>from page 62</b>



# Column drill SB P30 STG PV electronic

Also with  
transparent hood



- 3-year warranty for single-shift operation
- Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: SB P30 STG PV electronic with options

Fig.: SB P30 STG PV electronic with transparent hood and options

## Standard equipment

- Drill depth adjustment with fine tuning and under-voltage release
- Emergency stop button
- Stepless speed control
- Table height adjustment via toothed rack
- Connecting cable (1.5 m) with CEE plug
- Drill protection with electrical fuse
- Thermal overload protection
- Digital display for drill depth, speed and feed rate display
- Feed is electronically regulated and continuously variable incl. spindle monitoring
- Free cutting device
- Thread cutting system, thread cutting performance max. M20, thread cutting depth is set using the digital depth display
- Drill depth shut-off; programmable; easy operation
- Drill handle with push-button for turning the feed on/off
- Optional transparent protective hood at no extra price
- LED lighting as standard

## Special equipment

- Combination drilling table with vice and square table, can be rotated 360° with scale  
Jaw width 120 mm, span 105 mm  
Table surface 350 x 350 mm  
**Order no. 290.125**
- Machined foot plate  
**Order no. 290.175B**
- Machined base plate incl. integrated coolant system  
Filling quantity: max. 15 l  
Delivery rate: max. 30 l/min  
**Order no. 290.160B**
- LED lighting with articulated arm  
**Order no. 290.241**
- Coolant system (separate container)  
Filling quantity: max. 15 l, Delivery rate: max. 30 l/min  
**Order no. 290.340**

## Software options that can be supplied for PV electronic

- Safety module – automatic spindle stop for drill spindle at the top  
**Order no. 290.613**
- Chip breaking module – prevents the formation of long chips  
**Order no. 290.612**
- Snap action – 4 freely selectable feed speeds per working stroke  
**Order no. 290.614**

## ► Our classic

### Technical data

Drilling capacity/normal drilling performance (mm)	25/30 (in E335/ST60)
Thread cutting performance max. (depending on gradient)	M20
Spindle	MK III
Drilling depth (mm)	125 mm
Distance column-spindle (mm)	280 mm
Column diameter (mm)	110 mm
Useable table surface (W x L) (mm)	420 x 340 mm
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 125, 13/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	with fine tuning
Table height adjustment	with toothed rack
Three-phase current motor 400 V, pole-changeable (kW)	0.90/1.45
Spindle speed, stepless (1/min) with gearing (2 stages)	125-4,000
Stage I	125-2,000
Stage II	250-4,000

The step change takes place via belt-reversal

### SB P30 STG PV electronic

Feed, stepless (mm/min) incl. electromagnetic clutch; digital display	0-300
Spindle/table (mm)	240-790
Machine dimensions without VP (mm)	520 x 820 x 1,900
Machine dimensions with VP (mm)	670 x 1,100 x 2,200
Weight (kg)	320
<b>Order no. transparent hood</b>	<b>207.220</b>
<b>Order no. grey hood</b>	<b>207.183</b>
<b>Additional accessories</b>	<b>from page 62</b>

## Accessories

### Drill package 5

- Vice [felix] 150 2.0
- Taper mandrel MK III/B18
- Reduction sleeve MK III/MK I
- Reduction sleeve MK III/MK II
- Quick-change drill chuck B18 3-16 mm (accuracy 0.17 mm)  
**Order no. 296.594**





# Column drill SB P40 ST



- 3-year warranty for single-shift operation
- Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: SB P40 ST

## Standard equipment

- Drill depth adjustment with fine tuning and under-voltage release
- Emergency stop button
- Manual reversing switch (not applicable with thread cutting system option)
- Stepless speed control
- Connecting cable (1.5 m) with CEE plug
- Drill protection with electrical fuse
- Thermal overload protection
- Digital drilling depth and speed display

## Special equipment

- Thread cutting system  
Thread cutting capacity max M30  
Adjusting the thread cutting depth via digital depth display  
**Order no. 290.622**
- Combination drilling table with vice and square table, can be rotated 360° with scale  
jaw width 120 mm, span 105 mm  
table surface 350 x 350 mm  
**Order no. 290.135**
- Machined foot plate  
**Order no. 290.175C**
- Machined base plate incl. integrated coolant system  
Filling quantity: max. 15 l, Delivery rate: max. 30 l/min  
**Order no. 290.160C**
- LED lighting with articulated arm  
**Order no. 290.240**
- Coolant system (separate container)  
Filling quantity: max. 15 l, Delivery rate: max. 30 l/min  
**Order no. 290.340**

## Accessories

### Drill package 6

- Vice [felix] 150 2.0
- Taper mandrel MK IV/B18
- Reduction sleeve MK IV/MK III
- Reduction sleeve MK IV/MK II
- Quick-change drill chuck B18 3-16 mm (accuracy 0.17 mm)  
**Order no. 296.575**



## ► Our classic

### Technical data

Drilling capacity/normal drilling performance (mm)	35/40
Thread cutting performance max. (depending on gradient)	M30
Spindle	MK IV
Drilling depth (mm)	160
Distance column-spindle (mm)	300
Column diameter (mm)	125
Useable table surface (W x L) (mm)	590 x 450
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 160, 14/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	with fine tuning
Table height adjustment	with toothed rack
Machine dimensions without VP (mm)	610 x 850 x 1,920
Machine dimensions with VP (mm)	637 x 1,096 x 2,120
Three-phase current motor 400 V, pole-changeable (kW)	1.5/3.0
Spindle speed, stepless (1/min) with gearing	
Speed series R1	100-2,000
Speed series R2	70-1,400

### SB P40 ST

Spindle/table (mm)	150-700
Weight (kg)	440
<b>Order no. R1</b>	<b>205.205</b>
<b>Order no. R2</b>	<b>205.206</b>

**Additional accessories** **from page 62**



# Column drill SB P40 STG PV electronic

Also with  
transparent hood



- 3-year warranty for single-shift operation
- Warranty extension to 4 or 5 years available!  
See page 72-73

Fig.: SB P40 STG PV R1 transparent electronic

## Standard equipment

- ▶ Drill depth adjustment with fine tuning and under-voltage release
- ▶ Emergency stop button
- ▶ Stepless speed control
- ▶ Connecting cable (1.5 m) with CEE plug
- ▶ Drill protection with electrical fuse
- ▶ Thermal overload protection
- ▶ Digital display for drill depth, speed and feed rate display
- ▶ Feed is electronically regulated and continuously variable incl. spindle monitoring
- ▶ Free cutting device
- ▶ Thread cutting system, thread cutting performance max. M30, thread cutting depth is set using the digital depth display
- ▶ Drill depth shut-off; programmable; easy operation
- ▶ Drill handle with push-button for turning the feed on/off
- ▶ LED lighting as standard

## Special equipment

- ▶ Combination drilling table with vice and square table, can be rotated 360° with scale jaw width 120 mm, span 105 mm table surface 350 x 350 mm  
**Order no. 290.135**
- ▶ Machined foot plate  
**Order no. 290.175C**
- ▶ Machined base plate incl. integrated coolant system  
Filling quantity: max. 15 l, Delivery rate: max. 30 l/min  
**Order no. 290.160C**
- ▶ LED lighting with articulated arm  
**Order no. 290.241**
- ▶ Coolant system (separate container)  
Filling quantity: max. 15 l, Delivery rate: max. 30 l/min  
**Order no. 290.340**

## Software options that can be supplied for PV electronic

- ▶ Safety module – automatic spindle stop for drill spindle at the top  
**Order no. 290.613**
- ▶ Chip breaking module – prevents the formation of long chips  
**Order no. 290.612**
- ▶ Snap action – 4 freely selectable feed speeds per working stroke  
**Order no. 290.614**

## ► Our classic

### Technical data

Drilling capacity/normal drilling performance (mm)	35/40 (in E335/ST60)
Thread cutting performance max. (depending on gradient)	M30
Spindle	MK IV
Drilling depth (mm)	160
Distance column-spindle (mm)	300
Column diameter (mm)	125
Useable table surface (W x L) (mm)	590 x 450
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 160, 14/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	with fine tuning
Table height adjustment	with toothed rack
Machine dimensions without VP (mm)	610 x 850 x 1,920
Machine dimensions with VP (mm)	637 x 1,096 x 2,120
Three-phase current motor 400 V, pole-changeable (kW)	1.5/3.0
Spindle speed, stepless (1/min) with gearing	
Speed series R1	100-2,000
Speed series R2	70-1,400

### SB P40 STG PV electronic

Feed, stepless (mm/min) incl. electromagnetic clutch; digital display	0-300
Spindle/table (mm)	150-700
Weight (kg)	440
<b>Order no. transparent hood, R1</b>	<b>207.226</b>
<b>Order no. transparent hood, R2</b>	<b>207.227</b>
<b>Order no. grey hood, R1</b>	<b>207.208</b>
<b>Order no. grey hood, R2</b>	<b>207.209</b>
<b>Additional accessories</b>	<b>from page 62</b>

## Accessories

### Drill package 6

- ▶ Vice [felix] 150 2.0
- ▶ Taper mandrel MK IV/B18
- ▶ Reduction sleeve MK IV/MK III
- ▶ Reduction sleeve MK IV/MK II
- ▶ Quick-change drill chuck B18 3-16 mm (accuracy 0.17 mm)  
**Order no. 296.595**



# Gear drilling machine GB 50 MV



Fig.: GB 50 MV without special equipment

## Standard equipment

- Mechanical spindle feed
- Machined base plate with T-slots and integrated coolant system
- Precise mechanical drill depth setting
- Circuit breaker with U-trip
- Emergency stop button
- Drill protection with electrical fuse
- Machine lighting
- Rotary and swivel table
- automatic tool ejector
- Gear wheels made of hardened, ground steel
- Gearwheel lubrication with automatic oil pump
- Handwheel for manual, fine hand feed
- Reversing switch for clockwise/anti-clockwise rotation
- 12-month warranty

## Special equipment

- Thread cutting system  
**Order no: 287.045**

## Accessories

- Vice [felix] 150 2.0  
**Order no. 281.143**
- Quick-change drill chuck,  
Socket B18  
Span 3-16 mm  
Rotational accuracy: 0.17 mm  
**Order no. 285.165**
- Tapered mandrel (insertion pin)  
Dimension B 18/MK IV  
**Order no. 290.323**

## Technical data

Drilling capacity (mm)	50
Thread cutting performance max. (depending on gradient)	M36
Spindle	MK IV
Drilling depth (mm)	230
Distance column-spindle (mm)	400
Column diameter (mm)	200
Usable table surface (mm)	550 x 550
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 3, 160, 16/28
Speed indicator	scale
Drilling depth indicator	scale
Distance spindle/table (mm)	50-850
Table height adjustment	with toothed rack
Machine dimensions without VP (mm)	600 x 1,060 x 2,450
Machine dimensions with VP (mm)	680 x 2,600 x 1,210
Three-phase current motor 400 V (kW)	3.0
Spindle speed in 9 stages (gears) (1/min)	54-75-109-169-237-344-507- 712-1,032
Mechanical spindle feed (mm/rev)	0.1-0.2-0.3-0.4
<b>GB 50 MV</b>	
Weight (kg)	795
<b>Order no.</b>	<b>287.040</b>
Packaging	V0
Special colours (RAL) extra charge	on request

Further special equipment on request!

# Multi-head drilling machines

Expandable at any time  
flexible arrangement



Warranty  
extension

- 3-year warranty for single-shift operation
- Warranty extension to 4 or 5 years available!  
See page 72-73

We can put together the FLOTT multi-head drilling machine for you individually.

We would be happy to advise you!

## Standard equipment

- Fixed worktable
- Head height adjustment via hand crank
- Chip tray

## Special equipment / accessories

- Foot switch on request
- Coolant system
- Minimum quantity lubrication
- Side tables for optional equipment

## Features

- Can function modularly as a single machine or in series at any time
- Ideal also for operating while seated
- Individual modules can be easily moved, e.g. by forklift
- Base available either with open storage compartment or with drawer and lockable door

## Technical data

### Varying drill heads possible

#### Underframe

Usable table surface	590 x 450 mm (transverse slots 2 x 14 mm)
Fixed working height	900 mm
Distance spindle to column	300 mm
Column diameter	125 mm
Distance drill chuck to table	50 - 400 mm
Order no. Underframe with door and drawer	<b>280.600</b>
Order no. with cover and open storage compartment	<b>280.610</b>

## More options

- Can be combined with machines from 18 Plus to 40 NC Plus (**varying drill heads possible!**)

► 18 Plus <a href="#">Order no. 218.304</a>	► 30 NC Plus R1 <a href="#">Order no. 231.110</a>	► 40 MV Plus R2 <a href="#">Order no. 231.121</a>
► 20 Plus <a href="#">Order no. 220.101</a>	► 30 NC Plus R2 <a href="#">Order no. 231.111</a>	► 40 MV Plus R3 <a href="#">Order no. 231.122</a>
► 23 Plus R1 <a href="#">Order no. 223.024</a>	► 30 NC Plus R3 <a href="#">Order no. 231.112</a>	► 40 NC Plus R1 <a href="#">Order no. 231.125</a>
► 23 Plus R2 <a href="#">Order no. 223.028</a>	► 40 Plus R1 <a href="#">Order no. 231.115</a>	► 40 NC Plus R2 <a href="#">Order no. 231.126</a>
► 25 Plus R1 <a href="#">Order no. 225.013</a>	► 40 Plus R2 <a href="#">Order no. 231.116</a>	► 40 NC Plus R3 <a href="#">Order no. 231.127</a>
► 25 Plus R2 <a href="#">Order no. 225.018</a>	► 40 Plus R3 <a href="#">Order no. 231.117</a>	► 40 PV electronic R1 <a href="#">Order no. 297.087</a>
► P30 STG PV <a href="#">Order no. 297.086</a>	► 40 MV Plus R1 <a href="#">Order no. 231.120</a>	► 40 PV electronic R2 <a href="#">Order no. 297.088</a>
► 30 Plus R1 <a href="#">Order no. 231.100</a>		
► 30 Plus R2 <a href="#">Order no. 231.101</a>		
► 30 Plus R2 <a href="#">Order no. 231.102</a>		
► 30 MV Plus R1 <a href="#">Order no. 231.105</a>		
► 30 MV Plus R2 <a href="#">Order no. 231.106</a>		
► 30 MV Plus R3 <a href="#">Order no. 231.107</a>		



## Special equipment

### Option 1

**Machines with deviating special voltage**  
on request



Order no.

290.100

### Option 2

**Machined base plate with T-slots. Only available for SB-version from a column diameter of 82 mm onwards**



Order no. I Columns -Ø 82 mm 290.175A  
Order no. I Columns -Ø 110 mm 290.175 B  
Order no. I Columns -Ø 125 mm 290.175 C  
Order no. I Columns -Ø 140 mm 290.175 D

### Option 3

**Foot switch as "EMERGENCY STOP"**  
(must be unlocked manually)



Order no.

290.320

### Option 4

**Foot switch**  
following technical advice and creation of a requirement profile



Order no.

on request

### Option 5 and 6

**Column extension Ø 70**  
max. extension 200 mm



**Column extension Ø 82**  
max. extension 150 m

Order no. Ø 70 296.286  
Order no. Ø 82 296.287

### Option 7 and 8

**Column extension Ø 110**  
max. extension 300 mm



**Column extension Ø 125**  
max. extension 300 mm

Order no. Ø 110 296.288  
Order no. Ø 125 296.289

### Option 9

**Machined base plate with coolant system**  
Filling capacity: max. 15 l,  
Delivery rate max. 30 l/min



Order no. I Columns -Ø 82 mm 290.160A  
Order no. I Columns -Ø 110 mm 290.160B  
Order no. I Columns -Ø 125 mm 290.160C  
Order no. I Columns -Ø 140 mm 290.160D

### Option 10

**Electric coolant system**  
complete with pump, tank, hoses, cable and switch from Series 18 Plus onwards  
Filling capacity: max. 15 l  
Delivery rate: max. 30 l/min



Order no.

290.340

## Option 11

**Drill depth fixed stop**  
for optimum repetition accuracy up to 25 Plus



Order no.

212.716

## Option 12

**Special colour**  
Base (RAL one-component paint)



Order no.

290.200

## Option 13

**Special colour**  
Plus hood  
Possible on request!



Order no.

290.201

## Option 14 and 15

**Commissioning the machine**  
and instruction of the operating personnel  
**Online trainings:**  
[www.flott.de](http://www.flott.de)  
Advice and briefing

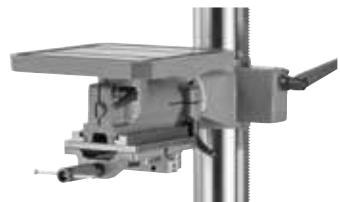


Order no. Com.

290.018  
229.931

## Option 16 and 17

**Combination drill tables for 110/125/140 columns** with vice and square table 360° rotatable with scale  
Jaw width 120 mm  
span 105 mm  
Table surface 350 x 350 mm



Order no. 110

290.125

Order no. 125

290.135

Order no. 140

290.138

## Option 18

**Minimum quantity lubrication**  
Machines with deviating special voltage. A metering pump moves the undiluted lubricant to the metering nozzle orifice, where this is formed into a microfine lubricant spray cone with blower air. Lubricant and blower air are guided separately coaxially to the nozzle and are repeatedly adjustable independently of each other.



After activation, the lubricant emerges from the dosing nozzle without any time delay.

Large, stepless adjustment range of the dosing pump. From barely perceptible volume to the maximum delivery rate of 3 cm<sup>3</sup>/min. The compact dosing unit for minimum quantity lubrication: As little as possible, but as much as necessary - i.e. optimally dosed!

Order no. for 13-15 Plus  
Order no. for 18 Plus  
Order no. for 20-25 Plus  
Order no. for 30-40 Plus

290.395 A  
290.395 B  
290.395 C  
290.395 D

## Accessories

### F0 precision cross table

- Table size 230 x 164 mm
- Travel x/y 120 mm x 110 mm
- Scale marking 0.05
- Weight 16 kg
- Works with drilling machine type series 18/20/23/25 Plus
- Intermediate plate



Order no.

281.085

### F1 precision cross table

- Table size 330 x 220 mm
- Travel x/y 190 mm x 130 mm
- Scale marking 0.05
- Weight 33 kg
- Works with drilling machine type series 18/20/23/25 Plus, series P30 and 30 Plus/MV/NC
- Intermediate plate



Order no.

281.090

### F2 Precision cross table

- Table size 430 x 240 mm
- Travel x/y 240 mm x 160 mm
- Scale marking 0.05
- Weight 46 kg
- Suitable for drilling machine type series P40/40 Plus/ MV/NC
- Intermediate plate



Order no.

281.095

### Machine cabinet I narrow version

- Solid beech top, 30 mm thick, height-adjustable feet (up to 3 cm), bar-glued and finger-jointed, oil-treated to repel dirt and protect against warping
- Bearing capacity: 300 kg
- 1 drawer with roller guide
- 1 lockable door
- 60 x 60 x 84 cm



Order no.

250.208

### Machine cabinet I wide version

- ▶ Solid beech top, 30 mm thick, height-adjustable feet (up to 3 cm), bar-glued and finger-jointed, oil-treated to repel dirt and protect against warping
- ▶ Bearing capacity: 300 kg
- ▶ 2 drawers with roller guides
- ▶ 2 lockable doors
- ▶ 120 x 60 x 84 cm



Order no.

250.180

### LED lighting with 90° articulated arm

- ▶ Fixed mounted
- ▶ Spotlight 90° with flex shaft 225 mm and on/off switch on lamp head
- ▶ 200 lm, approx. 5500 Kelvin (daylight white), IP65



Order no. up to series 25 Plus

290.240

Order no. from P30 Plus R3 series

290.241

### LED lighting with 90° articulated arm with straight magnetic base

- ▶ With 90° magnetic base and separate power supply unit 24 V (2.5 W)
- ▶ Spotlight 90° with flexible shaft 225 or 450 mm and on/off switch on lamp head
- ▶ 200 lm, approx. 5500 Kelvin (daylight white), IP65
- ▶ Magnetic holding force: 250 N



Order no. with 225 flex shaft

290.242

Order no. with 450 flex shaft

290.244

### LED lighting with articulated arm with straight magnetic base

- ▶ With 90° magnetic base and separate power supply unit 24 V (2.5 W)
- ▶ Spotlight 90° with 450 mm and on/off switch on lamp head
- ▶ 200 lm, approx. 5500 Kelvin (daylight white), IP65
- ▶ Magnetic holding force: 250 N



Order no.

290.243

## Accessories

### Vice [felix] 80 2.0

- Jaw width: 80 mm
- Span: 0-120 mm
- Jaw height: 28 mm
- Travel: 150 mm
- Weight: 11.6 kg
- W x L x H: 95 x 280 x 78 mm



Order no.

281.140

### Vice [felix] 100 2.0

- Jaw width: 100 mm
- Span: 0-135 mm
- Jaw height: 32 mm
- Travel: 165 mm
- Weight: 12.8 kg
- W x L x H: 122 x 343 x 85 mm



Order no.

281.141

### Vice [felix] 120 2.0

- Jaw width: 120 mm
- Span: 0-168 mm
- Jaw height: 40 mm
- Travel: 200 mm
- Weight: 20.3 kg
- W x L x H: 140 x 395 x 105 mm



Order no.

281.142

### Vice [felix] 150 2.0

- Jaw width: 150 mm
- Span: 0-200 mm
- Jaw height: 40 mm
- Travel: 220 mm
- Weight: 32.4 kg
- W x L x H: 170 x 451 x 103 mm



Order no.

281.143

### Precision quick-change drill chuck

- ▶ Ground, self-tensioning
- ▶ Span 0.5-6 mm
- ▶ Socket B12
- ▶ Rotational accuracy: 0.05 mm



Order no.

**285.104**

### Gear rimmed drill chuck

- ▶ Span 0.5-8 mm
- ▶ Socket B12 for turbo drill
- ▶ Rotational accuracy: 0.20 mm



Order no.

**285.103**

### Precision ground quick-change drill chuck

- ▶ self-clamping, for clockwise/anticlockwise rotation max. 8,000 1/min.
- ▶ Span 1-13 mm
- ▶ Socket B16
- ▶ Rotational accuracy: 0.06 mm



Order no.

**285.064**

### Quick-change drill chuck, self-tensioning

- ▶ Span 1-13 mm
- ▶ Socket B16
- ▶ Rotational accuracy: 0.17 mm



Order no.

**285.133**

## Accessories

### Quick-change drill chuck, self-tensioning

- Span 3-16 mm
- Socket B18
- Rotational accuracy: 0.17 mm



Order no.

285.165

### Taper mandrel (insertion pin)



Order no. for B16/MK I	285.310
Order no. for B16/MK II	285.320
Order no. for B18/MK II	285.321
Order no. for B18/MK III	285.323
Order no. for B18/MK IV	290.323
Order no. for B18/MK V	287.097

### Tap holder

- no automatic loosening in case of vibrations due to laterally mounted spindle for M4-M12 DIN 371
- Span: 1-10 mm
- Socket: B16
- Total length: 80 mm



Order no.

285.109

### Drill drift (Semi-automatic)



Order no. for 1-3	285.334
Order no. for 4-6	285.335

## Reduction sleeves



<b>Order no.</b> for MK II/MK I	<b>285.330</b>
<b>Order no.</b> for MK III/MK II	<b>285.331</b>
<b>Order no.</b> for MK III/MK I	<b>285.332</b>
<b>Order no.</b> for MK IV/MK III	<b>285.333</b>
<b>Order no.</b> for MK IV/MK II	<b>285.336</b>
<b>Order no.</b> for MK V/MK IV	<b>285.092</b>

## Multi-purpose collet for GBF 12

- ▶ Span 3.5-6.5 mm
- ▶ Span 6.5-10 mm



<b>Order no.</b> for 3.5-6.5 mm	<b>285.084</b>
<b>Order no.</b> for 6,5-10 mm	<b>285.085</b>

## GBF 12/MK 2 (tapping chuck)

- ▶ Tapping chuck with gate pressure booster. Length compensation push/pull for clockwise and anti-clockwise rotation.
- ▶ Cutting range M3-M12
- ▶ Without collet



<b>Order no.</b>	<b>285.083</b>
------------------	----------------

## Multi-purpose collet for GBF 18

- ▶ Span 2.8-7 mm
- ▶ Span 7-13 mm



<b>Order no.</b> for 2.8-7 mm	<b>285.087</b>
<b>Order no.</b> for 7-13 mm	<b>285.088</b>



## Accessories

### GBF 18/MK 3

- ▶ Tapping chuck with gate pressure booster. Length compensation push/pull for clockwise and anti-clockwise rotation.
- ▶ Cutting range M5-M18
- ▶ Without collet



Order no. for M5-M18

285.086

### Multi-purpose collet for GBF 30

- ▶ Span 10-16 mm
- ▶ Span 16-23 mm



Order no. for 10-16 mm

285.090

Order no. for 16-23 mm

285.091

### GBF 30/MK 4

- ▶ Tapping chuck with gate pressure booster. Length compensation push/pull for clockwise and anti-clockwise rotation.
- ▶ Cutting range M10-M30
- ▶ Without collet



Order no.

285.089

### HSS-G twist drill set in ABS box

- ▶ Multi-range drill bit with reinforced drill core and parabolically shaped flute for better chip evacuation DIN 338 - cross ground 130 degrees, 25-pcs., 1-13 mm x 0.5 mm



Order no.

285.123

### HSS-G twist drill set in ABS box

- DIN 338 N, 25-pcs  
1-13 mm x 0.5 mm



Order no.

**285.124**

### HSS-E machine tap in ABS box

- DIN 371/376, M3 - M12,  
form B, with core drill, 14  
pcs. for through hole



Order no.

**285.163**

### HSS-G taper and deburring countersink set in ABS box

- DIN 335 C, 90 degrees, 6 pcs.  
6.3-8 mm  
3-10 mm  
4-12 mm  
4-16 mm  
5-20.5 mm



Order no.

**285.162**

### HSS-E machine tap in ABS box

- DIN 371/376, M3 - M12,  
Form C, 35 degrees RSP,  
14 pcs. incl. core drill set and  
thread for through holes



Order no.

**285.164**



## Warranty extensions

Machine	for order no.	4 years warranty extension	5 years warranty extension	Page
TB 10 Eco Plus	217200	290.018.217.200	290.019.217.200	14
TB 10 Basic Plus with head height adjustment	217400	290.018.217.400	290.019.217.400	16
TB 10 Basic Plus with table adjustment	217410	290.018.217.410	290.019.217.410	16
TB 10 Plus	212505	290.018.212.505	290.019.212.505	18
Turbo drill	212506	290.018.212.506	290.019.212.506	20
TB 13 Plus	212500	290.018.212.500	290.019.212.500	22
TB 13 Plus MK2	212503	290.018.212.503	290.019.212.503	22
TBZ 13 Plus	212650	290.018.212.650	290.019.212.650	22
TBZ 13 Plus MK2	212655	290.018.212.655	290.019.212.655	22
SB 13 Plus	212502	290.018.212.502	290.019.212.502	22
SB 13 Plus MK2	212504	290.018.212.504	290.019.212.504	22
TB 15 Plus MK2	212755	290.018.212.755	290.019.212.755	24
SB 15 Plus MK2	212750	290.018.212.750	290.019.212.750	24
TB 18 Plus	218303	290.018.218.303	290.019.218.303	26
TBZ 18 Plus	218309	290.018.218.309	290.019.218.309	26
SB 18 Plus	218308	290.018.218.308	290.019.218.308	26
TB 20 Plus	220105	290.018.220.105	290.019.220.105	28
TBZ 20 Plus	220110	290.018.220.110	290.019.220.110	28
SB 20 Plus	220100	290.018.220.100	290.019.220.100	28
TB 23 Plus R1	223021	290.018.223.021	290.019.223.021	30
TB 23 Plus R2	223026	290.018.223.026	290.019.223.026	30
TBZ 23 Plus R1	223022	290.018.223.022	290.019.223.022	30
TBZ 23 Plus R2	223027	290.018.223.027	290.019.223.027	30
SB 23 Plus R1	223020	290.018.223.020	290.019.223.020	30
SB 23 Plus R2	223025	290.018.223.025	290.019.223.025	30
TB 25 Plus R1	225011	290.018.225.011	290.019.225.011	32
TBZ 25 Plus R1	225012	290.018.225.012	290.019.225.012	32
SB 25 Plus R1	225010	290.018.225.010	290.019.225.010	32
TB 25 Plus R2	225016	290.018.225.016	290.019.225.016	32
TBZ 25 Plus R2	225017	290.018.225.017	290.019.225.017	32
SB 25 Plus R2	225015	290.018.225.015	290.019.225.015	32



- ▶ 3-year warranty for single-shift operation
- ▶ Warranty extension to 4 or 5 years available!  
See page 72-73

## Warranty extension

## Warranty extensions

Machine	for order no.	4 years warranty extension	5 years warranty extension	Page
SB 30 Plus R1	230500	290.018.230.500	290.019.230.500	34
SB 30 Plus R2	230501	290.018.230.501	290.019.230.501	34
SB 30 Plus R3	230502	290.018.230.502	290.019.230.502	34
SB 30 MV Plus R1	230505	290.018.230.505	290.019.230.505	34
SB 30 MV Plus R2	230506	290.018.230.506	290.019.230.506	34
SB 30 MV Plus R3	230507	290.018.230.507	290.019.230.507	34
SB 30 NC Plus R1	230510	290.018.230.510	290.019.230.510	36
SB 30 NC Plus R2	230511	290.018.230.511	290.019.230.511	36
SB 30 NC Plus R3	230512	290.018.230.512	290.019.230.512	36
SB 40 Plus R1	230530	290.018.230.530	290.019.230.530	38
SB 40 Plus R2	230531	290.018.230.531	290.019.230.531	38
SB 40 Plus R3	230532	290.018.230.532	290.019.230.532	38
SB 40 MV Plus R1	230535	290.018.230.535	290.019.230.535	38
SB 40 MV Plus R2	230536	290.018.230.536	290.019.230.536	38
SB 40 MV Plus R3	230537	290.018.230.537	290.019.230.537	38
SB 40 NC Plus R1	230540	290.018.230.540	290.019.230.540	40
SB 40 NC Plus R2	230541	290.018.230.541	290.019.230.541	40
SB 40 NC Plus R3	230542	290.018.230.542	290.019.230.542	40
SB 20 Plus FB	220115	290.018.220.115	290.019.220.115	42
SB M3 ST	205180	290.018.205.180	290.019.205.180	46
SB M5 ST	205204	290.018.205.204	290.019.205.204	48
SB P30 ST	205181	290.018.205.181	290.019.205.181	50
SB P30 STG PV electronic transparent	207220	290.018.207.220	290.019.207.220	52
SB P30 STG PV electronic grey	207183	290.018.207.183	290.019.207.183	54
SB P40 ST/R1	205205	290.018.205.205	290.019.205.205	56
SB P40 ST/R2	205206	290.018.205.206	290.019.205.206	56
SB P40 STG PV electronic/ R1 transparent	207226	290.018.207.226	290.019.207.226	58
SB P40 STG PV electronic/ R2 transparent	207227	290.018.207.227	290.019.207.227	58
SB P40 STG PV electronic/R1 grey	207208	290.018.207.208	290.019.207.208	58
SB P40 STG PV electronic/R2 grey	207209	290.018.207.209	290.019.207.209	58

## Overview grinding machines

<b>Double grinding machine</b>	Grinding disc size mm	Revolutions per minute 1/min	Motor AC 230 V kW	Three-phase current motor 400 V kW	Weight kg	Suction socket Ø mm	<b>Page</b>
<b>TS 175 SW</b>	175 x 25 x 32	2,800	0.52	-	15	42	76
<b>TS 175 SD P</b>	175 x 25 x 32	2,740	-	0.7	15	42	76
<b>TS 175 Pro</b>	175x25x32	2,750	-	0.7	15	42	76
<b>TS 200 SD P/Pro</b>	200 x 32 x 32	2,550	-	1.0/0.75	20	42	78
<b>TS 250 SD P/Pro</b>	250 x 40 x 51	1,400	-	1.4 / 0.8	32	42	78
<b>TS 300 SD P</b>	300 x 40 x 51	1,250	-	2.2	40	42	82
<b>TSB 250 P</b>	250 x 40 x 51	1,400	-	1.4	35	42	84
<b>Belt grinders</b>	Belt length mm	Belt width mm	Motor AC 230 V kW	Three-phase current motor 400 V kW	Weight kg	Suction socket Ø mm	<b>Page</b>
<b>TBSM 100</b>	1,220	100	0.75 (1 x 230 V)	-	27	35	86
<b>BSM 75</b>	2,000	75	-	3.75	80	60	88
<b>BSM 75 A</b>	2,000	75	-	3.75	90	60	88
<b>BSM 75 A/pol</b>	2,000	75	-	3.0/3.75	105	60	88
<b>BSM 150</b>	2,000	150	-	3.75	90	60	90
<b>BSM 150 A</b>	2,000	150	-	3.75	100	60	90
<b>BSM 150 A/pol</b>	2,000	150	-	3.0/3.75	105	60	90
<b>Brush deburring machine</b>	Brush diameter mm	Brush width normal mm	Speed/ pole-changeable RPM	Drive power (Three-phase current motor) kW	Weight kg		<b>Page</b>
<b>BEM 250 Plus</b>	250	60	2,800/1,400	1.8/2.1	85		92
<b>BEM 250 Pro</b>	250 (3 pieces)	60	600-2,700	3	410		94

You can find corresponding dust extraction system in the technical data for the machine in question.



# GRINDING TECHNOLOGY

Double grinding machines .....	76-85
Comb. belt grinder/grinder .....	80-83
Belt grinders .....	84-91
Brush deburring machines .....	92-95



# Double grinding machine

TS 175 SW

TS 175 SD P

TS 175 Pro



Fig.: TS 175 SW/TS 175 SD P

## Standard equipment

- Smooth running, no-maintenance motor
- Protective hood closed at the sides
- Stable, adjustable workpiece supports
- High level of safety thanks to adjustable spark deflector
- Suitable for grinding, deburring and sharpening tools of all kinds, metal profiles etc.
- Circuit breaker and under-voltage release
- Spark/eye protection on both sides
- Connecting cable with two-pin earthed plug (for all SW models)
- Connecting cable with CEE plug 16 A (for all SD P models)
- 1x coarse and fine grinding wheel
- 12-month warranty for single-shift operation

## Accessories

- Machine stand with dip tank, Dimensions: 355 x 300 mm, Weight: 12 kg  
**Order no. 350.435**
- Wall bracket  
**Order no. 315.035**
- Separate replacement grinding wheel coarse standard corundum  
**Order no. for TS 175: 317.526**
- Separate replacement grinding wheel fine standard corundum  
**Order no. for TS 175: 317.527**
- Wheel dresser  
**Order no. 350.101**
- Dust extraction system MA 400 D (only TS 175 SD P and TS 175 Pro)  
**Order no. 330.295**

## Technical data

Machine dimensions without VP (mm)	230 x 440 x 210
Machine dimensions with VP (mm)	260 x 450 x 250
Suction piece Ø (mm)	42
<b>TS 175 SW</b>	
Dimensions of the grinding wheel (mm)	175 x 25 x 32
Speed (1/min)	2,800
Motor AC 230 V (kW)	0.52, S3-25% (periodic)
Weight (kg)	15
<b>Order no.</b>	<b>317.766</b>
<b>TS 175 SD P</b>	
Dimensions of the grinding wheel (mm)	175 x 25 x 32
Speed (1/min)	2,740
Three-phase current motor 400 V (kW)	0.7, S2-30 min (short time operation)
Weight (kg)	15
<b>Order no.</b>	<b>317.761</b>
<b>TS 175 Pro</b>	
Dimensions of the grinding wheel (mm)	175 x 25 x 32
Speed (1/min)	2,750
Motor AC 230 V (kW)	0.7, S1 (continuous operation)
Weight (kg)	15
<b>Order no.</b>	<b>317.840</b>

# Double grinding machine

## TS 200 SD P/Pro

## TS 250 SD P/Pro



Fig.: TS 200 SD P/Pro

## Standard equipment

- Smooth running, no-maintenance motor
- Protective hood closed at the sides
- Stable, adjustable workpiece supports
- High level of safety due to adjustable spark deflector
- Suitable for grinding, deburring and sharpening tools of all kinds, metal profiles etc.
- Circuit breaker and under-voltage release
- Spark/eye protection on both sides
- Connecting cable with CEE plug 16 A
- 1x coarse and fine grinding wheel
- 12-month warranty for single-shift operation

## Special equipment

- Different colour shade (One-component RAL paint)
- Order no. 309.010**

## Accessories

- Machine stand with dip tank, Dimensions: 355 x 300 mm, Weight: 12 kg (only TS 200 SD P)
- Order no. 350.435**
- Machine stand with dip tank, Dimensions: 420 x 520 mm, Weight: 15 kg (only TS 250 SD P)
- Order no. 350.436**
- Wall bracket (only TS 200 SD P)
- Order no. 315.035**
- Separate spare grinding wheel coarse standard corundum
- Order no. for TS 200: 317.532**
- Order no. for TS 250: 317.542**
- Separate spare grinding wheel fine standard corundum
- Order no. for TS 200: 317.533**
- Order no. for TS 250: 317.543**
- Wheel dresser
- Order no. 350.101**
- Dust extraction system MA 400 D (only TS 200 SD P)
- Order no. 330.295**
- Dust extraction system MA 600 D (only TS 250 SD P)
- Order no. 330.080**

## Technical data

Suction piece Ø (mm)	42
<b>TS 200 SD P/Pro</b>	
Dimensions of the grinding wheel (mm)	200 x 32 x 32
Machine dimensions without VP (mm)	250 x 470 x 230
Machine dimensions with VP (mm)	300 x 480 x 275
Speed (1/min)	2,550
Weight (kg)	20
<b>TS 200 SD P</b>	
Three-phase current motor 400 V (kW) 1.0, S2-30 min (short-time operation)	
<b>Order no.</b>	<b>317.762</b>
<b>TS 200 SD Pro</b>	
Three-phase current motor 400 V (kW) 0.75, S1 (continuous operation)	
<b>Order no.</b>	<b>317.845</b>
<b>TS 250 SD P/Pro</b>	
Dimensions of the grinding wheel (mm)	250 x 40 x 51
Machine dimensions without VP (mm)	280 x 530 x 270
Machine dimensions with VP (mm)	325 x 540 x 310
Speed (1/min)	1,400
Weight (kg)	32
<b>TS 250 SD P</b>	
Three-phase current motor 400 V (kW) 1.4, S2-30 min (short-time operation)	
<b>Order no.</b>	<b>317.763</b>
<b>TS 250 SD Pro</b>	
Three-phase current motor 400 V (kW) 0.8, S1 (continuous operation)	
<b>Order no.</b>	<b>317.850</b>

# Double grinding machine

## TS 200 SD P/Pro TS 250 SD P/Pro

As combination units always  
with machine stand and brake  
(optionally with extraction  
system)



**WHAT ELSE COULD YOU WISH FOR?  
OUR DOUBLE GRINDING MACHINES**



Fig.: TS 200 SD P/Pro with special equipment-foot switch

## Standard equipment

- Smooth running, no-maintenance motor
- Emergency off push button
- Brake
- Machine stand/optionally with extraction system
- Protective hood closed at the sides
- Stable, adjustable workpiece supports
- High level of safety thanks to adjustable spark deflector
- Suitable for grinding, deburring and sharpening tools of all kinds, metal profiles etc.
- Circuit breaker and under-voltage release
- Spark/eye protection on both sides
- Connecting cable with CEE plug 16 A
- 1x coarse and fine grinding wheel
- 12-month warranty for single-shift operation

## Special equipment

- Different colour shade (One-component RAL paint)  
**Order no. 309.010**
- Foot switch emergency stop (can only be ordered in conjunction with brake, machine stand and/or extraction system)  
**Order no. 317.859**

## Accessories

- Separate spare grinding wheel coarse standard corundum  
**Order no. for TS 200: 317.532**  
**Order no. for TS 250: 317.542**
- Separate spare grinding wheel fine standard corundum  
**Order no. for TS 200: 317.533**  
**Order no. for TS 250: 317.543**
- Wheel dresser  
**Order no. 350.101**

## Technical data

Suction piece Ø (mm)	42
<b>TS 200 SD P/Pro with brake and machine stand</b>	
Dimensions of the grinding wheel (mm)	200 x 32 x 32
Machine dimensions without VP (mm)	270 x 470 x 1,050
Machine dimensions with VP (mm)	600 x 800 x 1,350
Speed (1/min)	2,550
Weight (kg)	60
<b>TS 200 SD P with brake and machine stand</b>	
Three-phase current motor 400 V(kW)	1.0, S2-30 min (short-time operation)
<b>Order no.</b>	<b>317.774</b>
<b>TS 200 SD P with brake and machine stand with extraction system</b>	
Three-phase current motor 400 V(kW)	1.0, S2-30 min (short-time operation)
<b>Order no.</b>	<b>317.777</b>
<b>TS 200 Pro with brake and machine stand</b>	
Three-phase current motor 400 V(kW)	0.75, S1 (continuous operation)
<b>Order no.</b>	<b>317.846</b>
<b>TS 200 Pro with brake and machine stand with extraction system</b>	
Three-phase current motor 400 V(kW)	0.75, S1 (continuous operation)
<b>Order no.</b>	<b>317.847</b>
<b>TS 250 SD P/ Pro with brake and machine stand</b>	
Dimensions of the grinding wheel (mm)	250 x 40 x 51
Machine dimensions without VP (mm)	520 x 530 x 1,110
Machine dimensions with VP (mm)	600 x 800 x 1,400
Speed (1/min)	1,400
Weight (kg)	85
<b>TS 250 SD P with brake and machine stand</b>	
Three-phase current motor 400 V(kW)	1.4, S2-30 min (short-time operation)
<b>Order no.</b>	<b>317.775</b>
<b>TS 250 SD P with brake and machine stand with extraction system</b>	
Three-phase current motor 400 V(kW)	1.4, S2-30 min (short-time operation)
<b>Order no.</b>	<b>317.778</b>
<b>TS 250 SD Pro with brake and machine stand</b>	
Three-phase current motor 400 V(kW)	0.8, S1 (continuous operation)
<b>Order no.</b>	<b>317.851</b>

# Double grinding machine TS 300 SD P

Optionally combined  
with brake, machine  
stand and extraction  
system



Fig.: TS 300 SD P with machine stand

## Standard equipment

- ▶ Smooth running, no-maintenance motor
- ▶ with emergency stop button and brake  
(only standard with art. no. 317.776 and 3177.779)
- ▶ Optional machine stand and extraction system
- ▶ Protective hood closed at the sides
- ▶ Stable, adjustable workpiece supports
- ▶ High safety comfort due to  
adjustable spark deflectors
- ▶ Suitable for grinding, deburring and sharpening  
of all kinds of tools, metal profiles, etc.
- ▶ Circuit breaker and under-voltage release
- ▶ Spark/eye protection on both sides
- ▶ Connecting cable with CEE plug 16 A
- ▶ 1x coarse and fine grinding wheel
- ▶ 12-month warranty for single-shift operation

## Special equipment

- ▶ Different colour shade  
(One-component RAL paint)  
**Order no. 309.010**
- ▶ Foot switch emergency stop  
(can only be ordered in conjunction with  
brake, machine stand and/or extraction system)  
**Order no. 317.859**

## Accessories

- ▶ Separate replacement grinding wheel  
coarse standard corundum  
**Order no. 317.622**
- ▶ Separate replacement grinding wheel  
fine standard corundum  
**Order no. 317.624**
- ▶ Wheel dresser  
**Order no. 350.101**
- ▶ Machine stand with dip tank,  
Dimensions: 420 x 520 mm, Weight: 15 kg  
(only for 317.764)  
**Order no. 350.436**
- ▶ Machine stand with extraction unit MA 600 D  
Motor 0.55 kW, extraction power 350 m<sup>3</sup>/h  
(only for 317.764)  
**Order no. 330.080**

## Technical data

Suction piece Ø (mm)	42
<b>TS 300 SD P</b>	
Dimensions of the grinding wheel (mm)	300 x 40 x 51
Machine dimensions without VP (mm)	350 x 530 x 340
Machine dimensions with VP (mm)	800 x 600 x 500
Speed (1/min)	1,250
Three-phase current motor 400 V (kW)	2.2, S2-30 min (short-time operation)
Weight (kg)	55
<b>Order no.</b>	<b>317.764</b>
<b>TS 300 SD P with brake and machine stand</b>	
Machine dimensions without VP (mm)	540 x 530 x 1,180
Machine dimensions with VP (mm)	800 x 600 x 1,400
Weight (kg)	85
<b>Order no.</b>	<b>317.776</b>
<b>TS 300 SD P with brake, machine stand and extraction system</b>	
Machine dimensions without VP (mm)	540 x 530 x 1,180
Machine dimensions with VP (mm)	800 x 600 x 1,400
Weight (kg)	90
Three-phase current motor 400 V (kW)	0.55
Suction capacity m <sup>3</sup> /h	350
<b>Order no.</b>	<b>317.779</b>

# Combined belt grinder/ grinding machine TSB 250 P



Fig.: TSB 250 P with machine stand

## Standard equipment

- High performance
- Belt grinding system, height-adjustable, 0-90°
- Maximum useable surface grinding area
- Belt adjustment with fine tuning
- Longitudinal stop for material guiding
- Perfectly balanced and low vibration
- Connection for dust extraction system Ø 50 mm on both sides
- Circuit breaker with under-voltage release
- Fixed stop
- 1 standard grinding belt (below), grain 80
- 1 grinding wheel 250 x 40 x 51 mm, grain 80
- Spark arrestor
- Connecting cable with CEE plug
- 12-month warranty for single-shift operation

## Accessories

- Grinding wheel 250 x 40 x 51 mm  
Grain 36 coarse  
**Order no. 317.542**
- Grinding wheel 250 x 40 x 51 mm  
Grain 80 fine  
**Order no. 317.543**
- Standard grinding belt (brown) 1,300 x 75 mm, 5 pieces, grain 40  
**Order no. 316.042**
- Standard grinding belt (brown) 1,300 x 75 mm, 5 pieces, grain 80  
**Order no. 316.041**
- Graphite coating 80 x 350 mm  
**Order no. 316.045**
- Machine stand with dip tank  
(only for 330.360)  
**Order no. 350.436**
- Machine stand with integrated dust extraction system (MA 600) (only for 330.360)  
**Order no. 330.080**

## Technical data

### TSB 250 P

Dimensions of the grinding wheel (60 grain) (mm)	250 x 40 x 51
Machine dimensions without VP (mm)	600 x 320 x 700
Machine dimensions with VP (mm)	800 x 800 x 800
Speed (1/min)	1,400
Weight (kg)	35
Belt speed (m/s)	15
Band dimensions (mm)	1,300 x 75
Grain size	80
Sound level (dB (A))	78
Three-phase current motor 400 V (kW)	1.4
Measurement with grinding arm position (vertical) (mm)	560 x 320 x 680
<b>Order no.</b>	<b>330.360</b>

### TSB 250 P with machine stand, EMERGENCY STOP push button and brake

Machine dimensions without VP (mm)	600 x 540 x 1,190
Machine dimensions with VP (mm)	1,200 x 800 x 1,000
Weight (kg)	65
<b>Order no.</b>	<b>330.365</b>
<b>TSB 250 P with machine stand, EMERGENCY STOP push button, brake and extraction system</b>	
Machine dimensions without VP (mm)	600 x 540 x 1,190
Machine dimensions with VP (mm)	1,200 x 800 x 1,000
Weight (kg)	70
<b>Order no.</b>	<b>330.370</b>

# Belt grinder

## TBSM 100



Fig.: TBSM 100

## Standard equipment

- Compact, powerful machine
- Suitable for all grinding and deburring work
- Integrated EMERGENCY STOP button
- Connecting cable with two-pin earthed plug
- Low noise level
- Under-voltage release
- 1 grinding belt grain 80
- Suction piece Ø 35 mm
- Belt cover
- Fixed stop
- 12-month warranty for single-shift operation

## Accessories

- Graphite coating 310 x 105 mm  
**Order no. 371.764**
- Grinding belt: 1,220 x 100 mm, 5 pieces, grain 40  
**Order no. 371.765**
- Grinding belt: 1,220 x 100 mm, 5 pieces, grain 60  
**Order no. 371.766**
- Grinding belt: 1,220 x 100 mm, 5 pieces, grain 80  
**Order no. 371.767**
- Grinding belt: 1,220 x 100 mm, 5 pieces, grain 100  
**Order no. 371.768**
- Grinding belt: 1,220 x 100 mm, 5 pieces, grain 120  
**Order no. 371.769**
- Machine stand  
height 792 mm  
**Order no. 371.762**

## Technical data

### TBSM 100

Belt length (mm)	1,220
Belt width (mm)	100
Surface grinding area (mm)	310 x 100
Belt speed (m/sec)	19
Weight (kg)	27
Single phase motor 1 x 230 V (kW)	0.75
Machine dimensions without VP (mm)	650 x 380 x 260
Machine dimensions with VP (mm)	800 x 600 x 4,500
<b>Order no.</b>	<b>371.760</b>

Belt grinder

BSM 75

BSM 75 A

BSM 75 A pol.



Fig.: BSM 75

## Standard equipment

- ▶ High-quality construction
- ▶ The drive roller is cyclical (this is how the grinding belt automatically centres itself in the middle of the roller)
- ▶ Completely vulcanised contact roll for the longest possible service life and best possible smoothness
- ▶ Changing the grinding belt does not require any tools and is therefore a faster and simple process
- ▶ Continuous height adjustment for optimum setup of the belt grinder to suit the user
- ▶ Freely adjustable metal stop for optimum and safe guiding of workpieces when using the large surface grinding area
- ▶ Belt speed optimised from a construction point of view to exclude the possibility of the workpiece being burned to the greatest extent possible
- ▶ Model equipped with extraction system with robust and flexible suction hoses
- ▶ Circuit breaker with CEE industrial connector incl. phase inverter
- ▶ Motor brake (except BSM 75 A pol)
- ▶ Incl. grinding belt grain 60
- ▶ Dust bag (only with extraction system)
- ▶ 5-year warranty on the drive motor for single-shift operation

## Accessories

- ▶ Connecting cable with CEE plug (3 m)  
**Order no. 488.761**
- ▶ Suction hose (length: 1.50 m, total length in 2 parts)  
**Order no. 330.109**
- ▶ Graphite coating 75 x 620 mm  
**Order no. 374.042**
- ▶ Dust bag  
**Order no. 371.055**
- ▶ Spark guide plate BSM 75  
**Order no. 374.071**
- ▶ Grinding belt: 2,000 x 75 mm, 5 pieces, grain 40  
**Order no. 371.150**
- ▶ Grinding belt: 2,000 x 75 mm, 5 pieces, grain 60  
**Order no. 371.151**
- ▶ Grinding belt: 2,000 x 75 mm, 5 pieces, grain 80  
**Order no. 371.152**
- ▶ Grinding belt: 2,000 x 75 mm, 5 pieces, grain 100  
**Order no. 371.153**
- ▶ Grinding belt: 2,000 x 75 mm, 5 pieces, grain 120  
**Order no. 371.154**
- ▶ Grinding belt for steel and grey cast iron: 2,000 x 75 mm, 5 pieces, grain 40  
**Order no. 371.824**

## Technical data

Belt length (mm)	2,000
Belt width (mm)	75
Surface grinding area (mm)	600
Colour (RAL)	9007
Machine dimensions without VP (mm)	1,100 x 550 x 1,035
Machine dimensions with VP (mm)	800 x 700 x 1,400

### BSM 75

Belt speed (m/s)	30
Three-phase current motor 400 V (kW)	3.75
Extraction capacity (m <sup>3</sup> /h)	–
Suction motor (kW)	–
Weight (kg)	80
<b>Order no.</b>	<b>374.000</b>

### BSM 75 A

Belt speed (m/s)	30
Three-phase current motor 400 V (kW)	3.75
Extraction capacity (m <sup>3</sup> /h)	approx. 630
Suction motor (kW)	0.37
Weight (kg)	90
<b>Order no.</b>	<b>374.001</b>

### BSM 75 A pol.

Belt speed (m/s)	15/30
Three-phase current motor 400 V (kW)	3.0/3.75
Extraction capacity (m <sup>3</sup> /h)	approx. 630
Suction motor (kW)	0.37
Weight (kg)	105
<b>Order no.</b>	<b>374.002</b>

- ▶ Grinding belt for steel and grey cast iron: 2,000 x 75 mm, 5 pieces, grain 60  
**Order no. 371.825**
- ▶ Grinding belt for steel and grey cast iron: 2,000 x 75 mm, 5 pieces, grain 80  
**Order no. 371.826**
- ▶ Grinding belt for steel and grey cast iron: 2,000 x 75 mm, 5 pieces, grain 120  
**Order no. 371.827**

# Belt grinder

## BSM 150

## BSM 150 A

## BSM 150 A pol.



Fig.: BSM 150 A with extraction system

Fig.: BSM 150 A Pol with option

## Standard equipment

- ▶ High-quality construction
- ▶ The drive roller is cyclical (this is how the grinding belt automatically centres itself in the middle of the roller)
- ▶ Completely vulcanised contact roll for the longest possible service life and best possible smoothness
- ▶ Changing the grinding belt does not require any tools and is therefore a faster and simple process
- ▶ Continuous height adjustment for optimum setup of the belt grinder to suit the user
- ▶ Freely adjustable metal stop for optimum and safe guiding of workpieces when using the large surface grinding area
- ▶ Belt speed optimised from a construction point of view to exclude the possibility of the workpiece being burned to the greatest extent possible
- ▶ Model equipped with extraction system with robust and flexible suction hoses
- ▶ Circuit breaker with CEE industrial connector incl. phase inverter
- ▶ Motor brake (except BSM 150 A pol)
- ▶ Incl. grinding belt grain 60
- ▶ Dust bag (only with extraction system)
- ▶ 5-year warranty on the drive motor for single-shift operation

## Accessories

- ▶ Connecting cable with CEE plug (3 m)  
**Order no. 488.761**
- ▶ Suction hose (length: 1.50 m, total length in 2 parts)  
**Order no. 330.109**
- ▶ Graphite coating 150 x 620 mm  
**Order no. 374.043**
- ▶ Dust bag  
**Order no. 371.055**
- ▶ Spark guide plate BSM 150  
**Order no. 374.070**
- ▶ Grinding belt: 2,000 x 150 mm, 5 pieces, grain 40  
**Order no. 371.125**
- ▶ Grinding belt: 2,000 x 150 mm, 5 pieces, grain 60  
**Order no. 371.126**
- ▶ Grinding belt: 2,000 x 150 mm, 5 pieces, grain 80  
**Order no. 371.127**
- ▶ Grinding belt: 2,000 x 150 mm, 5 pieces, grain 100  
**Order no. 371.128**
- ▶ Grinding belt: 2,000 x 150 mm, 5 pieces, grain 120  
**Order no. 371.129**
- ▶ Grinding belt for steel and grey cast iron: 2,000 x 150 mm, 5 pieces, grain 40  
**Order no. 371.828**

## Technical data

Belt length (mm)	2,000
Belt width (mm)	150
Surface grinding area (mm)	600
Colour (RAL)	9007
Machine dimensions without VP (mm)	1,100 x 550 x 1,035
Machine dimensions with VP (mm)	800 x 700 x 1,400

### BSM 150

Belt speed (m/s)	30
Three-phase current motor 400 V (kW)	3.75
Extraction capacity (m <sup>3</sup> /h)	–
Suction motor (kW)	–
Weight (kg)	90
<b>Order no.</b>	<b>374.020</b>

### BSM 150 A

Belt speed (m/s)	30
Three-phase current motor 400 V (kW)	3.75
Extraction capacity (m <sup>3</sup> /h)	approx. 630
Suction motor (kW)	0.37
Weight (kg)	100
<b>Order no.</b>	<b>374.021</b>

### BSM 150 A pol.

Belt speed (m/s)	15/30
Three-phase current motor 400 V (kW)	3.0/3.75
Extraction capacity (m <sup>3</sup> /h)	approx. 630
Suction motor (kW)	0.37
Weight (kg)	105
<b>Order no.</b>	<b>374.022</b>

- ▶ Grinding belt for steel and grey cast iron: 2,000 x 150 mm, 5 pieces, grain 60  
**Order no. 371.829**
- ▶ Grinding belt for steel and grey cast iron: 2,000 x 150 mm, 5 pieces, grain 80  
**Order no. 371.830**
- ▶ Grinding belt for steel and grey cast iron: 2,000 x 150 mm, 5 pieces, grain 120  
**Order no. 371.831**

# Brush deburring machine BEM 250 Plus



Fig.: BEM 250 Plus

## Standard equipment

- Robust industrial three-phase current motor
- Adjustable eye protection
- Easily adjustable sliding unit  
(via adjustment screw) in case of wear of the deburring brush to the workpiece support
- Combined workpiece support both for round material (prism), flat and rectangular profiles (movable)
- Adjustable upper cover strip using the clamping lever (serves the purpose of adaptation to fit material size)
- Ø 80 mm suction piece with end plate  
(for connection to external extraction system)
- Machine colour:
  - Machine body RAL 7035
  - Side cover: RAL 7005
- 1 set of machine feet (4 pieces) with adjustment screw
- 1 round deburring brush 250 x 60/0.35 mm steel wire corrugated
- Connecting cable with CEE plug
- Incl. operating tools
- 12-month warranty for single-shift operation

## Technical data

### BEM 250 Plus

Brush diameter (mm)	250
Brush width normal (mm)	60
Socket bore (mm)	50.8
Max. material size (mm)	70 x 140
Working height (mm)	930
Speed/ pole-changeable (rpm)	2,800/1,400
Drive power (kW)	2.1/1.8
Electrical connection (V/Hz)	400/50
Weight (kg)	85
Machine dimensions (mm)	500 x 560 x 1,250
Machine dimensions with VP (mm)	1,400 x 750 x 1,350
<b>Order no.</b>	<b>373.150</b>

## Accessories

- Round deburring brush 250 x 60,  
steel wire 0.35 mm corrugated  
bore 50.8 mm, double keyway 13 x 7 mm  
**Order no. 373.176**
- Round deburring brush 250 x 60,  
steel wire 0.20 mm corrugated  
bore 50.8 mm, double keyway 13 x 7 mm  
(for small and thin-walled pipes/profiles)  
**Order no. 373.177**
- Round deburring brush 250 x 60,  
steel wire 0.50 mm corrugated  
bore 50.8 mm, double keyway 13 x 7 mm  
(for thick-walled pipes/profiles)  
**Order no. 373.178**
- Round deburring brush 250 x 60,  
steel wire 0.35 mm corrugated  
bore 50.8 mm, double keyway 13 x 7 mm  
(for steel pipes/profiles)  
**Order no. 373.179**

Other brushes for materials - such as aluminium  
or anodised profiles - on request

# Brush deburring machine BEM 250 Pro



Fig.: BEM 250 Pro

## Standard equipment

- High-performance deburring system for interior and exterior deburring of profiles and pipes in one working cycle (approx. 3 secs)
- Compact and robust construction
- High-performance industrial-drive three-phase current motor, frequency-regulated for optimum setting of the required speed (600-2,700 1/min) stepless
- For deburring pipes and profiles (max. material size horizontal/vertical) 120 mm
- Easily adjustable work table height (can be set and locked) for the material size in question
- Adjustable, lockable feed (sledges) on the deburring brushes for the work bench using a large handwheel (with locking function)
- Easily removable dust residue drawer
- Robust sheet steel housing construction with preparation (opening) for connection to an external extraction system
- Easily accessible housing hoods (folding) for changing the brushes
- Machine colour:
  - Machine body RAL 7035
  - Side cover: RAL 7005
- 1 set of machine feet (4 pieces) with adjustment screw
- 3 round deburring brushes 250 x 60/0.35 mm steel wire corrugated
- Connecting cable with CEE plug
- Incl. operating tools
- 12-month warranty for single-shift operation

## Accessories

- Round deburring brush 250 x 60, steel wire 0.35 mm corrugated bore 50.8 mm, double keyway 13 x 7 mm  
**Order no. 373.176**
- Round deburring brush 250 x 60, steel wire 0.20 mm corrugated bore 50.8 mm, double keyway 13 x 7 mm (for small and thin-walled pipes/profiles)  
**Order no. 373.177**
- Round deburring brush 250 x 60, steel wire 0.50 mm corrugated bore 50.8 mm, double keyway 13 x 7 mm (for thick-walled pipes/profiles)  
**Order no. 373.178**
- Round deburring brush 250 x 60, steel wire 0.35 mm corrugated bore 50.8 mm, double keyway 13 x 7 mm (for steel pipes/profiles)  
**Order no. 373.179**

Other brushes for materials - such as aluminium or anodised profiles - on request

## Technical data

### BEM 250 Pro\*

Brush diameter (mm)	250 (3 pieces)
Brush width normal (mm)	60
Socket bore (mm)	50.8
Working height (mm)	1,050
Speed, stepless (rpm)	600-2,700
Drive power, frequency-regulated (kW)	3
Electrical connection (V/Hz)	400/50
Weight (kg)	410
Machine dimensions (mm)	680 x 1,200 x 1,380
Machine dimensions with VP (mm)	1,150 x 680 x 1,440
<b>Order no.</b>	<b>373.155</b>

\* The brush deburring machine is fitted with a frequency converter and complies with the standard DIN EN 55011:2016 + A1:2017.

## Overview saws

Horizontal bandsaws	Band saw blade size mm	○* at 0° mm	□* at 0° mm	□* at 0° mm	Page
<b>HBS 225 A</b>	2,720 x 27 x 0.9	230	275 x 200	230 x 230	98
<b>HBS 230 ANC</b>	2,720 x 27 x 0.9	230	275 x 180	230 x 230	100
<b>HBS 250 A</b>	2,910 x 27 x 0.9	250	320 x 190	240 x 240	102
<b>HBS 250 HA</b>	2,910 x 27 x 0.9	250	320 x 190	240 x 240	104
<b>HBS 350 HA</b>	4,780 x 34 x 1.1	350	510 x 350	350 x 350	106
<b>HBS 350 ANC</b>	4,780 x 34 x 1.1	350	510 x 350	350 x 350	108
<b>HBS 350 SANC</b>	4,780 x 34 x 1.1	350	420 x 350	350 x 350	110
<b>HBS 450 HA</b>	5,200 x 34 x 1.1	450	610 x 450	450 x 450	112
<b>HBS 450 SANC</b>	6,020 x 41 x 1.3	450	520 x 450	450 x 450	114
Vertical bandsaws	Saw blade Ø mm	○* at 0° mm	□* at 0° mm	□* at 0° mm	Page
<b>VBS 400 Plus</b>	3,600 x 13 x 0.9		400 x 390		116
Metal circular saw	Saw blade Ø mm	○* at 0° mm	□* at 0° mm	□* at 0° mm	Page
<b>KS 315 M</b>	315 x 32	95	100 x 70	80	118
Portable metal band saws	Band saw blade size mm	○* at 0° mm	□* at 0° mm	□* at 0° mm	Page
<b>PBS 120 Plus</b>	1,620 x 13 x 0.65	120	60 x 70	120 x 120	120

\*Mitre cuts are possible. Please see the catalogue pages that are indicated for further information.

### Explanation of abbreviations

Lowering (Hydraulic cylinder)	<b>A</b>	Automatic NC	<b>ANC</b>	Vertical band saw	<b>VBS</b>
Semi-automatic	<b>HA</b>	Column-guided automatic NC	<b>SANC</b>	Circular saw	<b>KS</b>
		Horizontal bandsaw	<b>HBS</b>	Portable band saw	<b>PBS</b>



# SAWING TECHNOLOGY

Horizontal bandsaws .....	98-115
Circular saw .....	118-119
Portable band saw.....	120-121
Accessories .....	122-123



# FLOTT

## Metal band saw

### HBS 225 A



**Precise guiding**  
the saw blade is guided precisely using ground carbide plates



**Saw blade break monitoring**  
the saw blade tension is fitted with a saw blade tension monitoring and saw blade break monitoring device



**Round supporting table**  
the machine has a supporting table that rotates with the mitre cuts. This means no slits



**Operating elements**  
All operating elements are accessible from the front of the machine



**Powered chip removal brush**

## Standard equipment

- New saw concept with a multitude of standards – for every workshop
- Torsion-resistant, robust cast saw frame
- Powered chip removal brush
- High-performance industrial worm geared drive motor
- Independent switching-off at the end of the cut
- Mechanical saw blade tensioning with electrical blade break monitoring system
- Quick-change vice, sliding
- Hydraulic saw frame lowering with fast-action function (stepless control)
- Electric coolant pump
- Precision carbide saw blade guides, ground (adjustable)
- Large, round supporting table, rotates along with mitre cuts, mitre display (scale) for the operator
- Easily removable chip collection container
- Material stop 500 mm with scale
- Incl. saw blade combination toothing 4/6
- Machine colour:
  - Saw frame RAL 7035 / - Machine body RAL 7005
- 12-month warranty for single-shift operation

## Special equipment

- Laser line for cutting  
**Order no. 570.172**
- Micro spraying system  
**Order no. 570.170**
- LED work light  
**Order no. 570.174**

## Accessories

- Blade tension measurement device with dial indicator (Flottomat-BS)  
**Order no. 570.175**
- Connection L-SR (steel coil), left, 330 mm wide (incl. fastening set)  
**Order no. 570.176**
- Connection L-SR (steel coil), right, 330 mm wide (incl. fastening set)  
**Order no. 570.177**
- Roller conveyor L-SR (steel coil), 330 mm wide, basic version 2,000 mm, 150 kg/m  
**Order no. 570.178**
- Roller conveyor L-SR (steel coil), 330 mm wide, basic version 3,000 mm, 150 kg/m  
**Order no. 570.179**
- Extension roller conveyor L-SR (steel coil), 2,000 mm, 150 kg/m  
**Order no. 570.180**
- Extension roller conveyor L-SR (steel coil), 3,000 mm, 150 kg/m  
**Order no. 570.181**

## Technical data

### HBS 225 A

Three-phase current motor 400 V, pole-changeable (kW)	0.7/1.1
Saw blade dimensions (mm)	2,720 x 27 x 0.9
Flywheels Ø (mm)	300
Cutting speed (m/min)	40/80
Vice span (mm)	275
Working height (mm)	978
Machine dimensions (mm)	1,150 x 1,588 x 1,477
Weight (kg)	370
<b>Order no.</b>	<b>570.050</b>

**Additional accessories** [from page 122](#)

## Sawing area

	0 °	45° R	45° L	60° R
○	230	190	170	120
□	275 x 180	190 x 150	185 x 100	120 x 100
□	230 x 230	180 x 180	150 x 150	100 x 100

## HSS Bi-Metal (M42) Band Saw Blades <sup>1</sup>

Order no.	Dimensions in mm	Combination toothing	VPE set = 2 pcs.
570.200	2,720 x 27 x 0.9	4/6	1
570.201	2,720 x 27 x 0.9	5/8	1
570.202	2,720 x 27 x 0.9	6/10	1
570.203	2,720 x 27 x 0.9	10/14	1

<sup>1</sup> Other bandsaw blades on request

- Adjustable vertical rollers  
**Order no. 570.190**
- Adjustable vertical rollers  
**Order no. 570.188**
- Starter band saw blade package 2,720 x 27 x 0.9 mm each consisting of 1 pc. combi-toothing 4/6, 5/8, 6/10, 10/14  
**Order no. 570.233**
- Manual material stop 3 m with measuring tape  
**Order no. 570.195**
- Manual material stop 3 m with digital display  
**Order no. 570.240**
- Manual material stop 2 m with measuring tape  
**Order no. 570.194**
- Manual material stop 2 m with digital display  
**Order no. 570.199**
- further measuring stops on request

# FLOTT

## Metal band saw

### HBS 230 ANC



Fig.:Option roller conveyor

## Standard equipment

- ▶ Fully hydraulic lowering and lifting function of the sawframe, NC control, fully automatic
- ▶ Hydraulic opening and closing of the vice
- ▶ Switches off after end of cutting, saw arm guided back to the starting position
- ▶ Torsion-resistant saw frame made of cast steel (multi-ribbed)
- ▶ feed vice mounted on linear guides
- ▶ Precisely ground carbide saw blade guides, adjustable
- ▶ Electric coolant pump
- ▶ Manual blade tensioning with display, including electrical saw blade and cutting pressure monitoring system
- ▶ Hydraulic cutting feed incl. automatic cutting pressure regulation
- ▶ Chip removal brush, rotating
- ▶ Positioning plate rotatable, for mitre cuts with cutting channel, mitre adjustment manual, reading via scale
- ▶ Minimum remaining piece length 180 mm, smallest possible diameter 5 mm
- ▶ Feed length (single stroke) 490 mm, max. stroke repetition 999
- ▶ Incl. saw blade combination toothing 4/6
- ▶ Machine colour:
  - Saw frame RAL 7035 /- Machine body RAL 7005
- ▶ 12-month warranty for single-shift operation

## Special equipment

- ▶ Chip rinsing pistol  
**Order no. 570.110**
- ▶ Laser line for cutting  
**Order no. 570.172**
- ▶ Micro spraying system  
**Order no. 570.170**
- ▶ LED work lighting  
**Order no. 570.174**

## Accessories

- ▶ Connecting track L-SR (steel roller), right, 330 mm wide (incl. connection set)  
**Order no. 570.370**
- ▶ Roller conveyorL-SR (steel coil), 330 mm wide, basic version 2,000 mm, 150 kg/m  
**Order no. 570.178**
- ▶ Roller conveyor L-SR (steel coil), 330 mm wide, basic version 3,000 mm, 150 kg/m  
**Order no. 570.179**
- ▶ Extension roller conveyor L-SR (steel coil), 2,000 mm, 150 kg/m  
**Order no. 570.180**
- ▶ Extension roller conveyor L-SR (steel coil), 3,000 mm, 150 kg/m  
**Order no. 570.181**

## Technical data

### HBS 230 ANC

Three-phase current motor 400 V, pole-changeable (kW)	0.7/1.1
Saw blade dimensions (mm)	2,720 x 27 x 0.9
Flywheels Ø (mm)	300
Cutting speed (m/min)	40/80
Vice span (mm)	275
Working height (mm)	768
Machine dimensions (mm)	2,440 x 1,650 x 1,970
Weight (kg)	500
<b>Order no.</b>	<b>570.040</b>
<b>Additional accessories</b>	<b>from page 122</b>

## Sawing area

	0 °	45° R	60° R
	230	170	120
	275 x 180	185 x 100	120 x 100
	230 x 230	150 x 150	100 x 100

## HSS Bi-Metal (M42) Band Saw Blades <sup>1</sup>

Order no.	Dimensions in mm	Combination toothing	VPE set = 2 pcs.
<b>570.200</b>	2,720 x 27 x 0.9	4/6	1
<b>570.201</b>	2,720 x 27 x 0.9	5/8	1
<b>570.202</b>	2,720 x 27 x 0.9	6/10	1
<b>570.203</b>	2,720 x 27 x 0.9	10/14	1

<sup>1</sup> Other bandsaw blades on request

- ▶ Adjustable vertical rollers  
**Order no. 570.190**
- ▶ Adjustable vertical rollers  
**Order no. 570.188**
- ▶ Starter band saw blade package 2,720 x 27 x 0.9 mm each consisting of 1 pc. combi-toothing 4/6, 5/8, 6/10, 10/14  
**Order no. 570.233**

# FLOTT

## Metal band saw

### HBS 250 A



Pistol for rinsing away  
the chips  
(optional)



Roller conveyor with  
vertical rollers  
(accessory)

## Standard equipment

- ▶ High-performance band saw with hydraulic saw frame lowering (control valve) for mitre cuts from 0° to 60° right/45° left
- ▶ Saw frame made from a stable cast construction (torsion-resistant)
- ▶ Cut feed over frame weight
- ▶ High-quality industrial three-phase current motor (spur gear) for all requirements (frequency-controlled)
- ▶ Chip removal brush, rotating
- ▶ Precisely ground carbide saw blade guides, adjustable
- ▶ Quick-change vice, sliding
- ▶ Large, heavy, round supporting table, rotates along with mitre cuts with the fixed cutting channel, mitre display via scale
- ▶ Mitre settings and clamping are manual
- ▶ Removable chip collection container
- ▶ Electric coolant pump
- ▶ Material stop 500 mm with scale
- ▶ Incl. saw blade combination toothing 4/6
- ▶ Machine colour:  
- Saw frame RAL 7035 /- Machine body RAL 7005
- ▶ 12-month warranty for single-shift operation

## Special equipment

- ▶ Chip rinsing pistol  
**Order no. 570.110**
- ▶ Laser line for cutting  
**Order no. 570.172**
- ▶ Micro spraying system  
**Order no. 570.170**
- ▶ LED work light  
**Order no. 570.174**

## Accessories

- ▶ Blade tension measurement device with dial indicator (Flottomat-BS)  
**Order no. 570.175**
- ▶ L-SR (steel coil), left, 330 mm wide (incl. fastening set)  
**Order no. 570.282**
- ▶ L-SR (steel coil), right, 330 mm wide (incl. fastening set)  
**Order no. 570.281**
- ▶ Roller conveyor L-SR (steel coil), 330 mm wide, basic version 2,000 mm, 150 kg/m  
**Order no. 570.178**
- ▶ Roller conveyor L-SR (steel coil), 330 mm wide, basic version 3,000 mm, 150 kg/m  
**Order no. 570.179**
- ▶ Extension roller conveyor L-SR (steel coil), 2,000 mm, 150 kg/m  
**Order no. 570.180**
- ▶ Extension roller conveyor L-SR (steel coil), 3,000 mm, 150 kg/m  
**Order no. 570.181**

## Technical data

### HBS 250 A

Three-phase current motor 400 V, frequency-regulated (kW)	1.5
Saw blade dimensions (mm)	2,910 x 27 x 0.9
Flywheels Ø (mm)	325
Cutting speed (m/min)	20-120
Vice span (mm)	320
Working height (mm)	760
Machine dimensions (mm)	1,480 x 1,700 x 2,000
Weight (kg)	390
<b>Order no.</b>	<b>570.005</b>
<b>Additional accessories</b>	<b>from page 122</b>

## Sawing area

	0 °	45° R	45° L	60° R
○	250	220	180	130
□	300 x 240	240 x 190	240 x 100	130 x 100
□	240 x 240	210 x 210	160 x 160	100 x 100

## HSS Bi-Metal (M42) Band Saw Blades <sup>1</sup>

Order no.	Dimensions in mm	Combination toothing	VPE set = 2 pcs.
570.206	2,910 x 27 x 0.9	2/3	1
570.207	2,910 x 27 x 0.9	3/4	1
570.208	2,910 x 27 x 0.9	4/6	1
570.209	2,910 x 27 x 0.9	5/8	1
570.210	2,910 x 27 x 0.9	10/14	1

<sup>1</sup> Other bandsaw blades on request

- ▶ Adjustable vertical rollers  
**Order no. 570.190**
- ▶ Adjustable vertical rollers  
**Order no. 570.188**
- ▶ Starter band saw blade package 2,910 x 27 x 0.9 mm each consisting of 1 pc. combi-toothing 2/3, 3/4, 4/6, 5/8, 10/14  
**Order no. 570.234**
- ▶ Manual material stop 2 m with measuring tape  
**Order no. 570.194**
- ▶ Manual material stop 3 m with measuring tape  
**Order no. 570.195**
- ▶ Manual material stop 2 m with digital display  
**Order no. 570.199**
- ▶ Manual material stop 3 m with digital display  
**Order no. 570.240**
- ▶ further measuring stops on request

# FLOTT

## Metal band saw

### HBS 250 HA



Mitre reading display



Saw blade guide  
made from carbide



Laser line for  
cutting  
(optional)



LED lighting  
for the working area  
(optional)



Pistol for rinsing away  
the chips  
(optional)

## Standard equipment

- ▶ Fully hydraulic lowering and lifting system for the saw frame
- ▶ Hydraulic opening and closing of the vice
- ▶ Switches off after end of cutting, saw arm guided back to the starting position
- ▶ Torsion-resistant saw frame made from cast steel (multiple ribbed)
- ▶ Hydraulic short-stroke cylinder for vice
- ▶ Precisely ground carbide saw blade guides, adjustable
- ▶ Electric coolant pump
- ▶ Manual blade tensioning with display, including electrical saw blade and cutting pressure monitoring system
- ▶ Hydraulic vice (opening and closing)
- ▶ Chip removal brush, rotating
- ▶ Large, heavy, round supporting table, rotates along with mitre cuts with the fixed cutting channel, manual mitre setting, can be read from scale
- ▶ Material stop 500 mm with scale
- ▶ Incl. saw blade combination toothing 4/6
- ▶ Machine colour:
  - Saw frame RAL 7035 / - machine body RAL 7005
- ▶ 12-month warranty for single-shift operation

## Special equipment

- ▶ Chip rinsing pistol  
**Order no. 570.110**
- ▶ Laser line for cutting  
**Order no. 570.172**
- ▶ Micro spraying system  
**Order no. 570.170**
- ▶ LED work light  
**Order no. 570.174**

## Accessories

- ▶ Blade tension measurement device with dial indicator (Flottomat-BS)  
**Order no. 570.175**
- ▶ Flashing L-SR (steel coil), left, 330 mm wide (incl. fastening set)  
**Order no. 570.282**
- ▶ Flashing L-SR (steel coil), right, 330 mm wide (incl. fastening set)  
**Order no. 570.281**
- ▶ Roller conveyor L-SR (steel coil), 330 mm wide, basic version 2,000 mm, 150 kg/m  
**Order no. 570.178**
- ▶ Roller conveyor L-SR (steel coil), 330 mm wide, basic version 3,000 mm, 150 kg/m  
**Order no. 570.179**
- ▶ Extension roller conveyor L-SR (steel coil), 2,000 mm, 150 kg/m  
**Order no. 570.180**
- ▶ Extension roller conveyor L-SR (steel coil), 3,000 mm, 150 kg/m  
**Order no. 570.181**

## Technical data

### HBS 250 HA

Three-phase current motor 400 V, frequency-regulated (kW)	1.5
Saw blade dimensions (mm)	2,910 x 27 x 0.9
Flywheels Ø (mm)	325
Cutting speed (m/min)	20-120
Vice span (mm)	320
Working height (mm)	760
Machine dimensions (mm)	1,480 x 1,700 x 2,000
Weight (kg)	390
<b>Order no.</b>	<b>570.010</b>

**Additional accessories** [from page 122](#)

## Sawing area

	0 °	45° R	45° L	60° R
○	250	220	180	130
□	300 x 240	240 x 190	240 x 100	130 x 100
□	240 x 240	210 x 210	160 x 160	100 x 100

## HSS Bi-Metal (M42) Band Saw Blades <sup>1</sup>

Order no.	Dimensions in mm	Combination toothing	VPE set = 2 pcs.
<b>570.206</b>	2,910 x 27 x 0.9	2/3	1
<b>570.207</b>	2,910 x 27 x 0.9	3/4	1
<b>570.208</b>	2,910 x 27 x 0.9	4/6	1
<b>570.209</b>	2,910 x 27 x 0.9	5/8	1
<b>570.210</b>	2,910 x 27 x 0.9	10/14	1

<sup>1</sup> Other bandsaw blades on request

- ▶ Adjustable vertical rollers  
**Order no. 570.190**
- ▶ Adjustable vertical rollers  
**Order no. 570.188**
- ▶ Starter band saw blade package 2,910 x 27 x 0.9 mm each consisting of 1 pc. combi-toothed  
2/3, 3/4, 4/6, 5/8, 10/14  
**Order no. 570.234**
- ▶ Manual material stop 2 m with measuring tape  
**Order no. 570.194**
- ▶ Manual material stop 3 m with measuring tape  
**Order no. 570.195**
- ▶ Manual material stop 2 m with digital display  
**Order no. 570.199**
- ▶ Manual material stop 3 m with digital display  
**Order no. 570.240**
- ▶ further measuring stops on request

# FLOTT

## Metal band saw

### HBS 350 HA



Pistol for rinsing away  
the chips  
(optional)



Full-lift cylinder  
for the vice



Pressure regulation  
for the vice  
(optional)



Bundle tensioning device  
Enables layers and bundles  
to be tensioned using an  
additional vertical  
tensioning unit (optional)



Blade tension display  
For monitoring the optimum  
saw blade tension even while  
the machine is in operation  
(standard)

## Standard equipment

- ▶ Ergonomic, robust welded frame construction, new concept in appealing design for mitre cuts from 0° to 60° right /left
- ▶ Stable, low vibration frame construction with bearing hinged arm joint
- ▶ Simple operation console for the operators
- ▶ Simple, easy-to-understand control system
- ▶ Precisely ground carbide saw blade guides (adjustable) for the highest demands on cutting accuracy
- ▶ Synchronous powered chip removal brush
- ▶ Semi-automatic sawing cycle: fully hydraulic
- ▶ Hydraulic cutting feed incl. automatic cutting pressure regulation
- ▶ Mitre settings and clamping (manual)
- ▶ Hydraulic full-lift cylinder for the vice (Pull-down design) floating vice
- ▶ Blade tension and saw blade break monitoring system
- ▶ Integrated coolant supply (30l tank capacity)
- ▶ Easily removable chip collection containers
- ▶ Hydraulic Blade tension display
- ▶ LED work light
- ▶ Digital mitre display
- ▶ Incl. saw blade combination toothing 4/6
- ▶ Machine colour:  
- Saw frame RAL 7035 /- machine body RAL 7005
- ▶ 12-month warranty for single-shift operation

## Special equipment

- ▶ Chip rinsing pistol  
**Order no. 570.110**
- ▶ Laser line for cutting  
**Order no. 570.109**
- ▶ Hydraulic bundle tensioning device  
**Order no. 570.107**
- ▶ Clamping pressure regulation for vice  
**Order no. 570.076**

## Accessories

- ▶ Material stop 500 mm (measuring scale)  
**Order no. 570.268**
- ▶ Connecting track (steel coil), left, 540 mm wide (incl. fastening set)  
**Order no. 570.111**
- ▶ Connecting track (steel coil), right, 540 mm wide (incl. fastening set)  
**Order no. 570.112**
- ▶ Roller conveyor T-SR (steel coil), 540 mm wide, basic version 2,000 mm, 600 kg/m  
**Order no. 570.113**
- ▶ Roller conveyor T-SR (steel coil), 540 mm wide, basic version 3,000 mm, 600 kg/m  
**Order no. 570.114**
- ▶ Extension roller conveyor T-SR (steel coil), 2,000 mm, 600 kg/m  
**Order no. 570.115**
- ▶ Extension roller conveyor T-SR (steel coil), 3,000 mm, 600 kg/m  
**Order no. 570.116**

## Technical data

### HBS 350 HA

Three-phase current motor 400 V, frequency-regulated (kW)	3
Saw blade dimensions (mm)	4,780 x 34 x 1.1
Flywheels Ø (mm)	450
Cutting speed (m/min)	20-120
Vice span, full-lift cylinder (mm)	510
Working height (mm)	761
Machine dimensions (mm)	2,568 x 1,070 x 1,500
Weight (kg)	710
<b>Order no.</b>	<b>570.520</b>

**Additional accessories** [from page 122](#)

## Sawing area

	0 °	45° R	45° L	60° R	60° L
<input type="radio"/>	350	350	350	250	270
<input type="checkbox"/>	510 x 350	400 x 100	415 x 100	260 x 100	280 x 100
<input type="checkbox"/>	350 x 350	340 x 340	350 x 350	240 x 240	260 x 260

## HSS Bi-Metal (M42) Band saw blades <sup>1</sup>

Order no.	Dimensions in mm	Combination toothing	VPE set = 2 pcs.
<b>570.213</b>	4,780 x 34 x 1.1	2/3	1
<b>570.214</b>	4,780 x 34 x 1.1	3/4	1
<b>570.215</b>	4,780 x 34 x 1.1	4/6	1
<b>570.216</b>	4,780 x 34 x 1.1	5/8	1
<b>570.217</b>	4,780 x 34 x 1.1	8/12	1

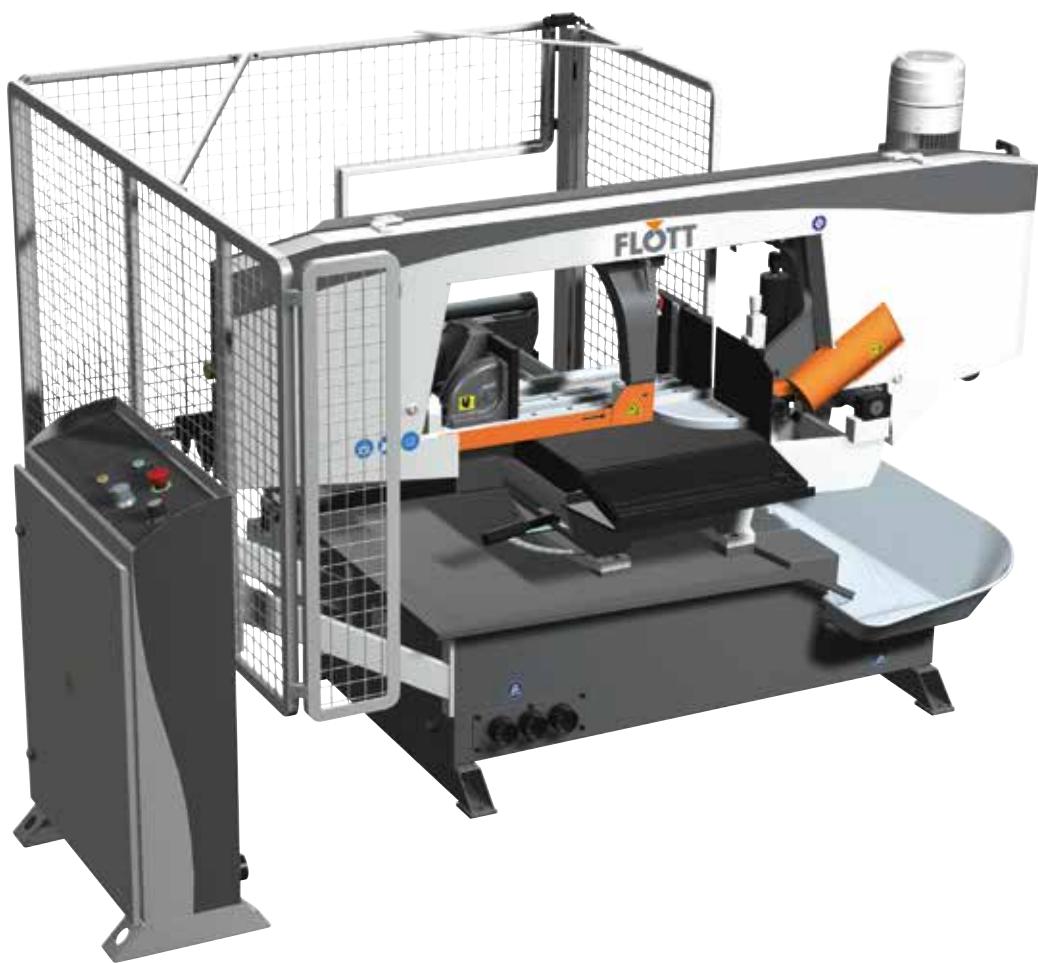
<sup>1</sup> Other bandsaw blades on request

- ▶ Adjustable vertical rollers  
**Order no. 570.119**
- ▶ Fixed vertical rollers  
**Order no. 570.120**
- ▶ Starter band saw blade package 4,780 x 34 x 1.1 mm each consisting of 1 pc. combi-toothed  
2/3, 3/4, 4/6, 5/8, 8/12  
**Order no. 570.235**
- ▶ Manual measuring stop 2 m with digital  
**Order no. 570.127**
- ▶ Manual measuring stop 3 m with measuring tape  
**Order no. 570.123**
- ▶ Manual measuring stop 2 m with measuring tape  
**Order no. 570.122**
- ▶ Manual measuring stop 3 m with digital  
**Order no. 570.128**
- ▶ Manual material stop 3 m with digital display  
**Order no. 570.240**
- ▶ further measuring stops on request

# FLOTT

## Metal band saw

### HBS 350 ANC



## Standard equipment

- The perfect combination of semi-automatic/automatic high-performance band saws for mitre cuts from 0° to 60° right
- Automatic operation only at 0° (in accordance with cutting data)
- Appealing design
- Saw frame with joint bearing, in robust welded frame construction
- Freely positionable console with an easy to read LCD control panel
- Integrated material feed (plain bearing) in automatic operation
- Feed length (single stroke) 600 mm
- Feed via hydraulic cylinder
- Max. stroke repetition: 999
- Smallest diameter for sawing: 10 mm
- Rest length: 60 mm
- The smallest cut piece (L x H): 15 x 5 mm
- Hydraulic Hydraulic full-lift cylinder for the vice (Pull-down design)
- Cut feed including automatic cutting pressure regulation
- Double-pump hydraulic unit
- Precisely ground carbide saw blade guides (adjustable)
- Clamping pressure regulation for vice
- Floating vice
- Blade tension and saw blade break monitoring system
- Easily removable chip collection containers
- Integrated coolant supply (30 l tank capacity)
- LED work light
- Incl. saw blade combination toothing 4/6
- Machine colour:  
- Saw frame RAL 7035 / - Machine body RAL 7005
- 12-month warranty for single-shift operation

## Special equipment

- Hydraulic bundle tensioning device  
**Order no. 570.064**
- Hydraulic blade tension display  
**Order no. 570.065**
- Micro spraying system 24 V  
**Order no. 570.254**
- Laser line for cutting  
**Order no. 570.109**

## Accessories

- Connecting track T-SR, left (incl. connection set)  
**Order no. 570.284**
- Connecting track T-SR, right, (incl. connection set)  
**Order no. 570.112**
- Roller conveyor T-SR (steel roller), 540 mm wide, Basic version 2,000 mm, 600 kg/m  
**Order no. 570.113**
- Roller conveyor T-SR (steel roller), 540 mm wide, Basic version 3,000 mm, 600 kg/m  
**Order no. 570.114**

## Technical data

### HBS 350 ANC

Three-phase current motor 400 V, frequency-regulated (kW)	3
Saw blade dimensions (mm)	4,780 x 34 x 1.1
Flywheels Ø (mm)	450
Cutting speed (m/min)	20-120
Vice span (mm)	510
Working height (mm)	761
Machine dimensions (mm)	2,440 x 2,880 x 1,540
Weight (kg)	950
<b>Order no.</b>	<b>570.025</b>

**Additional accessories** [from page 122](#)

## Sawing area

	0 °	45° R	60° R
○	350	350	250
■	510 x 350	400 x 100	260 x 100
□	350 x 350	340 x 340	240 x 240

## HSS Bi-Metal (M42) Band saw blades <sup>1</sup>

Order no.	Dimensions in mm	Combination toothing	VPE set = 2 pcs.
570.213	4,780 x 34 x 1.1	2/3	1
570.214	4,780 x 34 x 1.1	3/4	1
570.215	4,780 x 34 x 1.1	4/6	1
570.216	4,780 x 34 x 1.1	5/8	1
570.217	4,780 x 34 x 1.1	8/12	1

<sup>1</sup> Other bandsaw blades on request

- Extension roller conveyor T-SR (steel roller), 2,000 mm, 600 kg/m  
**Order no. 570.115**
- Extension roller conveyor T-SR (steel roller), 3,000 mm, 600 kg/m  
**Order no. 570.116**
- Starter band saw blade package 4,780 x 34 x 1.1 mm each consisting of 1 pc. combi-toothing 2/3, 3/4, 4/6, 5/8, 8/12  
**Order no. 570.235**
- Manual measuring stop 2 m with digital  
**Order no. 570.127**
- Manual measuring stop 3 m with measuring tape  
**Order no. 570.123**
- Manual measuring stop 2 m with measuring tape  
**Order no. 570.122**
- Manual measuring stop 3 m with digital  
**Order no. 570.128**
- Manual material stop 3 m with digital display  
**Order no. 570.240**
- further measuring stops on request

**FLOTT**  
**Metal band saw**  
**HBS 350 SANC**



## Standard equipment

- ▶ Fully automatic 2-column horizontal high-performance automatic band saw – perfect for industrial use
- ▶ The saw frame is guided by two robust columns and is unilaterally backlash free in a pretensioned linear guide
- ▶ 3-side precision HM saw blade guiding for optimum cutting results
- ▶ Blade tension and saw blade break monitoring system
- ▶ Synchronous powered chip removal brush
- ▶ Fully hydraulic sawing process:
  - Material feed (plain bearing)
  - Feed length (single stroke) 600 mm
  - Feed via hydraulic cylinder
- ▶ Max. stroke repetition: 999
- ▶ Smallest diameter for sawing 10 mm
- ▶ Rest length: 20 mm
- ▶ The smallest cut piece (L x H): 10 x 5 mm
- ▶ Hydraulic Cutting feed on the saw arm (incl. automatic cutting pressure regulation) saw frame lift height limiter via limit stop switch
- ▶ Simple and clear operation of the control panel (can be freely positioned) simple programming with display (steps) on the control panel display
- ▶ Hydraulic Full-lift cylinder for the vice
- ▶ Double-pump hydraulic unit
- ▶ Hydraulic Bundle tensioning device
- ▶ Clamping pressure regulation for vice, split vice, floating
- ▶ Integrated coolant supply (45 l tank capacity)
- ▶ LED work light
- ▶ Scraper floor-chip conveyor directly under the cutting channel
- ▶ Incl. saw blade combination toothing 4/6
- ▶ Machine colour:
  - Saw frame RAL 7035 /- Machine body RAL 7005
- ▶ 12-month warranty for single-shift operation

## Special equipment

- ▶ Saw feed speed display  
**Order no. 570.063**
- ▶ Micro spraying system 24 V  
**Order no. 570.254**
- ▶ Additional (3) coolant supply units  
**Order no. 570.173**
- ▶ Chip rinsing pistol  
**Order no. 570.110**
- ▶ Hydraulic blade tension display  
**Order no. 570.065**

## Accessories

- ▶ Connecting track X-SR, left (incl. fastening set)  
**Order no. 570.255**
- ▶ Roller conveyor X-SR (steel coil x 2 pieces), 450 mm wide, basic version 2,000 mm, 1,500 kg/m  
**Order no. 570.256**
- ▶ Roller conveyor X-SR (steel coil x 3 pieces), 450 mm wide, basic version 3,000 mm, 1,500 kg/m  
**Order no. 570.258**

## Technical data

### HBS 350 SANC

Three-phase current motor 400 V, frequency-regulated (kW)	3
Saw blade dimensions (mm)	4,780 x 34 x 1.1
Flywheels Ø (mm)	450
Cutting speed (m/min)	20-120
Vice span (mm)	420
Working height (mm)	780
Machine dimensions (mm)	2,300 x 2,050 x 2,000
Weight (kg)	1,200
<b>Order no.</b>	<b>570.030</b>
<b>Additional accessories</b>	<b>from page 122</b>

## Sawing area

0 °	
○	350
□	420 x 350
□	350 x 350

## HSS Bi-Metal (M42) Band saw blades <sup>1</sup>

Order no.	Dimensions in mm	Combination toothing	VPE set = 2 pcs.
570.213	4,780 x 34 x 1.1	2/3	1
570.214	4,780 x 34 x 1.1	3/4	1
570.215	4,780 x 34 x 1.1	4/6	1
570.216	4,780 x 34 x 1.1	5/8	1
570.217	4,780 x 34 x 1.1	8/12	1

<sup>1</sup> Other bandsaw blades on request

- ▶ Extension roller conveyor X-SR (steel coil x 2 pieces), 2,000 mm, 1,500 kg/m  
**Order no. 570.260**
- ▶ Extension roller conveyor X-SR (steel coil x 3 pieces), 3,000 mm, 1,500 kg/m  
**Order no. 570.262**
- ▶ Starter band saw blade package 4,780 x 34 x 1.1 mm each consisting of 1 pc. combi-toothed  
2/3, 3/4, 4/6, 5/8, 8/12  
**Order no. 570.235**
- ▶ further measuring stops on request

# FLOTT

## Metal band saw

### HBS 450 HA



Pistol for rinsing away  
the chips  
(optional)



Full-lift cylinder  
for the vice



Pressure regulation  
for the vice  
(optional)



Bundle tensioning device  
Enables layers and bundles  
to be tensioned using an  
additional vertical  
tensioning unit (optional)



Blade tension display  
For monitoring the optimum  
saw blade tension even while  
the machine is in operation  
(standard)

## Standard equipment

- ▶ Ergonomic, robust welded frame construction, new concept in appealing design for mitre cuts from 0° to 60° right /left
- ▶ Stable, low vibration frame construction with bearing hinged arm joint
- ▶ Simple operation console for the operators
- ▶ Simple, easy-to-understand control system
- ▶ Precisely ground carbide saw blade guides (adjustable) for the highest demands on cutting accuracy
- ▶ Synchronous powered chip removal brush
- ▶ Semi-automatic sawing cycle: fully hydraulic
- ▶ Hydraulic cutting feed incl. automatic cutting pressure regulation
- ▶ Mitre settings and clamping (manual)
- ▶ Hydraulic full-lift cylinder for the vice (Pull-down design) floating vice
- ▶ Blade tension and saw blade break monitoring system
- ▶ Easily removable chip collection containers
- ▶ Hydraulic Blade tension display
- ▶ Integrated coolant supply (30 l tank capacity)
- ▶ LED work light
- ▶ Digital mitre display
- ▶ Incl. saw blade combination toothing 3/4
- ▶ Machine colour:  
- Saw frame RAL 7035 /- Machine body RAL 7005
- ▶ 12-month warranty for single-shift operation

## Special equipment

- ▶ Laser line for cutting  
**Order no. 570.109**
- ▶ Clamping pressure regulation for vice  
**Order no. 570.076**
- ▶ Hydraulic bundle tensioning device  
**Order no. 570.066**

## Accessories

- ▶ Material stop 500 mm (measuring scale)  
**Order no. 570.269**
- ▶ Connecting track (steel coil), left, 640 mm wide (incl. fastening set)  
**Order no. 570.067**
- ▶ Connecting track (steel coil), right, 640 mm wide (incl. fastening set)  
**Order no. 570.068**
- ▶ Roller conveyor T-SR (steel coil), 640 mm wide, basic version 2,000 mm, 600 kg/m  
**Order no. 570.069**
- ▶ Roller conveyor T-SR (steel coil), 640 mm wide, basic version 3,000 mm, 600 kg/m  
**Order no. 570.070**
- ▶ Extension roller conveyor T-SR (steel coil), 2,000 mm, 600 kg/m  
**Order no. 570.071**

## Technical data

### HBS 450 HA

Three-phase current motor 400 V, frequency-regulated (kW)	3
Saw blade dimensions (mm)	5,200 x 34 x 1.1
Flywheels Ø (mm)	480
Cutting speed (m/min)	20-120
Vice span, full-lift cylinder (mm)	610
Working height (mm)	781
Machine dimensions (mm)	2,780 x 1,440 x 1,560
Weight (kg)	800
<b>Order no.</b>	<b>570.525</b>

**Additional accessories** [from page 122](#)

## Sawing area

	0 °	45° R	45° L	60° R	60° L
○	450	450	450	300	300
□	610 x 450	450 x 250	450 x 400	300 x 290	300 x 290
□	450 x 450	370 x 370	450 x 450	300 x 300	300 x 300

## HSS Bi-Metal (M42) Band saw blades <sup>1</sup>

Order no.	Dimensions in mm	Combination toothing	VPE set = 2 pcs.
<b>570.220</b>	5,200 x 34 x 1.1	2/3	1
<b>570.221</b>	5,200 x 34 x 1.1	3/4	1
<b>570.222</b>	5,200 x 34 x 1.1	4/6	1
<b>570.223</b>	5,200 x 34 x 1.1	5/8	1

<sup>1</sup> Other bandsaw blades on request

- ▶ Extension roller conveyor T-SR (steel roller), 3,000 mm, 600 kg/m  
**Order no. 570.080**
- ▶ Adjustable vertical rollers  
**Order no. 570.083**
- ▶ Fixed vertical rollers  
**Order no. 570.084**
- ▶ Starter band saw blade package 5,200 x 34 x 1.1 mm each consisting of 1 pc. combi-toothed 2/3, 3/4, 4/6, 5/8  
**Order no. 570.236**
- ▶ Manual measuring stop 2 m with digital  
**Order no. 570.127**
- ▶ Manual measuring stop 3 m with measuring tape  
**Order no. 570.123**
- ▶ Manual measuring stop 2 m with measuring tape  
**Order no. 570.122**
- ▶ Manual measuring stop 3 m with digital  
**Order no. 570.128**

**FLOTT**  
**Metal band saw**  
**HBS 450 SANC**



## Standard equipment

- ▶ Fully automatic 2-column horizontal high-performance automatic band saw – perfect for industrial use
- ▶ The saw frame is guided by two robust columns and is unilaterally backlash free in a pretensioned linear guide
- ▶ Saw frame lift height limiter via limit switch
- ▶ Hydraulic Cutting feed on the saw arm (incl. double-side cutting pressure regulation)
- ▶ 3-side precision HM saw blade guiding for optimum cutting results
- ▶ Synchronous powered chip removal brush
- ▶ Blade tension and saw blade break monitoring system
- ▶ Fully hydraulic sawing process:
  - Material feed (linear bearings)
  - Feed length (single stroke) 600 mm
  - Feed via hydraulic cylinder
- ▶ Max. stroke repetition: 999
- ▶ Smallest diameter for sawing: 10 mm
- ▶ Rest length: 25 mm
- ▶ The smallest cut piece (L x H): 10 x 5 mm
- ▶ Simple and clear programming with display (steps) on the control panel display
- ▶ Hydraulic full-lift cylinder for the vice
- ▶ Double-pump hydraulic unit
- ▶ Hydraulic Bundle tensioning device
- ▶ Clamping pressure regulation for vice
- ▶ LED work light
- ▶ Scraper floor-chip conveyor directly under the cutting channel
- ▶ Integrated coolant supply (45 l tank capacity)
- ▶ Incl. saw blade combination toothing 3/4
- ▶ Machine colour:
  - Saw frame RAL 7035 /- Machine body RAL 7005
- ▶ 12-month warranty for single-shift operation

## Special equipment

- ▶ Saw feed speed display  
**Order no. 570.063**
- ▶ Micro spraying system 24 V  
**Order no. 570.254**
- ▶ Additional (3) coolant supply units  
**Order no. 570.173**
- ▶ Chip rinsing pistol  
**Order no. 570.110**

## Accessories

- ▶ Connecting part X-SR, left (incl. fastening set)  
**Order no. 570.136**
- ▶ Roller conveyor X-SR (steel coil x 4 pieces), 550 mm wide, basic version 2,000 mm, 1,500 kg/m
- ▶ further measuring stops on request

## Technical data

### HBS 450 SANC

Three-phase current motor 400 V, frequency-regulated (kW)	4
Saw blade dimensions (mm)	6,020 x 41 x 1.3
Flywheels Ø (mm)	550
Cutting speed (m/min)	20-120
Vice span (mm)	520
Working height (mm)	780
Machine dimensions (mm)	2,890 x 2,055 x 2,030
Weight (kg)	1,600
<b>Order no.</b>	<b>570.035</b>
<b>Additional accessories</b>	<b>from page 122</b>

## Sawing area

0 °	
	450
	520 x 450
	450 x 450

## HSS Bi-Metal (M42) Band saw blades <sup>1</sup>

Order no.	Dimensions in mm	Combination toothing	VPE set = 2 pcs.
<b>570.227</b>	6,020 x 41 x 1.3	2/3	1
<b>570.228</b>	6,020 x 41 x 1.3	3/4	1
<b>570.229</b>	6,020 x 41 x 1.3	4/6	1
<b>570.230</b>	6,020 x 41 x 1.3	5/8	1

<sup>1</sup> Other bandsaw blades on request

### Order no. 570.139

- ▶ Roller conveyor X-SR (steel coil x 6 pieces), 550 mm wide, basic version 3,000 mm, 1,500 kg/m  
**Order no. 570.141**
- ▶ Extension roller conveyor X-SR (steel coil x 4 pieces), 2,000 mm, 1,500 kg/m  
**Order no. 570.143**
- ▶ Extension roller conveyor X-SR (steel coil x 6 pieces), 3,000 mm, 1,500 kg/m  
**Order no. 570.145**
- ▶ Starter band saw blade package 6,020 x 41 x 1.3 mm each consisting of 1 pc. combi-toothing 2/3, 3/4, 4/6, 5/8  
**Order no. 570.237**

- ▶ further measuring stops on request

# FLOTT

## Vertical band saw

### VBS 400 Plus



Minimum quantity  
lubrication  
Order no. 410.031



Longitudinal stop  
Order no. 410.030



Standard height-adjust-  
able guide arm

## Standard equipment

- ▶ Manual vertical band saw with a cutting width of 400 mm
- ▶ Elegant and rigid welded construction
- ▶ Precise drive powered by a frequency converter
- ▶ Digital speed display
- ▶ Stepless band speed
- ▶ Balanced discs
- ▶ Running surfaces coated with hard rubber
- ▶ Hardened and ground guiding jaws
- ▶ LED workspace light
- ▶ Height-adjustable guide arm
- ▶ Machine colour RAL 7005 / RAL 7035
- ▶ 12-month warranty for single-shift operation

## Special equipment

- ▶ Table manually moveable via crank  
**Order no. 410.032**
- ▶ Saw blade welding device  
**Order no. 410.033**
- ▶ Tilting table, 15° to the left, right, front and back  
**Order no. 410.034**
- ▶ Longitudinal stop für 90° cuts  
**Order no. 410.030**
- ▶ Minimal lubrication  
**Order no. 410.031**

## Accessories

- ▶ Band saw blade: 3,600 x 13 x 0.9 mm, 5 pieces, Tothing 14 teeth  
**Order no. 410.040**
- ▶ Band saw blade: 3,600 x 13 x 0.9 mm, 5 pieces, Tothing 10/14 teeth  
**Order no. 410.041**
- ▶ Band saw blade: 3,600 x 13 x 0.9 mm, 5 pieces, Tothing 6 teeth  
**Order no. 410.042**
- ▶ Starter band saw blade package: 3,600 x 13 x 0.9 mm each consisting of 1 pc. combi tothing 14, 10/14, 6  
**Order no. 410.050**
- ▶ Further band saw blades on request

## Technical data

### VBS 400 Plus

Table model	Fixed
Table dimensions (mm)	600 x 600
Cutting width (mm)	400
Cutting height (mm)	390
Cutting speed (m/min)	50-1,000
Saw blade dimensions (mm)	3,600 x 13 x 0.9
Drive type	Three-phase current motor, electronically regulated
Connected value (kW/A)	4.0/7.5
Machine dimensions (mm)	2,225 x 1,120 x 770
Weight (kg)	465
<b>Order no.</b>	<b>410.010</b>
<b>With minimum quantity lubrication and longitudinal stop</b>	
Order no.	<b>410.020</b>
<b>Additional accessories</b>	<b>from page 122</b>

# FLOTT

## Metal circular saw

### KS 315 M



## Standard equipment

- With swivelling head (left/right) for mitre cuts
- Two speeds
- Stable cast machine housing construction
- Reduction gear in oil bath consisting of bronze wheel and hardened, ground steel worm wheel
- Quick-change vice with counter-tension device for double work piece tensioning
- Long life mechanical coolant pump
- Adjustable length stop
- Operating tool
- Machine colour: RAL 7037
- 12-month warranty for single-shift operation

## Accessories

- Steel underframe (with VP - 250 x 720 x 840 mm)

**Order no. 560.830**

## Technical data

### KS 315 M

Three-phase current motor 400 V, pole-changeable (kW)	1.3/1.9
Vice span (mm)	110
Cooling tank capacity (l)	5
Work height with underframe (mm)	980
2 speeds (rpm)	41/82
Machine dimension with underframe without VP (mm)	1,000 x 1,100 x 1,800
Machine dimensions with underframe with VP (mm)	630 x 1,030 x 880
<b>Not included in scope of delivery</b>	
Saw blade (mm)	Ø 315 x 32
<b>Order no.</b>	<b>560.835</b>

## Sawing area

	45° L	0 °	45° R
○	90	95	90
□	80 x 70	100 x 70	80 x 70
□	75	80	75

## Metal circular saw blades <sup>1</sup>

Order no.	Dimensions in mm	Number of teeth	VPE
<b>560.316</b>	315 x 2.5 x 32	240	1
<b>560.311</b>	315 x 2.5 x 32	160	1

<sup>1</sup> different saw blades on request

# FLOTT

## Metal band saw

### PBS 120 Plus



3D object – Separation from  
the base plate – Detail  
(optional)



3D object – Separation from  
the base plate  
(optional)

## Standard equipment

- ▶ Portable manual metal band saw with two band speeds for mitre cuts from 0° to 60°
- ▶ Manual arm feed to the cut
- ▶ Two band speeds
- ▶ Saw blade guide made from carbide
- ▶ Cast iron vice with quick-release lever
- ▶ Option to connect a longitudinal stop
- ▶ Saw blade cooling at the point of machining
- ▶ incl. saw blade combi toothing 8/12
- ▶ 12-month warranty for single-shift operation

## Accessories

- ▶ Underframe  
(can only be ordered together with coolant tray)  
**Order no. 570.508**
- ▶ Coolant tray  
(can only be ordered together with underframe)  
**Order no. 570.509**
- ▶ Material stop 300 mm  
**Order no. 570.510**
- ▶ Connecting track, left  
**Order no. 570.511**
- ▶ Connecting track, right  
**Order no. 570.512**
- ▶ Roller conveyor, 2 m (150 kg/m)  
**Order no. 570.507**
- ▶ Starter band saw blade package 1,620 x 13 x 0.65 mm  
each consisting of 1 pc. combi-toothing  
6/10, 8/12, 10/14  
**Order no. 570.519**

## Technical data

### PBS 120 Plus

Belt speed (m/min)	35/75
Band saw blade size (mm)	1,620 x 13 x 0.65
Motor 230V (kW)	0.25/0.37
Machine dimensions (mm)	810 x 530 x 450
Weight (kg)	38
<b>Order no.</b>	<b>570.505</b>

## Sawing area

	0 °	45°R	60°R
○	120	90	55
■	60 x 70	100 x 90	55 x 65
□	120 x 120	90 x 90	55 x 55

## Metal band saw blades <sup>1</sup>

Order no.	Dimensions in mm	Teeth per inch	VPE set = 5 pcs.
<b>570.514</b>	1,620 x 13 x 0.65	6/10	1
<b>570.515</b>	1,620 x 13 x 0.65	8/12	1
<b>570.516</b>	1,620 x 13 x 0.65	10/14	1

<sup>1</sup> Other bandsaw blades on request

## Accessories

### Roller conveyor system L-SR/K330

Highly flexible solution for handling tasks with medium-weight materials. Thanks to the unique profile system, the roller conveyors can be adapted to customer requirements very easily.

on request



### Stop systems

Stop systems -from simple, convenient manual length measuring unitsto NC controlled modern measuring devices, incl. programme memory.

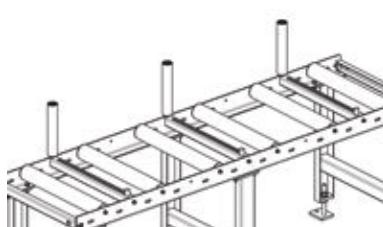


on request

### Roll-off safety system

The roll-off safety system serves to prevent the pipes from rolling off in an uncontrolled manner and the associated danger that this creates for the operating personnel and persons in close proximity.

on request



### Digital measuring stop - display

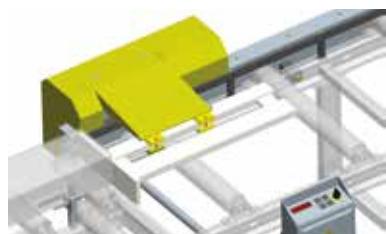
The stop carriage is adjusted manually and the position is shown on the digital display with an accuracy of 0.1 mm. The stop arm can be folded upwards for the material to pass through.

on request



### Digital measuring stop

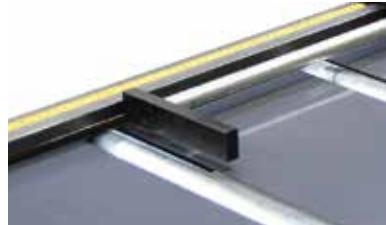
Digital material stop with handwheel and pneumatic brake



on request

### Manual measuring stop

The support surface of the stop enables stable fixation of the material before cutting the desired length.



on request

### Hydraulic bundle tensioning

The hydraulic bundle tensioning device enables the tensioning of layers and bundles with an additional hydraulic vertical tensioning unit.



on request

### Controlled material feed



on request

## Vertical rollers

In the ideal arrangement, the vertical rollers ensure precise perpendicular alignment, easier operations and safety for operators and people near the equipment.



on request

Security systems for individual solutions  
on request!

## Adjustable vertical rollers

Adjustable vertical rollers are essential for cutting layers/bundles. The cut pieces are secured and their shape is maintained when combined with fixed built-in vertical rollers.



on request

## Plastic rollers series L-K

The rollers used are stable, solid tubes made of high-quality plastic. Thanks to their properties, the supplied material is protected from damage.



on request

## Connecting parts

Each band saw has an adapted connecting part, including the fasteners.



on request



## Information contents

Topic	Page
<b>FLOTT Safety</b>	124
<b>FLOTT ACADEMY</b>	127
<b>FLOTT demonstration centres and training centres/service points</b>	128
<b>FLOTT area support</b>	129
<b>FLOTT service</b>	130
<b>FLOTT extract from the conditions of sale</b>	131





FLOTT Safety .....	126
FLOTT ACADEMY .....	127
FLOTT Demonstration centres /Training centres / Service points .....	128
FLOTT Area support .....	129
FLOTT Service .....	130
FLOTT Extract/Terms of sale.....	131

## FLOTT drilling technology safety

### Efficient LED illumination

- The positioning of the power LEDs in the front area of the machine illuminates the drill hole. The work piece does not create any disruptive shadows. Direct glare is prevented by the positioning of the LEDs.



### Standard electrical drilling protection

- In accordance with the European Machine Directive No. 2006/42/EC, all drilling machines are fitted with drilling protection with an electrical fuse.



Standard electrical drilling protection

### Safe drilling

- Standard EMERGENCY OFF switch and and spindle stop function (spindle stops when it reaches the starting position)

## FLOTT [felix] 2.0

### Vice [felix] 2.0

- Patented single clamping via hexagon head screw
- Anti-twist protection through internal hexagon head screw



### Double grinding machine with optional brake and extraction system

- Optionally with emergency stop push-button and foot emergency stop
- The grinding wheels come to a standstill within just a few seconds



Double grinding machine

### Belt grinder with brake and easy belt change, as well as optional extraction system

- The grinding wheel comes to a standstill within just a few seconds
- The grinding wheel can be changed without any tools



Belt grinder



see. understand. learn.



## FLOTT AKADEMIE

The FLOTT ACADEMY with Felix Röwekämper. He will show you how it's done.

Learn the basics of drilling technology.

Here you will find more videos on drilling, sawing and grinding.

## FLOTT demonstration centres and training centres

Extensive and practice-oriented training and service – at its modern equipped training centres, FLOTT provides qualified training courses in theoretical and practical elements for its “high-quality” segments, drilling technology, grinding technology and sawing technology.

With competent expert support, detailed demonstrations of all products and the development of user-friendly solutions for almost all areas of application.

## FLOTT service points

Short, fast routes to qualified service. An obvious advantage of FLOTT machine tools.

Thanks to its extensive service network and professional, expert technicians, FLOTT provides support for any incidents via its support locations, offering fast and efficient solutions and guaranteeing convenient processing of all service work and repairs.

### Training and demonstration centre

#### Remscheid

Arnz FLOTT GmbH  
Werkzeugmaschinen  
Vieringhausen 131  
42857 Remscheid, Germany  
Phone: +49 2191 979-0  
info@flott.de

### Demonstration centres

#### Heusweiler

Arthur Martini GmbH  
Schacht Dilsburg 5  
66265 Heusweiler, Germany  
Phone: +49 6806 9221-53  
www.a-martini.com

#### Nuremberg

BFS GmbH  
Meckenloher Straße 1  
91126 Rednitzhembach, Germany  
Phone: +49 9122 78550  
www.bfs-maschinen.de



## FLÖTT area support

1. Baden-Württemberg
2. Bavaria
3. Berlin
4. Brandenburg
5. Bremen
6. Hamburg
7. Hesse
8. Mecklenburg-Western Pomerania
9. Lower Saxony
10. North Rhine-Westphalia
11. Rhineland-Palatinate
12. Saarland
13. Saxony
14. Saxony-Anhalt
15. Schleswig-Holstein
16. Thuringia

### Area: 1, 2

Field sales:  
Perry Gantzkow -  
Phone: +49 172 8334445  
[perry.gantzkow@flott.de](mailto:perry.gantzkow@flott.de)

Back office:  
Toni Dragano  
Phone: +49 2191 979-153  
[toni.dragano@flott.de](mailto:toni.dragano@flott.de)

### Area: 3, 4, 7, 11, 12, 14

Field sales:  
Mike Paßlack  
Phone: +49 152 08612538  
[mike.passlack@flott.de](mailto:mike.passlack@flott.de)

Back office:  
Mandy Saxer  
Phone: +49 2191 979-100  
[mandy.saxer@flott.de](mailto:mandy.saxer@flott.de)

### Area: 5, 6, 9, 10, 15

Field sales:  
Humberto Picarra  
Phone: +49 163 8334507  
[humberto.picarra@flott.de](mailto:humberto.picarra@flott.de)

Back office:  
Holger Hausmann  
Phone: +49 2191 979-158  
[holger.hausmann@flott.de](mailto:holger.hausmann@flott.de)



### Area: 13, 16

Field sales:  
Dieter Liemen  
Phone: +49 152 04207585  
[dieter.liemen@mmaschinen.de](mailto:dieter.liemen@mmaschinen.de)

Back office:  
Mandy Saxer  
Phone: +49 2191 979-100  
[mandy.saxer@flott.de](mailto:mandy.saxer@flott.de)

### Export

Field sales:  
Alexander Reul  
Phone: +49 152 03918123  
[alexander.reul@flott.de](mailto:alexander.reul@flott.de)

Back office:  
Dr Karl Peter Becker  
Phone: +49 172 9800737  
[peter.becker@flott.de](mailto:peter.becker@flott.de)

Back office:  
Volker Wächter  
Phone: +49 2191 979-159  
[volker.waechter@flott.de](mailto:volker.waechter@flott.de)

## FLOTT service

Our FLOTT team will be happy to serve!

### FLOTT technical service

Holger Paucke  
Phone: +49 2191 46408-177  
holger.paucke@flott.de

The direct link  
to your  
service partner



### FLOTT spare parts service

Mareike Goerzen  
Phone: +49 2191 46408-121  
mareike.goerzen@flott.de

Anna Miller  
Phone: +49 2191 46408-120  
anna.miller@flott.de

#### Note:

For the quickest possible  
processing of your spare parts  
request, please keep the  
**machine number** and the  
**machine type** ready!

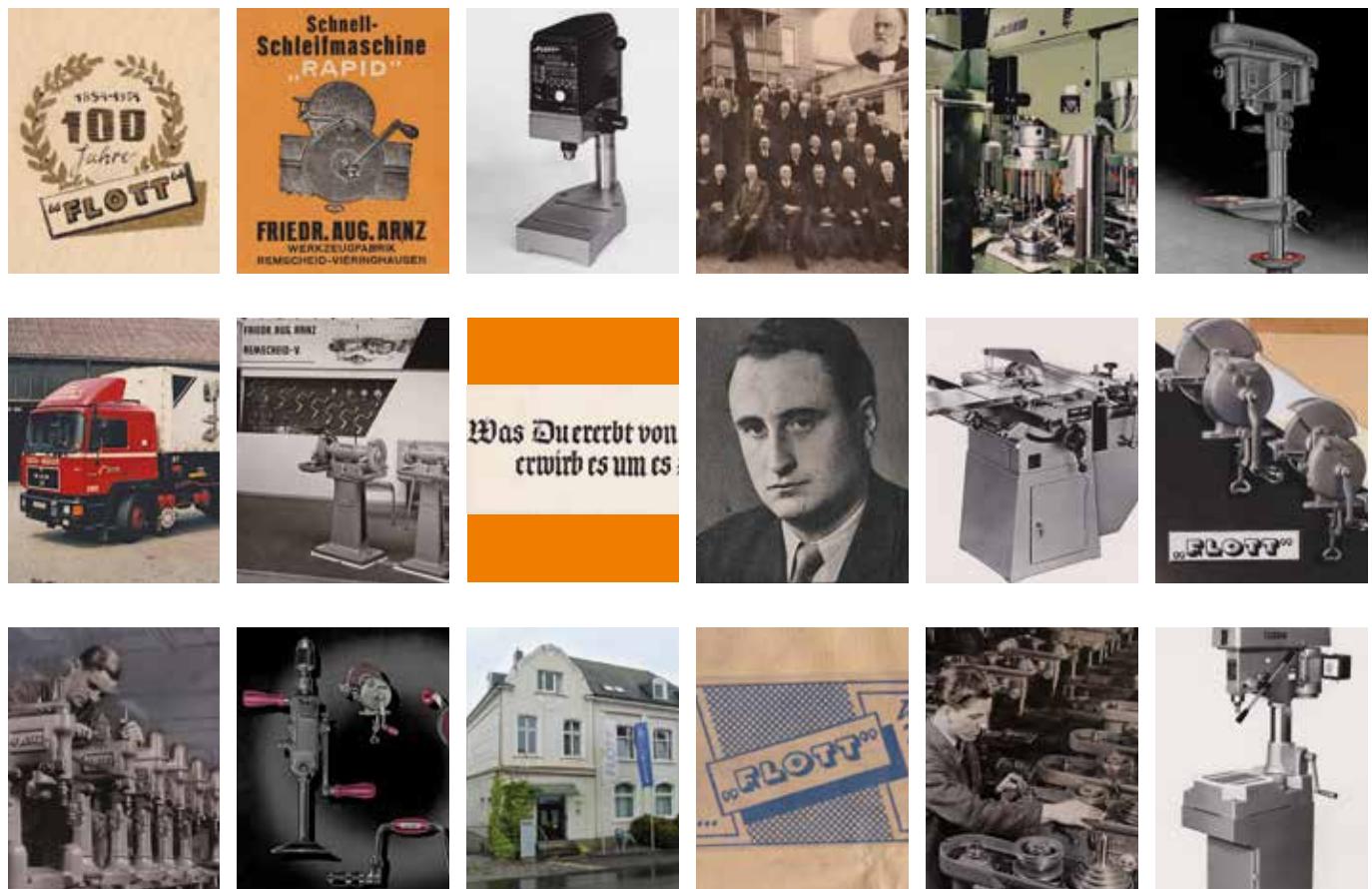


## Extract from our Terms of Sale

- Delivery ex works, excluding packaging.  
Shipping location: 42857 Remscheid
- Extra charges incurred for "seaworthy" packaging.
- Standard colour (one-component paint)
  - Series TB 10 Eco Plus to 20 Plus (hood 7005 and base black RAL 9005)
  - series from 23 Plus completely in RAL 7005
  - grinding machines RAL 9007
  - saws: saw frame RAL 7035, machine body RAL 7005
- Construction particulars and dimensions are subject to change without notice even during the term of an order.
- Non-binding price recommendation in EUR

plus statutory VAT.

- Machine prices excluding packaging.  
Flat rates for packaging in accordance with the price list
- Accessories and replacement parts excluding packaging.
- Warranty:
  - 36 months for drilling machines, except: GB 50 MV, here 12 months for single-shift operation
  - 12 months for grinding machines and saws for single-shift operation from delivery, except wearing parts, 6 months on spare parts
- Complete GTC at [www.flott.de](http://www.flott.de)





**Arnz FLOTT GmbH**  
**Werkzeugmaschinen**

Vieringhausen 131  
42857 Remscheid | Germany  
Phone +49 2191 979-0  
Fax +49 2191 979-222  
info@flott.de  
www.flott.de

Subject to technical change and further information at [www.flott.de](http://www.flott.de)  
[www.punktuell-werbeagentur.de](http://www.punktuell-werbeagentur.de)

05\_11\_2023\_EN