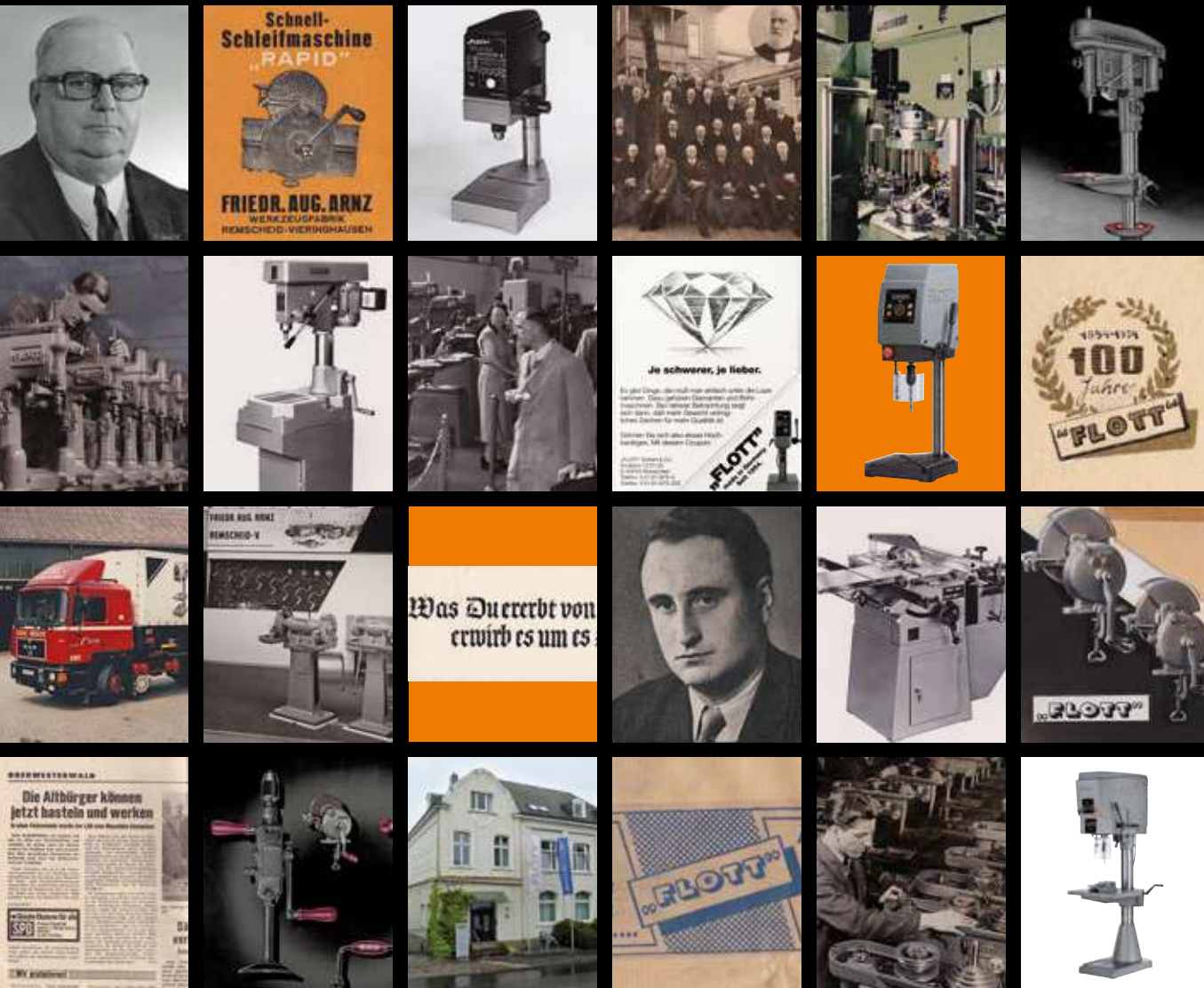


CA  
TAL  
OG  
UE!

TWO THOUSAND AND NINETEEN  
& TWO THOUSAND AND TWENTY

# We have been drilling together for 165 years



1854 – 2019  
**165** years

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## Drilling machines contents

Machine	Drilling capacity / normal drilling performance in mm	Thread cutting performance	Revolutions per minute 1/min	Motor/FU kW	Page
Drilling machines – vice[felix]					10
TB 10 Eco Plus	12		250-3,000	0.45 AC 230 V	12
TB 10 Basic Plus	12		250-3,000	0.45 AC 230 V	14
TB 10 Plus	10/12	max. M6	60-6,000	0.54 three-phase current, frequency-controlled, (network connection 230 V)	16
Turbo Drill	6/8	max. M5	100-10,000	0.54 three-phase current, frequency-controlled, (network connection 230 V)	18
TB/TBZ/SB 13 Plus	13/15	max. M10	40-4,000	0.54 three-phase current, frequency-controlled, (network connection 230 V)	20
TB/TBZ/SB 15 Plus	15/18	max. M12	40-4,000	0.75 three-phase current, frequency-controlled, (network connection 230 V)	22
TB/TBZ/SB 18 Plus	18/20	max. M12	30-3,000	0.75 three-phase current, frequency-controlled, (network connection 230 V)	24
TB/TBZ/SB 20 Plus	20/23	max. M14	40-4,000	1.5 three-phase current, frequency-controlled, (400 V)	26
TB/TBZ/SB 23 Plus	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)	28
TB/TBZ/SB 25 Plus	23/25	max. M16x1	20-2,000 R1	1.5 three-phase current, frequency-controlled, (400 V)	30
SB 30 Plus	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)	32
SB 30 MV Plus	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)	32
SB 30 NC Plus	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)	34
SB P30 STG PV elec.	25/30	max. M20	125-4000	0.9/1.45 three-phase current, 400 V, pole-changeable	36
SB 40 Plus	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
SB 40 MV Plus	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
SB 40 NC Plus	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
SB P40 STG PV elec.	35/40	max. M30	100-2,000 R1 70-1,400 R2	1.5/3.0 three-phase current, 400 V, pole-changeable	42
SB 20 FB Plus		M12	40-4,000	1.5 three-phase current, frequency-controlled, (400 V)	44
SB 30 FB Plus		M36x2	0-4,000	3.0 three-phase current, frequency-controlled, (400 V)	46
SB 30 FB NC PLUS			0-4,000	3.0 three-phase current, frequency-controlled, (400 V)	46
GB 50 MV	50	max. M36	Gear steps	3.0 three-phase current, (400 V)	48
GB 50 MV Plus	50	max. M36	Gear steps	3.0 three-phase current, (400 V)	50
SB P50 STG MV	50	max. M42	Gear steps	4.0 three-phase current, (400 V)	52
GB 70 MV Plus	70	max. M50	Gear steps	5.5 three-phase current, (400 V)	54
BFM 40	35	max. M35	Gear steps	0.9/1.5 three-phase current, 400 V, pole-changeable	56
BS15	on request				58
BA30CNC	on request				60
Gang drilling machine	on request				62

You can find the right drill kits in the technical data for the machine in question.

### Colour description



Plus series

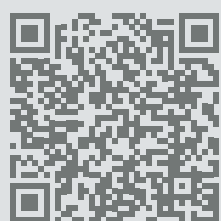


P series



Drilling machines





**Drilling  
technology**

# PLUS SERIES



THE SB 40 NC PLUS EXAMPLE

## Our Plus series with clear benefits

- ▶ Convenient operator-machine interface with 4,3" touchscreen display for optimised user convenience (NC Plus).
- ▶ Robust, high-quality rotary hood with ergonomically inclined front panel for easier reading and entry of machine and process parameters.
- ▶ The newly developed drive and gear train guarantees maximum power with its integrated frequency converter.
- ▶ Speed can be continuously adjusted via the central control dial.
- ▶ All safety features comply with the current requirements and guidelines of the Industrial Safety Ordinance.
- ▶ All machines are equipped with LED lighting as standard.
- ▶ Standard interfaces ensure that additional devices can be connected and that there is an option of integrating and interlinking in production lines.
- ▶ Thread cutting device (except TB 10 Eco Plus and TB 10 Basic Plus).
- ▶ Deactivatable/activatable spindle stop (except TB 10 Eco Plus and TB 10 Basic Plus).

**YOU CAN VIEW  
OUR NEW PRODUCTS ON  
the next pages!**

You can find out more about  
**SB 40 NC Plus** on Page 40/41  
in our catalogue!

## FLOTT drilling technology

With the newly developed PLUS drilling machine line, FLOTT has provided a modular system that gives the user an optimum choice in the drilling range of between 0.5 and 70 mm.

The drilling machine types are **sorted** by drilling and/or thread cutting performance. 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**.

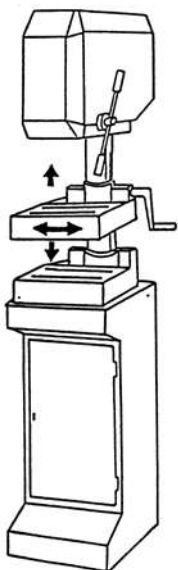
**Modern electronics**, for example, **digital** depth and speed displays, as well as **electronic stepless** drives, have been the standard at FLOTT for years.

**The robust construction and long service lives** of our drilling machines are valued all over the world.

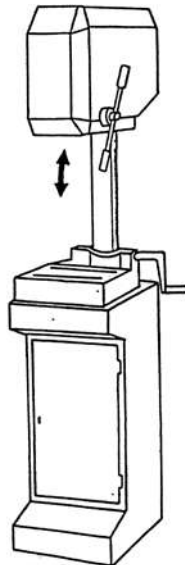
**Safety** has always been a top priority for FLOTT. That's why we observe all the current safety requirements.

**Do you have any more questions?** The FLOTT team will be happy to advise you in accordance with your individual requirements!

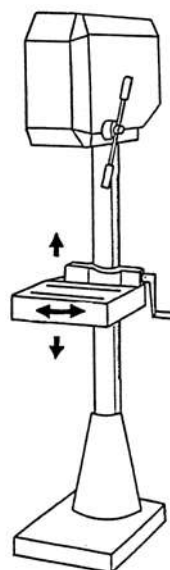
## Models



**TB**  
Bench drill with  
work table



**TBZ**  
TBZ bench drill  
without work table  
with toothed rack



**SB**  
Column drill press

### Explanation of abbreviations

Flow drilling  
Mechanical feed, with electromagnetic coupling  
Programmable feed with electromagnetic feed coupling  
with electronic controls; digital multi-function display  
Gear-driven drilling machine  
Controlled z-axis (feed/return)

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



## FLOTT drilling technology highlights

**FLOTT provides a 3-year warranty**  
(Details see Page 135), which can be extended on request

- ▶ The manufacturing of the mechanical A-parts, as well as assembly by an experienced team at Flott, guarantee the highest levels of quality and reliability

### The control panel with display

- ▶ Clear control panel with central knob
- ▶ OLED display (organic light-emitting diode)  
Dustproof with sealing lip in a covered hood recess
- ▶ Easy to disassemble and maintain with 4 screws

### The menu functions

- ▶ Clear input menu that is easy to understand
- ▶ Select the mode of operation between drilling and thread cutting
- ▶ Set the speed using the central knob
- ▶ Precise display of the drill depth (target, actual), speed
- ▶ Counting function of the drilling stroke
- ▶ Intelligent memory function for the parameters
- ▶ Energy-saving mode
- ▶ Spindle stop

### Additional panel with touchscreen operation

- ▶ Plus technology
- ▶ Programmable z-axis NC-Plus
- ▶ The 4,3" touchscreen display is a convenient operator-machine interface for programming the z-axis (feed/return).

It enables you to select between the following operating modes:

- ▶ Drilling
- ▶ Grating
- ▶ Countersinking
- ▶ Flow drilling
- ▶ Thread cutting

There is also the option of programming the device freely.



## Drilling machines – vice [felix]



Fig. above: Flott [felix] 100

Fig. below: Flott [felix] 100 with tensioning aid

# jugend forscht

1st prize Arbeitswelt 2018

## Easy and safe drilling

### Drilling machine device with integrated clamping mechanism

On different drilling machines, the work piece is clamped between the gripping jaws of a vice for the purpose of securing the work piece. For larger drilling tasks, this must also be secured mechanically or electromagnetically on a drilling table.

**Felix Röwekämper** analysed existing concepts and found them to be too laborious, time-consuming and expensive. His alternative was intended to be safe and easy to use and also make it possible to align the work piece easily and precisely.



For this purpose, the early-stage researcher developed a new type of vice with a fixing mechanism integrated on the lower side: A so-called clamping lever can be secured very firmly to the table using levering action and a screw, allowing it to be adjusted well.



# FLÖTT [felix]

## Standard equipment

- ▶ Large clamping range
  - ▶ Prism jaws with an indentation, as well as horizontal and vertical recesses for a broad range of work pieces
  - ▶ Optimum clamping aid guarantees a high level of clamping force, as well as safe and fast clamping of the work pieces (only [felix] 100/[felix] 125)
  - ▶ Patented easy clamping via hexagon socket screw
  - ▶ Full occupational safety
  - ▶ Work piece can be positioned freely
  - ▶ No turning of the workpieces
  - ▶ No setup time, fast clamping
  - ▶ Jaw, case-hardened, milled and burnished
- Replacement jaw and special top jaws on request

## Technical data

### Flott [felix] 80

Gripping jaw width (mm)	80
Span width (mm)	0-81
Gripping jaw height (mm)	35
<b>Order number</b>	<b>281.105</b>

### Flott [felix] 100

Gripping jaw width (mm)	100
Span width (mm)	0-101
Gripping jaw height (mm)	35
<b>Order number</b>	<b>281.106</b>
<b>Order number with tensioning aid</b>	<b>281.108</b>

### Flott [felix] 125

Gripping jaw width (mm)	125
Span width (mm)	0-131
Gripping jaw height (mm)	40
<b>Order number</b>	<b>281.107</b>
<b>Order number with tensioning aid</b>	<b>281.109</b>

**Bench drill  
in AC design  
TB 10 Eco ▶Plus**



Fig.: TB 10 Eco ▶Plus with special equipment

## Standard equipment

- ▶ Robust, high-quality inclined rotary hood for easy reading and entry of the speed
- ▶ LED lighting
- ▶ Ergonomic drill depth stop that can be adjusted quickly
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Under-voltage release
- ▶ Drill protection with electr. fuse
- ▶ Connecting cable with two-pin earthed plug (1.2 m)
- ▶ 3-year warranty for single-shift operation

## Special equipment

- ▶ Height adjustment  
via threaded spindle  
**Order number 290.302**
- ▶ Warranty extension 4 years  
**Order number 290.018**
- ▶ Warranty extension 5 years  
**Order number 290.019**

## Accessories

- ▶ Machine cabinet with  
door and intermediate plate  
Height: 800 mm  
Weight: 20 kg  
**Order number 213.168**
- ▶ Machine vice with  
with prism jaws  
Jaw width: 85 mm  
Span width: 70 mm  
**Order number 281.205**
- ▶ Twist drill set  
DIN 338 HSSG  
25-part, sanded,  
Split point 135°,  
Ø 1.0-13.0 x 0.5 mm  
**Order number 285.124**
- ▶ Quick-change drill chuck  
(1-13 mm), B16  
Rotational accuracy: 0.17 mm  
**Order number 285.133**
- ▶ Precision quick-change drill chuck  
sanded, self tightening,  
for right-hand/left hand rotation max. 8,000 1/min.  
Clamping range 1-13 mm  
Socket B16  
Rotational accuracy: 0.06 mm  
**Order number 285.064**

## Technical data

Spindle	B16
Speed indicator	Digital
Drilling depth indicator	Scale
Drilling depth stop	Thrust ring that can be adjusted quickly
Feed	by hand

## TB 10 Eco Plus

Steel Ø (mm)	12 (in E335/ST60)
Aluminium Ø (mm)	20
Softwood Ø (mm)	40
Drilling depth (mm)	50
Distance column-spindle (mm)	180
Column diameter (mm)	50
Useable working surface (W x L) (mm)	300 x 200
T-slot size (arm), distance (mm), width measurement (mm)	Number 2, 100, 12/20
Machine dimensions without VP (mm)	400 x 248 x 460
Machine dimensions with VP (mm)	430 x 680 x 810
Drill head height adjustment	by hand
Weight (kg)	30
Spindle/foot (mm)	105-245
Motor AC 230 V (kW)	0.45
Spindle speed, stepless (1/min)	250-3,000
<b>Order number</b>	<b>217.200</b>

**Additional accessories** from Page 64



# Bench drill TB 10 Basic ▶ Plus



Fig.: TB 10 Basic ▶ Plus with special equipment

## Standard equipment

- ▶ Robust, high-quality inclined rotary hood for easy reading and entry of the speed
- ▶ LED lighting
- ▶ Ergonomic drill depth stop that can be adjusted quickly
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Under-voltage release
- ▶ Drill protection with electr. fuse
- ▶ Connecting cable with two-pin earthed plug (1.2 m)
- ▶ 3-year warranty for single-shift operation

## Special equipment

- ▶ Drill depth fixed stop  
for optimum repetition accuracy  
**Order number 212.716**
- ▶ Warranty extension 4 years  
**Order number 290.018**
- ▶ Warranty extension 5 years  
**Order number 290.019**

## Accessories

- ▶ Machine cabinet with door and drawer  
Height: 840 mm  
Weight: 28 kg  
**Order number 250.208**
- ▶ Quick-change drill chuck B16  
Clamping range 1–13 mm  
Rotational accuracy: 0.17 mm  
**Order number 285.133**
- ▶ Precision quick-change drill chuck  
sanded, self tightening,  
for right-hand/left hand rotation max. 8,000 1/min.  
Clamping range 1–13 mm  
socket B16  
Rotational accuracy: 0.06 mm  
**Order number 285.064**

## Technical data

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
Machine dimensions without VP (mm)	320 x 520 x 820
Machine dimensions with VP (mm)	452 x 700 x 1,130
Distance spindle - working surface (mm)	140 - 315
Drill head height adjustment	by hand
T-slot size (arm), width measurement (mm)	Cross grooves, number 2, 14/26
Speed indicator	digital
Drilling depth stop	Thrust ring that can be adjusted quickly
Feed	by hand
Motor AC 230 V (kW)	0.45
Weight (kg)	44

## TB 10 Basic Plus

Steel Ø (mm)	12 (in E335/ST60)
Aluminium Ø (mm)	20
Softwood Ø (mm)	40
Spindle speed stepless, electronic (1/min)	250 - 3,000
<b>Order number</b> (with drill head height adjustment)	<b>217.400</b>
<b>Order number</b> (with work table and table height adjustment via toothed rack)	<b>217.410</b>

**Additional accessories** from Page 64

# Bench drill

## TB 10 ►Plus



Fig.: TB 10 ►Plus with special equipment

## Standard equipment

- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head hood with front that is tilted ergonomically
- ▶ LED lighting
- ▶ Ergonomic drill depth stop that can be adjusted quickly
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electr. fuse
- ▶ Connecting cable with two-pin earthed plug
- ▶ 3-year warranty for single-shift operation

## 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 number 290.521**
- ▶ Drill depth fixed stop  
for optimum repetition accuracy  
**Order number 212.716**
- ▶ Warranty extension 4 years  
**Order number 290.018**
- ▶ Warranty extension 5 years  
**Order number 290.019**

## Accessories

- ▶ Machine cabinet with door and drawer  
Height: 840 mm  
Weight: 28 kg  
**Order number 250.208**
- ▶ Quick-change drill chuck B16  
Clamping range 1–13 mm  
Rotational accuracy: 0.17 mm  
**Order number 285.133**
- ▶ Precision quick-change drill chuck  
sanded, self tightening,  
for right-hand/left hand rotation max. 8,000 1/min.  
Clamping range 1–13 mm  
socket B16  
Rotational accuracy: 0.06 mm  
**Order number 285.064**
- ▶ Tap holder M4-M12 DIN 371  
Span width: 1-10 mm  
Socket: B16  
Total length: 80 mm  
**Order number 285.109**

## Technical data

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
Machine dimensions without VP (mm)	320 x 520 x 820
Machine dimensions with VP (mm)	452 x 700 x 1,130
Distance spindle - working surface (mm)	140-315
Drill head height adjustment	by hand
T-slot size, width measurement (mm)	Cross grooves, number 2, 14/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Thrust ring (positive-locking)
Feed	by hand
Motor three-phase current, frequency-regulated, mains connection 230 V (kW)	0.54
Weight (kg)	44

## TB 10 Plus\*

Drilling capacity / normal drilling performance (mm)	10/12 (in E335/ST60)
Thread cutting performance (depends on gradient) max.	M6
Spindle speed stepless, electronic (1/min)	60-6,000
<b>Order number</b>	<b>212.505</b>

## Additional accessories from Page 64

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

## Drill kit 1

- ▶ 1 Vice [felix] 80 mm
- ▶ 1 quick-change drill chuck  
1-13 mm (accuracy 0.17 mm)  
**Order number 296.570**

# Bench drill Turbo Drill





## Standard equipment

- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head hood with front that is tilted ergonomically
- ▶ LED lighting
- ▶ Ergonomic drill depth stop that can be adjusted quickly
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electr. fuse
- ▶ Connecting cable with two-pin earthed plug
- ▶ 3-year warranty for single-shift operation

## 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 number 290.521**
- ▶ Drill depth fixed stop  
for optimum repetition accuracy  
**Order number 212.716**
- ▶ Warranty extension 4 years  
**Order number 290.018**
- ▶ Warranty extension 5 years  
**Order number 290.019**

## Accessories

- ▶ Machine cabinet with door and drawer  
Height: 840 mm  
Weight: 28 kg  
**Order number 250.208**
- ▶ Keyed drill chuck for Turbo Drill, B12  
Clamping range 0.5-8 mm  
Rotational accuracy: 0.20 mm  
**Order number 285.103**
- ▶ Precision quick-change drill chuck for Turbo Drill, B12  
Clamping range 0.5-6 mm  
Rotational accuracy: 0.05 mm  
**Order number 285.104**

## Technical data

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
Machine dimensions without VP (mm)	320 x 520 x 820
Machine dimensions with VP (mm)	452 x 700 x 1,130
Distance spindle - working surface (mm)	140-315
Drill head height adjustment	by hand
T-slot size, width measurement (mm)	Cross grooves, number 2, 14/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Thrust ring (positive-locking)
Feed	by hand
Motor three-phase current, frequency-regulated, mains connection 230 V (kW)	0.54
Weight (kg)	44

## Turbo Drill\*

Drilling capacity / normal drilling performance (mm)	6/8 (in E335/ST60)
Thread cutting performance (depends on gradient) max.	M5
Spindle speed stepless, electronic (1/min)	100-10,000
<b>Order number</b>	<b>212.506</b>

**Additional accessories** from Page 64

\* 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 press

TB 13 ▶Plus

TBZ 13 ▶Plus

SB 13 ▶Plus



AVAILABLE  
IMMEDIATELY! ▶ **to go**

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

Fig.: TB 13 ▶Plus with MK II to go!

## Standard equipment

- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head hood with front that is tilted ergonomically
- ▶ LED lighting
- ▶ Ergonomic drill depth stop that can be adjusted quickly
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electr. fuse
- ▶ Connecting cable with two-pin earthed plug
- ▶ 3-year warranty for single-shift operation

## Special equipment

- ▶ Drill depth fixed stop  
for optimum repetition accuracy  
**Order number 212.716**
- ▶ Warranty extension 4 years  
**Order number 290.018**
- ▶ Warranty extension 5 years  
**Order number 290.019**

## Accessories

- ▶ Machine cabinet with door and drawer  
(only for TB 13 Plus)  
Height: 840 mm  
Weight: 28 kg  
**Order number 250.208**
- ▶ Machine cabinet with  
door for TBZ and intermediate plate  
Height: 800 mm, Weight: 36 kg  
**Order number 201.160**

### Drill kit 1 (for B16)

- ▶ Vice [felix] 80
- ▶ Quick-change drill chuck B16  
1-13 mm (accuracy 0.17 mm)  
**Order number 296.570**

### Drill kit 2 (for MK II)

- ▶ Vice [felix] 80
- ▶ Taper mandrel MK II/B16
- ▶ Reduction sleeve MK II/MK I
- ▶ Quick-change drill chuck B16  
1-13 mm (accuracy 0.17 mm)  
**Order number 296.571**

## Technical data

Spindle	B16, optional MK II
Drilling depth (mm)	60
Thread cutting performance max. (depends on gradient)	max. M10
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Thrust ring (positive-locking)
Feed	by hand
Table height adjustment	with toothed rack
Motor three-phase current, frequency-regulated, mains connection 230 V (kW)	0.54

### TB 13 Plus\*

Drilling capacity / normal drilling performance (mm)	13/15 (in E335/ST60)
Distance column-spindle (mm)	220
Column diameter (mm)	70
Useable table surface (W x L) (mm)	300 x 250
Distance spindle - work surface (mm)	
spindle nose - table	85-370
Spindle nose - table (below)	420
T-slot size (arm), distance (mm), width measurement (mm)	Number 2, 125, 14/26
T-slot size (foot), width measurement (mm)	Cross grooves, number 2, 14/26
Spindle speed stepless, electronic (1/min)	40-4,000
Machine dimension (mm)	
without VP	400 x 520 x 850
with VP	452 x 700 x 1,130
Weight (kg)	62
<b>Order number B16</b>	<b>212.500</b>
<b>Order number MK II</b>	<b>212.503</b>

### TBZ 13 Plus\*

Spindle nose - table (mm)	125-490
Distance column-spindle (mm)	214
Column diameter (mm)	82
Machine dimension (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 number B16</b>	<b>212.650</b>
<b>Order number MK II</b>	<b>212.655</b>

### SB 13 Plus\*

Drilling capacity / normal drilling performance (mm)	13/15 (in E335/ST60)
Distance column-spindle (mm)	220
Column diameter (mm)	70
Useable table surface (W x L) (mm)	300 x 250
Distance spindle - working surface (mm)	max. 750
Centre offset (mm)	20
T-slot size, distance (mm), width measurement (mm)	Number 2, 125, 13/26
Spindle speed, stepless, electr. (1/min)	40-4,000
Machine dimension (mm)	
without VP	420 x 540 x 1,780
with VP	572 x 936 x 2,142
Weight (kg)	85
<b>Order number B16</b>	<b>212.502</b>
<b>Order number MK II</b>	<b>212.504</b>

**Additional accessories** from Page 64

# Bench drill and column drill press

TB 15 ▶ Plus

TBZ 15 ▶ Plus

SB 15 ▶ Plus



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Fig.: TB 15 ▶ Plus

## Standard equipment

- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head hood with front that is tilted ergonomically
- ▶ LED lighting
- ▶ Ergonomic drill depth stop that can be adjusted quickly
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electr. fuse
- ▶ Connecting cable with two-pin earthed plug
- ▶ 3-year warranty for single-shift operation

## Special equipment

- ▶ Drill depth fixed stop  
for optimum repetition accuracy  
**Order number 212.716**
- ▶ Warranty extension 4 years  
**Order number 290.018**
- ▶ Warranty extension 5 years  
**Order number 290.019**

## Accessories

- ▶ Machine cabinet with door and drawer  
(only for TB 13 Plus)  
Height: 840 mm  
Weight: 28 kg  
**Order number 250.208**
- ▶ Machine cabinet with  
door for TB/TBZ and intermediate plate  
Height: 800 mm, Weight: 36 kg  
**Order number 212.860**

### Drill kit 2 (for MK II)

- ▶ Vice [felix] 80
- ▶ Taper mandrel MK II/B16
- ▶ Reduction sleeve MK II/MK I
- ▶ Quick-change drill chuck B16  
1-13 mm [accuracy 0.17 mm]  
**Order number 296.571**

## Technical data

Spindle	MK II
Drilling depth (mm)	70
Thread cutting performance max. (depends on gradient)	M12
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Thrust ring (positive-locking)
Feed	by hand
Table height adjustment	with toothed rack
Motor three-phase current, frequency-regulated, mains connection 230 V (kW)	0.75

### TB 15 Plus\*

Drilling capacity / normal drilling performance (mm)	15/18 (in E335/ST60)
Distance column-spindle (mm)	220
Column diameter (mm)	70
Useable table surface (W x L) (mm)	300 x 250
Distance spindle - work surface (mm)	
spindle nose - table	85-370
Spindle nose - table (below)	420
T-slot size (arm), distance (mm), width measurement (mm)	Number 2, 125, 14/26
T-slot size (foot), width measurement (mm)	Cross grooves, number 2, 14/26
Spindle speed stepless, electronic (1/min)	40-4,000
Machine dimension (mm)	
without VP	400 x 520 x 850
with VP	452 x 700 x 1,130
Weight (kg)	65
<b>Order number</b>	<b>212.755</b>

### TBZ 15 Plus\*

Spindle nose - table (mm)	125-490
Distance column-spindle (mm)	214
Column diameter (mm)	82
Machine dimension (mm)	
with cabinet	350 x 495 x 1,800
with cabinet with VP	940 x 570 x 2,140
without cabinet	320 x 485 x 1,027
without cabinet with VP	940 x 570 x 1,600
Weight without cabinet (kg)	73
<b>Order number</b>	<b>212.765</b>

### SB 15 Plus\*

Drilling capacity / normal drilling performance (mm)	15/18 (in E335/ST60)
Distance column-spindle (mm)	220
Column diameter (mm)	70
Useable table surface (W x L) (mm)	300 x 240
Distance spindle - working surface (mm)	max. 750
Centre offset (mm)	20
T-slot size, distance (mm), width measurement (mm)	Number 2, 125 14/26
Spindle speed stepless, electronic (1/min)	40-4,000
Machine dimension (mm)	
without VP	420 x 540 x 1,780
with VP	572 x 936 x 2,142
Weight (kg)	88
<b>Order number</b>	<b>212.750</b>

**Additional accessories** from Page 64

\* 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 press

TB 18 ►Plus

TBZ 18 ►Plus

SB 18 ►Plus



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 front that is tilted ergonomically
- ▶ LED lighting
- ▶ Ergonomic drill depth stop that can be adjusted quickly
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electr. fuse
- ▶ Connecting cable with two-pin earthed plug
- ▶ 3-year warranty for single-shift operation

## Special equipment

- ▶ Machined base plate incl. integrated coolant system (only SB models)  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.160A**
- ▶ LED lighting with articulated arm  
**Order number 290.020**
- ▶ Coolant system (separate container)  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.340**
- ▶ Warranty extension 4 years  
**Order number 290.018**
- ▶ Warranty extension 5 years  
**Order number 290.019**

## Accessories

- ▶ Machine cabinet with door for TB/TBZ  
Height: 800 mm  
Weight: 36 kg  
**Order number 201.160**
- ▶ Foot pedal  
Function during drilling: Spindle ON and OFF  
Function during thread cutting: Right-hand/left-hand rotation  
**Order number 225.029**

### Drill kit 3

- ▶ Vice [felix] 100
- ▶ Taper mandrel MK II/B18
- ▶ Reduction sleeve MK II/MK I
- ▶ Quick-change drill chuck B18  
3-16 mm (accuracy 0.17 mm)  
**Order number 296.572**

## Technical data

Drilling capacity / normal drilling performance (mm)	18/20 (in E335/ST60)
Thread cutting performance max. (depends 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)	Number 2, 125, 13/26
Speed indicator	Digital
Drilling depth indicator	Digital
Drilling depth stop	Thrust ring that can be adjusted quickly
Feed	by hand
Table height adjustment	with toothed rack
Motor three-phase current 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 dimension 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 number</b>	<b>218.303</b>

### TBZ 18 Plus\*

Distance spindle - working surface (mm)	
Base	155-550
Column diameter (mm)	82
Machine dimension (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 number</b>	<b>218.309</b>

### SB 18 Plus\*

Spindle/table (mm)	160-880
Machine dimension 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 number</b>	<b>218.308</b>

**Additional accessories** from Page 64

\* 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 press

TB 20 ►Plus

TBZ 20 ►Plus

SB 20 ►Plus



Fig.: TB 20 ►Plus with special equipment



Fig.: SB 20 ►Plus

## Standard equipment

- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head hood with front that is tilted ergonomically
- ▶ LED lighting
- ▶ Ergonomic drill depth stop that can be adjusted quickly
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electr. fuse
- ▶ Connecting cable with CEE plug
- ▶ 3-year warranty for single-shift operation

## Special equipment

- ▶ Machined base plate incl. integrated coolant system (only SB models)  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.160A**
- ▶ LED lighting with articulated arm  
**Order number 290.020**
- ▶ Coolant system (separate container)  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.340**
- ▶ Foot pedal  
Function during drilling: Spindle ON and OFF  
Function during thread cutting: Right-hand/left-hand rotation  
**Order number 225.029**
- ▶ Warranty extension 4 years  
**Order number 290.018**
- ▶ Warranty extension 5 years  
**Order number 290.019**

## Accessories

- ▶ Machine cabinet with door for TB/TBZ  
Height: 800 mm  
Weight: 36 kg  
**Order number 201.160**

### Drill kit 3

- ▶ Vice [felix] 100
- ▶ Taper mandrel MK II/B18
- ▶ Reduction sleeve MK II/MK I
- ▶ Quick-change drill chuck B18  
3-16 mm (accuracy 0.17 mm)  
**Order number 296.572**

## Technical data

Drilling capacity / normal drilling performance (mm)	20/23 (in E335/ST60)
Thread cutting performance max. (depends on gradient)	M14
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)	Number 2, 125, 13/26
Speed indicator	Digital
Drilling depth indicator	Digital
Drilling depth stop	Thrust ring that can be adjusted quickly
Feed	by hand
Table height adjustment	with toothed rack
Motor three-phase current 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 dimension 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 number</b>	<b>220.105</b>

### TBZ 20 Plus\*

Distance spindle - working surface (mm)	
Base	155-550
Column diameter (mm)	82
Machine dimension (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 number</b>	<b>220.110</b>

### SB 20 Plus\*

Spindle/table (mm)	160-880
Machine dimension 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 number</b>	<b>220.100</b>

**Additional accessories** from Page 64

\* 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 press

TB 23 ►Plus

TBZ 23 ►Plus

SB 23 ►Plus



AVAILABLE  
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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 front that is tilted ergonomically
- ▶ LED lighting
- ▶ Ergonomic drill depth stop that can be adjusted quickly
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electr. fuse
- ▶ Connecting cable with CEE plug
- ▶ 3-year warranty for single-shift operation

## Special equipment

- ▶ Machined base plate incl. integrated coolant system (only SB models)  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.160A**
- ▶ LED lighting with articulated arm  
**Order number 290.020**
- ▶ Coolant system (separate container)  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.340**
- ▶ Foot pedal  
Function during drilling: Spindle ON and OFF  
Function during thread cutting: Right-hand/left-hand rotation  
**Order number 225.029**
- ▶ Warranty extension 4 years  
**Order number 290.018**
- ▶ Warranty extension 5 years  
**Order number 290.019**

## Accessories

- ▶ Machine cabinet with door for TB/TBZ  
Height: 800 mm, Weight: 36 kg  
**Order number 205.160**

### Drill kit 3

- ▶ Vice [felix] 100
- ▶ Taper mandrel MK II/B18
- ▶ Reduction sleeve MK II/MK I
- ▶ Quick-change drill chuck B18  
3-16 mm (accuracy 0.17 mm)  
**Order number 296.572**

## Technical data

Drilling capacity / normal drilling performance (mm)	
R1	23/25 (in E335/ST60)
R2	20/23 (in E335/ST60)
Thread cutting performance max. (depends 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)	Number 2, 125, 13/26
Speed indicator	Digital
Drilling depth indicator	Digital
Drilling depth stop	Thrust ring that can be adjusted quickly
Feed	by hand
Table height adjustment	with toothed rack
Motor three-phase current 400 V with frequency converter (kW)	1.5
Spindle speed, stepless (1/min)	
R1 with transmission	20-2,000
R2	30-3,000

### TB 23 Plus\*

Distance spindle - working surface (mm)	
Table	230-590
Base	230-670
Machine dimension 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 number R1</b>	<b>223.021</b>
<b>Order number R2</b>	<b>223.026</b>

### TBZ 23 Plus\*

Distance spindle - working surface (mm)	
Base	230-730
Machine dimension (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 number R1</b>	<b>223.022</b>
<b>Order number R2</b>	<b>223.027</b>

### SB 23 Plus\*

Spindle/table	230-850
Machine dimension 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 number R1</b>	<b>223.020</b>
<b>Order number R2</b>	<b>223.025</b>

**Additional accessories** from Page 64

\* 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 press

TB 25 ►Plus

TBZ 25 ►Plus

SB 25 ►Plus



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 front that is tilted ergonomically
- ▶ LED lighting
- ▶ Ergonomic drill depth stop that can be adjusted quickly
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electr. fuse
- ▶ Connecting cable with CEE plug
- ▶ 3-year warranty for single-shift operation

## Special equipment

- ▶ Machined base plate incl. integrated coolant system (only SB models)  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.160A**
- ▶ LED lighting with articulated arm  
**Order number 290.020**
- ▶ Coolant system (separate container)  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.340**
- ▶ Foot pedal  
Function during drilling: Spindle ON and OFF  
Function during thread cutting: Right-hand/left-hand rotation  
**Order number 225.029**
- ▶ Warranty extension 4 years  
**Order number 290.018**
- ▶ Warranty extension 5 years  
**Order number 290.019**

## Accessories

- ▶ Machine cabinet with door for TB/TBZ  
Height: 800 mm, Weight: 36 kg  
**Order number 205.160**

### Drill kit 4

- ▶ Vice [felix] 125
- ▶ 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 number 296.573**

## Technical data

Drilling capacity/normal drilling performance (mm) R1	23/25 (in E335/ST60)
Thread cutting performance max. (depends on gradient) R1	M16x1
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)	Number 2, 125, 13/26
Speed indicator	Digital
Drilling depth indicator	Digital
Drilling depth stop	Thrust ring that can be adjusted quickly
Feed	by hand
Table height adjustment	with toothed rack
Motor three-phase current 400 V with frequency converter (kW)	1.5
Spindle speed, stepless (1/min) R1 with transmission	20-2,000

### TB 25 Plus\*

Distance spindle - working surface (mm)	
Table	230-590
Base	230-670
Machine dimension 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 number R1</b>	<b>225.011</b>

### TBZ 25 Plus\*

Distance spindle - working surface (mm)	
Base	230-730
Machine dimension (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 number R1</b>	<b>225.012</b>

### SB 25 Plus\*

Spindle/table	230-850
Machine dimension 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 number R1</b>	<b>225.010</b>

**Additional accessories** from Page 64

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

# Column drill press

SB 30 ►Plus

SB 30 MV ►Plus



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 front that is tilted ergonomically
- ▶ LED lighting
- ▶ Ergonomic drill depth stop that can be adjusted quickly
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electr. fuse
- ▶ Connecting cable with CEE plug
- ▶ 3-year warranty for single-shift operation
- ▶ Mechanical feed for z-axis incl. electromagnetic coupling 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

- ▶ Combination drilling table with vice and square table, can be rotated 360° with scale  
Jaw width 120 mm, span width 105 mm  
Table surface 350 x 350 mm  
**Order number 290.135**
- ▶ Machined base plate  
**Order number 290.378**
- ▶ Machined base plate incl. integrated coolant system  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.160C**
- ▶ Coolant system (separate container)  
Filling quantity: max. 30 l  
Output: max. 30 l/min  
**Order number 290.340**
- ▶ Foot pedal  
Function during drilling: Spindle ON and OFF (for MV feed ON and OFF)  
Function during thread cutting: Right-hand/left-hand rotation  
**Order number 231.000**
- ▶ Warranty extension 4 years  
**Order number 290.018**
- ▶ Warranty extension 5 years  
**Order number 290.019**
- ▶ Commissioning the machine and briefing the operating staff  
**Order number 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. (depends 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 dimension without VP (mm)	610 x 900 x 1,980
Machine dimensions with VP (mm)	670 x 1,100 x 2,140
Motor three-phase current 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 transmission)	0-4,000

### SB 30 Plus

Feed	by hand
Weight (kg)	370
<b>Order number R1</b>	<b>230.500</b>
<b>Order number R2</b>	<b>230.501</b>
<b>Order number R3</b>	<b>230.502</b>

### SB 30 MV Plus

Feed (mm/rotation)	0.10/0.16/0.25
Weight (kg)	385
<b>Order number R1</b>	<b>230.505</b>
<b>Order number R2</b>	<b>230.506</b>
<b>Order number R3</b>	<b>230.507</b>

**Additional accessories** from Page 64

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

## Accessories

### Drill kit 5

- ▶ Vice [felix] 125
- ▶ 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 number 296.574**

# Column drill press SB 30 NC ►Plus



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 front that is tilted ergonomically
- ▶ LED lighting
- ▶ Ergonomic drill depth stop that can be adjusted quickly
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electr. fuse
- ▶ Connecting cable with CEE plug
- ▶ 3-year warranty for single-shift operation
- ▶ Switch lever for manual/automatic mode
- ▶ Clear control panel with central metal knob
- ▶ Input menu that is easy to understand
- ▶ Select the mode of operation between drilling and thread cutting
- ▶ Counting function of the drilling stroke
- ▶ Additional panel for automatic mode (activation by moving switch lever to automatic)
- ▶ 4.3" touchscreen display
- ▶ Convenient operator/machine interface for programming the spindle sleeve feed
- ▶ Selection of operating mode between: Drilling, grating, countersinking, flow drilling, thread cutting
- ▶ Free-programming function
- ▶ Choose the machine settings

## Special equipment

- ▶ Combination drilling table with vice and square table, can be rotated 360° with scale  
Jaw width 120 mm, span width 105 mm  
Table surface 350 x 350 mm  
**Order number 290.135**
- ▶ Machined base plate  
**Order number 290.378**
- ▶ Machined base plate incl. integrated coolant system  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.160C**
- ▶ Coolant system (separate container)  
Filling quantity: max. 30 l  
Output: max. 30 l/min  
**Order number 290.340**
- ▶ Foot pedal  
Function during drilling: Spindle ON and OFF  
Function during thread cutting: Right-hand/left-hand rotation  
For AUTO: Programme start/stop  
**Order number 231.000**

## 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. (depends 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 dimension without VP (mm)	610 x 900 x 1,980
Machine dimensions with VP (mm)	670 x 1,100 x 2,200
Motor three-phase current 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 transmission)	0-4,000

## SB 30 NC Plus

Feed/return stroke, infinitely variable (m/min)	0 - 1.5
Weight (kg)	400
<b>Order number R1</b>	<b>230.510</b>
<b>Order number R2</b>	<b>230.511</b>
<b>Order number R3</b>	<b>230.512</b>
<b>Additional accessories</b>	<b>from Page 64</b>

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

- ▶ Warranty extension 4 years  
**Order number 290.018**
- ▶ Warranty extension 5 years  
**Order number 290.019**
- ▶ Commissioning the machine and briefing the operating staff  
**Order number 229.931**

## Accessories

### Drill kit 5

- ▶ Vice [felix] 125
- ▶ 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 number 296.574**



Column drill  
press  
SB P30 STG PV  
electronic ► Plus



Fig.: SB P30 STG PV electronic  
with machined base plate

## Standard equipment

- ▶ Drill depth adjustment with fine tuning and under-voltage release
- ▶ Emergency stop button
- ▶ Continuous speed control
- ▶ Table height adjustment via toothed rack
- ▶ Connecting cable (1.5 m) with CEE plug
- ▶ Drill protection with electr. fuse
- ▶ Thermal overload protection
- ▶ 3-year warranty for single-shift operation
- ▶ Digital display for drill depth, speed and feed rate display
- ▶ Feed is electronically regulated and continuously variable incl. spindle monitoring
- ▶ Clean cutting system
- ▶ Thread cutting system, thread cutting performance max. M20, thread cutting depth is set using the digital depth display
- ▶ Drill depth deactivation; 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

- ▶ Motor with external ventilation  
**Order number 290.617**
- ▶ Combination drilling table with vice and square table, can be rotated 360° with scale  
Jaw width 120 mm, span width 105 mm  
Table surface 350 x 350 mm  
**Order number 290.125**
- ▶ Machined base plate  
**Order number 290.378**
- ▶ Machined base plate incl. integrated coolant system  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.160B**
- ▶ LED lighting with articulated arm  
**Order number 290.020**
- ▶ Coolant system (separate container)  
Filling quantity: max. 15 l, Output: max. 30 l/min  
**Order number 290.340**

## Software options that can be supplied for PV electronic

- ▶ Safety module – automatic spindle stop for drill spindle at the top  
**Order number 290.613**
- ▶ Chip breaking module – prevents the formation of long chips  
**Order number 290.612**

## Our classics

### Technical data

Drilling capacity / normal drilling performance (mm)	25/30 (in E335/ST60)
Thread cutting performance max. (depends 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)	Number 2, 160, 13/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	With fine tuning
Table height adjustment	with toothed rack
Motor three-phase current, 400 V, pole-changeable (kW)	0.90 / 1.45
Spindle speed, stepless (1/min) with transmission (2 stages)	125-4,000
Stage I	125-2,000
Stage II	250-4,000
The stage change takes place via the belt turning	

### SB P30 STG PV electronic

Feed, continuously variable (mm/min) incl. electromagnetic coupling; digital display	0-300
Spindle/table (mm)	240-790
Machine dimension 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 number transparent hood</b>	<b>205.220</b>
<b>Order number grey hood</b>	<b>205.183</b>
<b>Additional accessories</b>	<b>from Page 64</b>

- ▶ Span action – 4 freely selectable feed speeds per working stroke  
**Order number 290.614**

## Accessories

### Drill kit 5

- ▶ Vice [felix] 125
- ▶ 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 number 296.574**

# Column drill press

SB 40 ►Plus

SB 40 MV ►Plus



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 front that is tilted ergonomically
- ▶ LED lighting
- ▶ Ergonomic drill depth stop that can be adjusted quickly
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electr. fuse
- ▶ Connecting cable with CEE plug
- ▶ 3-year warranty for single-shift operation
- ▶ Mechanical feed for z-axis incl. electromagnetic coupling 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

- ▶ Machined base plate  
**Order number 290.378**
- ▶ Combination drilling table with vice and square table, can be rotated 360° with scale, jaw width 120 mm, span width 105 mm, column diameter 125 mm (various)  
Table surface 350 x 350 mm  
**Order number 290.135**
- ▶ Machined base plate incl. integrated coolant system  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.160C**
- ▶ Coolant system (separate container)  
Filling quantity: max. 30 l  
Output: max. 30 l/min  
**Order number 290.340**
- ▶ Foot pedal  
Function during drilling: Spindle ON and OFF (for MV feed ON and OFF)  
Function during thread cutting: Right-hand/left-hand rotation  
**Order number 231.000**
- ▶ Warranty extension 4 years  
**Order number 290.018**
- ▶ Warranty extension 5 years  
**Order number 290.019**
- ▶ Commissioning the machine and briefing the operating staff  
**Order number 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. (depends 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 dimension without VP (mm)	610 x 900 x 1,980
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Machine dimensions with VP (mm)	670 x 1,100 x 2,200
---------------------------------	---------------------

Motor three-phase current 400 V with frequency converter (kW)	4.0
---	-----

Spindle speed, stepless (1/min)	
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R1 (1-stage)	0-1,000
--------------	---------

R2 (1-stage)	0-1,600
--------------	---------

R3 (2-stage with transmission)	0-4,000
--------------------------------	---------

### SB 40 Plus

Feed	by hand
------	---------

Weight (kg)	400
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<b>Order number R1</b>	<b>230.530</b>
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<b>Order number R2</b>	<b>230.531</b>
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<b>Order number R3</b>	<b>230.532</b>
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### SB 40 MV Plus

Feed (mm/rotation)	0.10/0.16/0.25
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Weight (kg)	420
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<b>Order number R1</b>	<b>230.535</b>
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<b>Order number R2</b>	<b>230.536</b>
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<b>Order number R3</b>	<b>230.537</b>
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<b>Additional accessories</b>	<b>from Page 64</b>
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\* The drilling machine is fitted with a frequency converter and complies with the standards DIN EN 55011:2016 & A1:2017.

## Accessories

### Drill kit 6

- ▶ Vice [felix] 125
- ▶ 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 number 296.575**

# Column drill press SB 40 NC ►Plus



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 front that is tilted ergonomically
- ▶ LED lighting
- ▶ Ergonomic drill depth stop that can be adjusted quickly
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electr. fuse
- ▶ Connecting cable with CEE plug
- ▶ 3-year warranty for single-shift operation
- ▶ Switch lever for manual/automatic mode
- ▶ Clear control panel with central metal knob
- ▶ Input menu that is easy to understand
- ▶ Select the mode of operation between drilling and thread cutting
- ▶ Counting function of the drilling stroke
- ▶ Additional panel for automatic mode (activation by moving switch lever to automatic)
- ▶ 4.3" touchscreen display
- ▶ Convenient operator/machine interface for programming the spindle sleeve feed
- ▶ Selection of operating mode between: Drilling, grating, countersinking, flow drilling, thread cutting
- ▶ Free-programming function
- ▶ Choose the machine settings

## Special equipment

- ▶ Machined base plate  
**Order number 290.378**
- ▶ Combination drilling table with vice and square table, can be rotated 360° with scale, jaw width 120 mm, span width 105 mm, column diameter 125 mm (varying) Table surface 350 x 350 mm  
**Order number 290.135**
- ▶ Machined base plate incl. integrated coolant system  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.160C**
- ▶ Coolant system (separate container)  
Filling quantity: max. 30 l  
Output: max. 30 l/min  
**Order number 290.340**
- ▶ Foot pedal  
Function during drilling: Spindle ON and OFF  
Function during thread cutting: Right-hand/left-hand rotation  
For AUTO: Programme start/stop  
**Order number 231.000**

## 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. (depends 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 dimension without VP (mm)	610 x 900 x 1,980
Machine dimensions with VP (mm)	670 x 1,100 x 2,200
Motor three-phase current 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 transmission)	0-4,000

## SB 40 NC Plus

Feed/return stroke, infinitely variable (m/min)	0 - 1.5
Weight (kg)	440 kg
<b>Order number R1</b>	<b>230.540</b>
<b>Order number R2</b>	<b>230.541</b>
<b>Order number R3</b>	<b>230.542</b>
<b>Additional accessories</b>	<b>from Page 64</b>

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

- ▶ Warranty extension 4 years  
**Order number 290.018**
- ▶ Warranty extension 5 years  
**Order number 290.019**
- ▶ Commissioning the machine and briefing the operating staff  
**Order number 229.931**

## Accessories

### Drill kit 6

- ▶ Vice [felix] 125
- ▶ 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 number 296.575**

Column drill  
press  
SB P40 STG PV  
electronic ►Plus



Fig.: SB P40 STG PV electronic with special equipment



## Standard equipment

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

## Special equipment

- ▶ Motor with forced ventilation  
**Order number 290.619**
- ▶ Combination drilling table with vice and square table, can be rotated 360° with scale jaw width 120 mm, span width 105 mm  
Table surface 350 x 350 mm  
**Order number 290.135**
- ▶ Machined base plate  
**Order number 290.378**
- ▶ Machined base plate incl. integrated coolant system  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.160C**
- ▶ LED lighting with articulated arm  
**Order number 290.020**
- ▶ Coolant system (separate container)  
Filling quantity: max. 15 l, Output: max. 30 l/min  
**Order number 290.340**

## Software options that can be supplied for PV electronic

- ▶ Safety module – automatic spindle stop for drill spindle at the top  
**Order number 290.613**
- ▶ Chip breaking module – prevents the formation of long chips  
**Order number 290.612**
- ▶ Span action – 4 freely selectable feed speeds per working stroke  
**Order number 290.614**

## Our classics

### Technical data

Drilling capacity / normal drilling performance (mm)	35/40 (in E335/ST60)
Thread cutting performance max. (depends 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)	Number 2, 160, 14/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	With fine tuning
Table height adjustment	with toothed rack
Machine dimension without VP (mm)	610 x 850 x 1,920
Machine dimensions with VP (mm)	637 x 1,096 x 2,120
Motor three-phase current, 400 V, pole-changeable (kW)	1.5 / 3.0
Spindle speed, stepless (1/min) with transmission	
Series of speeds R1	100-2,000
Series of speeds R2	70-1,400

### SB P40 STG PV electronic

Feed, continuously variable (mm/min) incl. electromagnetic coupling; digital display	0-300
Spindle/table (mm)	150-700
Weight (kg)	440
<b>Order number transparent hood, R1</b>	<b>205.226</b>
<b>Order number transparent hood, R2</b>	<b>205.227</b>
<b>Order number grey hood, R1</b>	<b>205.208</b>
<b>Order number grey hood, R2</b>	<b>205.209</b>

**Additional accessories** from Page 64

## Accessories

### Drill kit 6

- ▶ Vice [felix] 125
- ▶ 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 number 296.575**

# Flow drilling machine SB 20 FB ▶Plus



Fig.: SB 20 FB ▶Plus

## Standard equipment

- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head hood with front that is tilted ergonomically
- ▶ LED lighting
- ▶ Ergonomic drill depth stop that can be adjusted quickly
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electr. fuse
- ▶ Connecting cable with CEE plug
- ▶ 3-year warranty for single-shift operation

## Flow drilling

Serves to produce extrusions in thin-walled metallic materials.

The flow drilling procedure creates a socket 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 resilient connections.

## The advantages of flow drilling are

- ▶ Low costs per thread
- ▶ Highly resilient connections
- ▶ High-quality threads
- ▶ No special equipment
- ▶ Low start-up costs
- ▶ No external material
- ▶ Fewer production steps
- ▶ No chip disposal

## Accessories

- ▶ Vice [felix] 100  
Order number 281.106

### Technical data

Flow drilling 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)	Number 2, 125, 13/26
Speed indicator	Digital
Drilling depth indicator	Digital
Drilling depth stop	Thrust ring that can be adjusted quickly
Feed	by hand
Table height adjustment	with toothed rack
Motor three-phase current 230 V with frequency converter (kW)	1.5
Spindle speed, stepless (1/min)	40-4,000

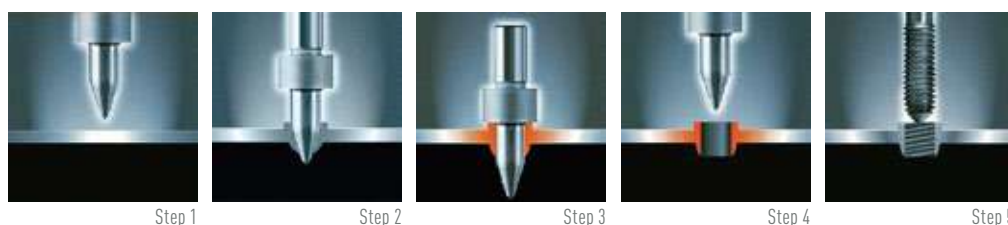
### SB 20 FB Plus

Spindle/table (mm)	160-880
Machine dimension without VP (mm)	355 x 705 x 1,825
Machine dimensions with VP (mm)	572 x 936 x 2,142
Weight (kg)	195

**Order number** 220.115

**Additional accessories** from Page 64

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



# Flow drilling machine

SB 30 FB ►Plus

SB 30 FB NC ►Plus



Fig.: SB 30 FB ►Plus



Fig.: SB 30 FB NC ►Plus

## Standard equipment

- ▶ Main switch
- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head hood with front that is tilted ergonomically
- ▶ LED lighting
- ▶ Ergonomic drill depth stop that can be adjusted quickly
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electr. fuse
- ▶ Connecting cable with CEE plug
- ▶ 3-year warranty for single-shift operation
- ▶ Switch lever for manual/automatic mode (only to SB 30 FB NC Plus)
- ▶ Additional panel for automatic mode (activation by moving switch lever to automatic) (only to SB 30 FB NC Plus)
- ▶ 4.3" touchscreen display (only to SB 30 FB NC Plus)
- ▶ Convenient operator/machine interface for programming the spindle sleeve feed (only to SB 30 FB NC Plus)
- ▶ Selection of operating mode between: Drilling, grating, countersinking, flow drilling, thread cutting (only to SB 30 FB NC PLUS)
- ▶ Free programming function (only to SB 30 FB NC PLUS)
- ▶ Choose the machine settings (only to SB 30 FB NC PLUS)

## Special equipment

- ▶ Combination drilling table with vice and square table, can be rotated 360° with scale jaw width 120 mm, span width 105 mm Table surface 350 x 350 mm  
**Order number 290.135**
- ▶ Machined base plate  
**Order number 290.378**
- ▶ Machined base plate incl. integrated coolant system  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.160C**
- ▶ Coolant system (separate container)  
Filling quantity: max. 15 l, Output: max. 30 l/min  
**Order number 290.340**

## Technical data

Flow drilling at 3 mm sheet thickness (mm)	18
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 dimension without VP (mm)	610 x 900 x 1,980
Machine dimensions with VP (mm)	637 x 1,096 x 2,200
Motor three-phase current 400 V with frequency converter (kW)	3

### SB 30 FB Plus

Spindle speed, stepless (1/min)	0-4,000
Weight (kg)	370
<b>Order number</b>	<b>230.503</b>

### SB 30 FB NC Plus

Spindle speed, stepless (1/min)	0-4,000
Feed, infinitely variable (m/min)	0 - 1.5
Weight (kg)	400
<b>Order number</b>	<b>230.513</b>

**Additional accessories** from Page 64

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

- ▶ Warranty extension 4 years  
**Order number 290.018**
- ▶ Warranty extension 5 years  
**Order number 290.019**
- ▶ Commissioning the machine and briefing the operating staff  
**Order number 229.931**

## Accessories

- ▶ Vice [felix] 125  
**Order number 281.107**

# Gear-driven drill- ing machine

GB 50 MV



AVAILABLE  
IMMEDIATELY! **to go**

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 activation
- ▶ Emergency stop button
- ▶ Drill protection with electr. fuse
- ▶ 3-year warranty for single-shift operation
- ▶ Machine light
- ▶ Rotary and swivel table
- ▶ automatic tool ejector
- ▶ Gear wheels made of hardened and sanded steel
- ▶ Gearwheel lubrication with automatic oil pump
- ▶ Handwheel for manual, fine hand feed
- ▶ Reversing switch for right-hand/left-hand rotation
- ▶ 12-month warranty

## Special equipment

- ▶ Thread cutting system  
Order number: 287.045

## Accessories

- ▶ Machine vice with prism jaws  
Jaw width: 140 mm, Span width: 155 mm  
Order number 281.211
- ▶ Quick-change drill chuck, socket B18  
Clamping range 3-16 mm  
Rotational accuracy: 0.17 mm  
Order number 285.165
- ▶ Taper mandrel (insertion pin)  
Size B 18/MK IV  
Order number 290.323

Additional special equipment available on request

## Technical data

Drilling capacity (mm)	50
Thread cutting performance max. (depends on gradient)	M36
Spindle	MK IV
Drilling depth (mm)	230
Distance column-spindle (mm)	400
Column diameter (mm)	200
Useable table space (mm)	550 x 550
T-slot size (arm), distance (mm), width measurement (mm)	Number 3, 160, 16/28
Speed indicator	Scale
Drilling depth indicator	Scale
Distance spindle/table (mm)	50-850
Table height adjustment	with toothed rack
Machine dimension without VP (mm)	600 x 1,060 x 2,450
Machine dimensions with VP (mm)	680 x 2,600 x 1,210
Motor three-phase current, 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/U)	0.1-0.2-0.3-0.4
<b>GB 50 MV</b>	
Weight (kg)	795
Order number	287.040
Packaging	V0
Special colours (RAL) for extra charge	on request



# Gear-driven drill- ing machine

GB 50 MV ►Plus



Fig.: GB 50 MV ►Plus without special equipment

## Standard equipment

- ▶ Automatic electromagnetic feed
- ▶ Machined base plate with T-slots and integrated coolant system
- ▶ Precise mechanical drill depth setting
- ▶ Rotary and swivel table
- ▶ Circuit breaker with U activation
- ▶ Emergency stop button
- ▶ Drill protection with electr. fuse
- ▶ 3-year warranty for single-shift operation
- ▶ Machine light
- ▶ automatic tool ejector
- ▶ Gear wheels made of hardened and sanded steel
- ▶ Gearwheel lubrication with automatic oil pump
- ▶ Handwheel for manual, fine hand feed
- ▶ Switch for right-hand/left-hand motion
- ▶ Push-button feed on cross handle
- ▶ 12-month warranty

## Special equipment

- ▶ Thread cutting system  
Order number: 287.056

## Accessories

- ▶ Machine vice with prism jaws  
Jaw width: 140 mm, Span width: 155 mm  
Order number 281.211
- ▶ Quick-change drill chuck, socket B18  
Clamping range 3-16 mm  
Rotational accuracy: 0.17 mm  
Order number 285.165
- ▶ Taper mandrel (insertion pin)  
Size B18/MK IV  
Order number 290.323

## Technical data

Drilling capacity (mm)	50
Thread cutting performance max. (depends on gradient)	M36
Spindle	MK IV
Drilling depth (mm)	230
Distance column-spindle (mm)	400
Column diameter (mm)	200
Useable table space (mm)	550 x 550
T-slot size (arm), distance (mm), width measurement (mm)	Number 3, 160, 16/28
Speed indicator	Scale
Drilling depth indicator	Scale
Distance spindle/table (mm)	50-850
Table height adjustment	with toothed rack
Machine dimension without VP (mm)	600 x 1,060 x 2,450
Machine dimensions with VP (mm)	680 x 2,600 x 1,210
Motor three-phase current, 400 V (kW)	3.0
Spindle speed in 9 stages (gears) (1/min)	54-75-109-169-237-344-507-712-1,032
Automatic and electromagnetic spindle feed (mm/U)	0.1-0.2-0.3-0.4-0.5-0.6

## GB 50 MV Plus

Weight (kg)	805
Order number	287.050
Packaging	V0
Special colours (RAL) for extra charge	on request

# Column drill press SB P50 STG MV



AVAILABLE  
IMMEDIATELY! **to go**

Fig.: SB P50 STGMV without special equipment

## Standard equipment

- ▶ Drive:  
Combination of V-belt and gear drive
- ▶ Automatic electromagnetic spindle feed
- ▶ Machined base plate with T-slots and integrated coolant system
- ▶ Precise mechanical drill depth setting
- ▶ automatic tool ejector
- ▶ Lighting
- ▶ Circuit breaker with U activation
- ▶ Emergency stop button
- ▶ Drill protection with electr. fuse
- ▶ 3-year warranty for single-shift operation
- ▶ Rotary and swivel table
- ▶ Thread cutting system
- ▶ Gearwheel lubrication with automatic oil pump
- ▶ Push-button feed on cross handle
- ▶ Continuous speed adjustment, frequency controlled via potentiometer and 3 x transmission for stage changes
- ▶ 12-month warranty

## Accessories

- ▶ Machine vice with prism jaws  
Jaw width: 140 mm, Span width: 155 mm  
**Order number 281.211**
- ▶ Quick-change drill chuck, socket B18  
Clamping range 3-16 mm  
Rotational accuracy: 0.17 mm  
**Order number 285.165**
- ▶ Taper mandrel (insertion pin)  
Size B18/MK IV  
**Order number 290.323**

## Technical data

Drilling capacity (mm)	50
Thread cutting performance max. (depends on gradient)	M42
Spindle	MK IV
Drilling depth (mm)	200
Distance column-spindle (mm)	360
Column diameter (mm)	175
Useable table space (mm)	550 x 550
T-slot size (arm), distance (mm), width measurement (mm)	Number 3, Distance 160 16/28
Speed indicator	Digital
Drilling depth indicator	Scale
Distance spindle/table (mm)	50-850
Table height adjustment	with toothed rack
Machine dimension without VP (mm)	550 x 950 x 2,170
Machine dimensions with VP (mm)	740 x 2.220 x 1,320
Motor three-phase current, 400 V (kW)	4.0
Spindle speed, stepless (1/min) with transmission (3 stage with gearbox)	
Stage I	30-230
Stage II	90-730
Stage III	190-1,500
Automatic and electromagnetic spindle feed (mm/U)	0.1-0.2-0.3-0.4
<b>SB P50 STG MV*</b>	
Weight (kg)	850
<b>Order number</b>	<b>287.060</b>
Packaging	V0
Special colours (RAL) for extra charge	on request

# Gear-driven drill- ing machine

GB 70 MV ►Plus



Fig.: GB 70 MV ►Plus without special equipment

## Standard equipment

- ▶ Automatic electromagnetic feed
- ▶ Machined base plate with T-slots and integrated coolant system
- ▶ Precise mechanical drill depth setting
- ▶ Rotary and swivel table
- ▶ Circuit breaker with U activation
- ▶ Emergency stop button
- ▶ Drill protection with electr. fuse
- ▶ 3-year warranty for single-shift operation
- ▶ Machine light
- ▶ automatic tool ejector
- ▶ Gear wheels made of hardened and sanded steel
- ▶ Gearwheel lubrication with automatic oil pump
- ▶ Handwheel for manual, fine hand feed
- ▶ Switch for right-hand/left-hand motion
- ▶ Push-button feed on cross handle
- ▶ 12-month warranty

## Special equipment

- ▶ Thread cutting system  
Order number 287.076

## Accessories

- ▶ Machine vice with prism jaws  
Jaw width: 140 mm, Span width: 155 mm  
Order number 281.211
- ▶ Quick-change drill chuck, socket B18  
Clamping range 3-16 mm  
Rotational accuracy: 0.17 mm  
Order number 285.165
- ▶ Taper mandrel (insertion pin)  
Size B18/MK V  
Order number 287.097

## Technical data

Drilling capacity (mm)	70
Thread cutting performance max. (depends on gradient)	M50
Spindle	MK V
Drilling depth (mm)	260
Distance column-spindle (mm)	420
Column diameter (mm)	220
Useable table space (mm)	600 x 600
T-slot size (arm), distance (mm), width measurement (mm)	Number 3, 191, 18/30
Speed indicator	Scale
Drilling depth indicator	Scale
Distance spindle/table (mm)	25-825
Table height adjustment	with toothed rack
Machine dimension without VP (mm)	600 x 1,060 x 2,640
Machine dimensions with VP (mm)	770 x 2,760 x 1,220
Motor three-phase current, 400 V (kW)	5.5
Spindle speed in 12 stages (gears) (1/min)	51-64-84-110-158-198-262-342-447-559-738-966
Automatic and electromagnetic spindle feed (mm/U)	0.1-0.2-0.3-0.4-0.5-0.6

## GB 70 MV Plus

Weight (kg)	940
Order number	287.070
Packaging	V0
Special colours (RAL) for extra charge	on request

# Milling/drilling machine BFM 40



Fig.: BFM 40 without special equipment

## Standard equipment

- ▶ Automatic mechanical spindle feed
- ▶ Coolant system completely integrated in base plate
- ▶ Machine light
- ▶ Precise mechanical drill depth setting
- ▶ Sleeve locking for milling work and tool changes
- ▶ Cross table with 3 T-grooves
- ▶ Circuit breaker with U activation
- ▶ Emergency stop button
- ▶ Drill protection with electr. fuse
- ▶ 3-year warranty for single-shift operation
- ▶ Vertical drill head setting with drive mechanism
- ▶ Drill head adjustment by 45° in both directions from the central axis
- ▶ Machine bed with coolant tank and motor pump
- ▶ automatic tool ejector
- ▶ Gear wheels made of hardened and sanded steel
- ▶ Gearwheel lubrication with automatic oil pump
- ▶ Switch for right-hand/left-hand motion
- ▶ Push-button feed on cross handle
- ▶ 12-month warranty

## Special equipment

- ▶ Digital position display of the working table various axes possible (X; X-Y; X-Y-Z)  
**on request**
- ▶ Spindle socket ISO 30  
**Order number: 287.082**
- ▶ ENG-X table feed x-axis via transmission, 8 feed speeds  
(20-550 mm/min, with fast mode 850 mm/min)  
**Order number: 287.083**
- ▶ ENG-X table feed y-axis via transmission, 8 feed speeds  
(20-550 mm/min, with fast mode 850 mm/min)  
**Order number: 287.084**
- ▶ Thread cutting system  
**Order number: 287.086**

## Accessories

- ▶ Machine vice with prism jaws  
Jaw width: 140 mm, Span width: 155 mm  
**Order number 281.211**
- ▶ Quick-change drill chuck, socket B18  
Clamping range 3-16 mm  
Rotational accuracy: 0.17 mm  
**Order number 285.165**
- ▶ Taper mandrel (insertion pin)  
Size B18/MK IV  
**Order number 290.323**

## Technical data

Drilling capacity (mm)	35
Milling performance (cm³/min)	55
Thread cutting performance max. (depends on gradient)	M35
Spindle	MK IV
Drilling depth (mm)	180
Distance column-spindle (mm)	390
Useable table surface cross table (mm)	1,200 x 360
T-slot size (arm), distance (mm), width measurement (mm)	Number 3, 95, 16/28
Longitudinal stroke table (X) (hand) (mm)	700
Cross stroke table (Y) (hand) (mm)	360
Speed indicator	Scale
Drilling depth indicator z-axis	Scale
Distance spindle/table (mm)	190-650
Drill head height adjustment motor (mm)	Travel 150
Machine dimension without VP (mm)	1,660 x 1,520 x 2,450
Machine dimensions with VP (mm)	1,680 x 1,680 x 2,520
Motor three-phase current, 400 V (kW)	0.9/1.5
Spindle speed in 16 stages (gears) (1/min)	94-135-189-207-271-303-347-414-497-606-760-995-1,112-1,520-2,225
Automatic and electromagnetic spindle feed (mm/U)	0.1-0.18-0.24
<b>BFM 40</b>	
Weight (kg)	1,400
<b>Order number</b>	<b>287.080</b>
Packaging	V0
Special colours (RAL) for extra charge	on request



# Drilling line BS 15 ►Plus



Fig.: Drilling BS 15 ►Plus with special equipment

## Standard equipment

- ▶ Industrially reliable control unit
- ▶ Control panel with 5.7" display
- ▶ Positioning with the help of a frequency converter or servo drive
- ▶ Programme storage on internal memory or USB stick
- ▶ 2-button feed cycle operation
- ▶ Feed system (x-axis) with pliers 4,500 mm
- ▶ Main vice (pneumatic) under the drilling unit TBZ 15 Plus
- ▶ Incl. safety light barrier system (CE conformity)

## Special equipment / accessories

- ▶ Drilling line 15 Plus with 1 NC axis
- ▶ X-axis stroke and feed system (Material) NC controlled
- ▶ Y-axis can be manually adjusted using handwheel
- ▶ Z-axis: drilling, thread cutting and flow drilling by hand
- ▶ Drilling line 15 Plus with 2 NC axes
- ▶ XY-axis stroke and feed system (Material) NC controlled
- ▶ Z-axis: thread cutting and flow drilling by hand

**We can assemble the FLOTT drilling line for you on an individual basis.**

**We would be happy to advise you!**

### Technical data

Feed runway (L x W) (mm)	5,000 x 330
Output runway (mm)	5,000 x 330
Traverse speed X-axis (m/min)	12
Positioning accuracy X-axis (mm)	+/- 0.2
Repetition accuracy X-axis (mm)	+/- 0.1
<b>Order no.: 1 NC axis</b>	<b>288.020</b>
<b>Order no.: 2 NC axes</b>	<b>288.021</b>

### Combination with TBZ 15 Plus\*

Drilling capacity / normal drilling performance (mm)	15/18
Spindle	MK II
Drilling depth (mm)	60
Thread cutting performance max.	M10 x 1
Column diameter (mm)	82
Motor three-phase current, frequency-regulated, mains connection 230 V (kW)	0.75
Max. torque (Nm)	15

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

# Drilling system BA 30 CNC ▶ Plus



## Standard equipment

- ▶ X- and Y-axes are controlled by NC
- ▶ Useable distance column-spindle in Y 300 mm
- ▶ Sanded slot table
- ▶ Pneumatic vices
- ▶ Minimum quantity lubrication
- ▶ Z-axis (drill head) controlled by NC
- ▶ Height adjustment via crank
- ▶ 140 mm column diameter

## Special equipment / accessories

- ▶ Safety equipment
- ▶ Tool holders
- ▶ LED lighting
- ▶ Pendulum machining  
2 independent processing areas
- ▶ Chip drawers

We can assemble the FLOTT drilling systems for you based on your requirements.

Do you also require any milling work? We can also provide a solution here and work closely with a partner in order to do this!

We would be happy to advise you!

### Technical data

Working lengths X-axis (mm)	3,000 4,000 6,000
Traverse speed (mm/sec)	600
Positioning accuracy of the axes (per m)	0.1

### Combination with SB 30 NC Plus

Drilling capacity/normal drilling performance (mm)	30/35
at maximum capacity (mm)	25
Spindle	MK II
Drilling depth (mm)	125 mm
Thread cutting performance max. (depends on gradient)	M20
Order no.:	on request

### Combination with SB 40 NC Plus

Drilling capacity/normal drilling performance (mm)	35/40
at maximum capacity (mm)	30
Spindle	MK IV
Drilling depth (mm)	160
Thread cutting performance max. (depends on gradient)	M30
Order no.:	on request

# Gang drilling machine



Fig.: Drilling line with 6 drilling heads 40 NC Plus

## Standard equipment

- ▶ Fixed worktable
- ▶ Head height adjustment via crank
- ▶ Radial twisting options for the drill heads
- ▶ Chip tray

## Special equipment / accessories

- ▶ Safety equipment
- ▶ Foot switch
- ▶ Coolant system
- ▶ Warranty extension 4 years
- ▶ Warranty extension 5 years

We can assemble the FLOTT gang drilling machines for you based on your requirements.

We would be happy to advise you!

## Technical data

Depending on the quantity and choice of drill heads

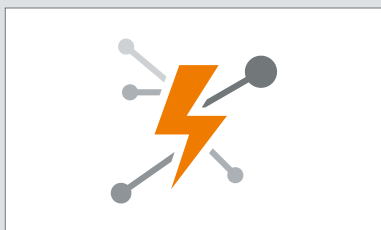
Order no.:

on request

## FLOTT special equipment

### Option 1

Machines with  
different  
special voltage  
on request



Order number 290.100

### Option 5

Column extension  
Ø 70  
max. extension  
200 mm



Order number 296.286

### Option 2

Machined base plate  
with T-slots.  
Only available for  
SB models from  
Ø 82 mm columns



Order number 290.378

### Option 6

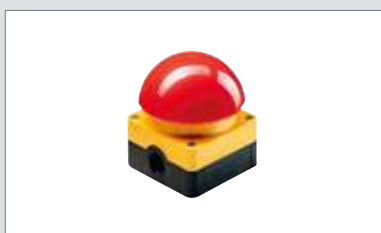
Column extension  
Ø 82  
max. extension  
150 mm



Order number 296.287

### Option 3

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



Order number 290.320

### Option 7

Column extension  
Ø 110  
max. extension  
300 mm



Order number 296.288

### Option 4

Foot switch  
following technical  
advice and creation of a  
requirement profile



Order number on request

### Option 8

Column extension  
Ø 125  
max. extension  
300 mm



Order number 296.289

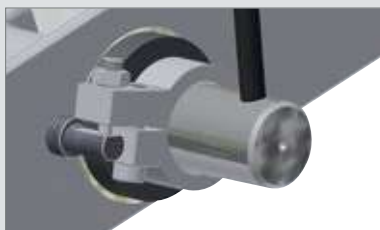


Advice via WhatsApp  
It doesn't get any easier than that  
Telephone: +49 (162) 18 54 000



## Option 9

**Drill depth fixed stop**  
for optimum repetition accuracy



Order number 212.716

## Option 13

**Extended warranty**  
5 years



Order number 290.019

## Option 10

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



Order number 290.200

## Option 14

**Combination drilling table for 110 columns**  
with vice and square table, can be rotated 360° with scale  
jaw width 120 mm, span width 105 mm  
Table surface 350 x 350 mm



Order number 290.125

## Option 11

**Special colour**  
Plus hood



Order number 290.201

## Option 15

**Combination drilling table for 125/140 columns**  
with vice and square table, can be rotated 360° with scale  
jaw width 120 mm, span width 105 mm  
Table surface 350 x 350 mm



Order number 290.135

## Option 12

**Extended warranty**  
4 years



Order number 290.018

## Option 16

**Commissioning of the machine**  
and training of the operating personnel



Order number 229.931



## Accessories



Order number 290.395

### Minimum quantity lubrication

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. The lubricant and blower are guided separately and coaxially to the nozzle and can be set independently from the other in a manner that is reproducible.

#### Advantages

- ▶ After activation, the lubricant is immediately released from the metering nozzle.
- ▶ Large, continuous setting range for the metering pump. From a barely perceptible quantity to a maximum output of 3 cm<sup>3</sup>/min.

The compact dosing unit for minimal quantities of lubrication: As little as possible but as much as necessary – with optimum metering!

Order number 290.395



Order number 290.340

### Electrical coolant system

- ▶ Complete with pump, container, hoses, cable and circuit breaker from the 18 Plus series and above
- ▶ Dimensions: 350 x 250 x 250 mm
- ▶ Power supply: 230 V / 50 Hz
- ▶ Filling quantity: max. 15 l
- ▶ Output: max. 30 l/min
- ▶ Cannot be used with the TB 10 ECO series
- ▶ Requires a reliable N conductor
- ▶ Colour: grey RAL 7005

Order number 290.340



Order number 290.160C

### Base plate with coolant system

- ▶ Filling quantity: max. 15 l,
- ▶ Output: max. 30 l/min

Columns Ø 82 mm – Order number 290.160A  
Columns Ø 110 mm – Order number 290.160B  
Columns Ø 125 mm – Order number 290.160C  
Columns Ø 140 mm – Order number 290.160C



Order number 250.208

### Machine cabinet

Massive beech top, 30 mm thick,  
height-adjustable feet (up to 3 cm),  
laminated and finger-jointed,  
oil-treated to prevent the build-up of dirt  
and to protect against warpage

Bearing capacity: 300 kg

### Narrow design

- ▶ 1 drawer with roller-bearing guideway
- ▶ 1 lockable door
- ▶ 60 x 60 x 84 cm

Order number 250.208



Order number 250.180

### Wide design

- ▶ 2 drawers with roller-bearing guideway
- ▶ 2 lockable doors
- ▶ 120 x 60 x 84 cm

Order number 250.180

## Accessories



Order number 281.085

### 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 types series 18/20/23/25 Plus
- ▶ Intermediate plate

Order number 281.085



Order number 281.090

### 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 types series 18/20/23/25 Plus, series P30 and 30 Plus/MV /NC
- ▶ Intermediate plate

Order number 281.090



Order number 281.095

### 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
- ▶ Works with drilling machine types series P40 / 40 Plus/MV/ NC
- ▶ Intermediate plate

Order number 281.095

## Drilling machine vice Flott [felix]



Order number 281.105

### [felix] 80

- ▶ Jaw width: 80 mm
- ▶ Span width: 0-81 mm
- ▶ Gripping jaw height: 35 mm
- ▶ Weight: 4.5 kg

**Order number 281.105**



Order number 281.106

### [felix] 100

- ▶ Jaw width: 100 mm
- ▶ Span width: 0-101 mm
- ▶ Gripping jaw height: 35 mm
- ▶ Weight: 5.6 kg

**Order number 281.106**

### [felix] 100 with tensioning aid

- ▶ Weight: 6.1 kg

**Order number 281.108**



Order number 281.109

### [felix] 125

- ▶ Jaw width: 125 mm
- ▶ Span width: 0-131 mm
- ▶ Gripping jaw height: 40 mm
- ▶ Weight: 11.2 kg

**Order number 281.107**

### [felix] 125 with tensioning aid

- ▶ Weight: 11.7 kg

**Order number 281.109**

## Accessories



Order number 281.205

### Medium-duty machine vice made from grey cast iron with ergonomic handle

#### No. 1: 85

- ▶ Jaw width: 85 mm
- ▶ Span width: 75 mm
- ▶ Gripping jaw height: 30 mm
- ▶ Weight: 3.3 kg

Order number 281.205

#### No. 1: 100

- ▶ Jaw width: 100 mm
- ▶ Span width: 95 mm
- ▶ Gripping jaw height: 30 mm
- ▶ Weight: 4.0 kg

Order number 281.206

#### No. 1: 120

- ▶ Jaw width: 120 mm
- ▶ Span width: 105 mm
- ▶ Gripping jaw height: 30 mm
- ▶ Weight: 6.6 kg

Order number 281.207

### Replacement jaw

#### No. 1: 85

Order number 281.212

#### No. 1: 100

Order number 281.213

#### No. 1: 120

Order number 281.214

**Heavy-duty machine vice,  
hardened and closed jaws with  
handle for maximum clamping forces**



Order number 281.209

**No. 2: 100**

- ▶ Jaw width: 100 mm
- ▶ Span width: 90 mm
- ▶ Gripping jaw height: 40 mm
- ▶ Weight: 7.5 kg

Order number 281.209

**No. 2: 120**

- ▶ Jaw width: 120 mm
- ▶ Span width: 120 mm
- ▶ Gripping jaw height: 40 mm
- ▶ Weight: 11.5 kg

Order number 281.210

**No. 2: 140**

- ▶ Jaw width: 150 mm
- ▶ Span width: 155 mm
- ▶ Gripping jaw height: 40 mm
- ▶ Weight: 13.5 kg

Order number 281.211

**Universal angle vice,  
100 mm jaw width and 3 milled contact surfaces**



Order number 281.208

**No. 3: 100**

- ▶ Jaw width: 100 mm
- ▶ Span width: 85 mm
- ▶ Gripping jaw height: 30 mm
- ▶ Weight: 4.9 kg

Order number 281.208

**Replacement jaw**

**No. 3: 100**

Order number 281.218

## Accessories

### Keyed drill chuck

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

Order number 285.103

### Precision keyless chuck

- ▶ Sanded, self-tensioning
- ▶ Clamping range 0.5-6 mm
- ▶ Socket B12
- ▶ Rotational accuracy: 0.05 mm

Order number 285.104



Order number 285.064

### Precision quick-change drill chuck sanded, self tightening, for right-hand/left hand rotation max. 8,000 1/min.

- ▶ Clamping range 1-13 mm
- ▶ Socket B16
- ▶ Rotational accuracy: 0.06 mm

Order number 285.064

## Accessories



Order number 285.133

### Keyless chuck, self-tensioning

- ▶ Clamping range 1-13 mm
- ▶ Socket B16
- ▶ Rotational accuracy: 0.17 mm

Order number 285.133

### Keyless chuck, self-tensioning

- ▶ Clamping range 3-16 mm
- ▶ Socket B18
- ▶ Rotational accuracy: 0.17 mm

Order number 285.165



Order number 285.109

### Tap holder, no independent release due to vibrations thanks to the side spindle for M4-M12 DIN 371

- ▶ Span width: 1-10 mm
- ▶ Socket: B16
- ▶ Overall length: 80 mm

Order number 285.109



## Accessories



Order number 285.310

### Taper mandrel (insertion pin)

**Dimensions B16/MK I**

Order number 285.310

**Dimensions B16/MK II**

Order number 285.320

**Dimensions B18/MK II**

Order number 285.321

**Dimensions B18/MK III**

Order number 285.323

**Dimensions B18/MK IV**

Order number 290.323

**Dimensions B18/MK V**

Order number 287.097



Order number 285.330

### Reduction sleeves

**Dimensions MK II/MK I**

Order number 285.330

**Dimensions MK III/MK II**

Order number 285.331

**Dimensions MK III/MK I**

Order number 285.332

**Dimensions MK IV/MK III**

Order number 285.333

**Dimensions MK IV/MK II**

Order number 285.336

**Dimensions MK V/MK IV**

Order number 285.092



Order number 285.334

### Drift, semiautomatic

**Dimensions 1-3**

Order number 285.334

**Dimensions 4-6**

Order number 285.335

**Tapping chuck: with pressure increase,  
length compensation pressure/tension  
for right-hand and left-hand rotation**



Order number 285.083

#### **GBF 12/MK 2**

- ▶ Cutting area M3 - M12
- ▶ without gripping collet

Order number 285.083

#### **Multi-purpose gripping collet for GBF 12**

- ▶ Clamping range 3.5-6.5 mm

Order number 285.084

- ▶ Clamping range 6.5-10 mm

Order number 285.085

#### **GBF 18/MK 3**

- ▶ Cutting area M5 - M18
- ▶ without gripping collet

Order number 285.086

#### **Multi-purpose gripping collet for GBF 18**

- ▶ Clamping range 2.8-7 mm

Order number 285.087

- ▶ Clamping range 7-13 mm

Order number 285.088

#### **GBF 30/ MK 4**

- ▶ Cutting area M10 - M30
- ▶ without gripping collet

Order number 285.089



Order number 285.089

#### **Multi-purpose gripping collet for GBF 30**

- ▶ Clamping range 10-16 mm

Order number 285.090

- ▶ Clamping range 16-23 mm

Order number 285.091

## Accessories



Order number 285.124

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

- ▶ DIN 338 N, 25-part  
1-13 mm x 0.5 mm

Order number 285.124

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

- ▶ Multi-purpose drill with strengthened drill core and parabola-shaped chip flute for improved chip removal  
DIN 338 – split point 130 degrees, 25-part,  
1-13 mm x 0.5 mm

Order number 285.123



Order number 285.162

### HSS-G countersink and deburring countersink set in ABS Box

- ▶ DIN 335 C, 90 degrees, 6-part  
6.3-8.3-10.4-12.4-16.5-20.5 mm

Order number 285.162



Order number 285.163

### HSS-E machine tap in ABS Box

- ▶ DIN 371/376, M3 - M12, Form B, with twist drill, 14-part for clearance hole

Order number 285.163

### HSS-E machine tap in ABS Box

- ▶ DIN 371/376, M3 - M12, Form C 35 degree RSP, 14-part for blind holes

Order number 285.164

## Accessories



Order number 290.854

### Replacement sight protection for the most common machines

**Series Turbodrill, 10 Eco Plus,  
10 Basic Plus, 10/13/15 Plus**

Order number 212.596

**Series 18/20/23/25 Plus**

Order number 218.366



Order number 290.040

### Complete, telescopic drilling protection, incl. electr. locking device (accessories)

**Series TB 10 Eco Plus**

Order number 290.045

**Series Turbo Drill, 10/13/15/18/20/23 Plus**

Order number 290.032

**Replacement sight protection:**

**(W x H x D) 170 x 250 x 130 mm**

Order number 290.030

**Series P30, P40**

Order number 290.041

**Replacement sight protection:**

**(W x H x D) 270 x 300 x 150 mm**

Order number 290.040

## Retrofitting kit



Order number 290.854

### Complete drilling protection, incl. electr. Locking device standard (retrofitting kit)

All current FLOTT machines are fitted with  
electrical drilling protection.

Retrofit your old machines now in accordance with  
the Industrial Premises Regulation (Betriebs-  
stättenverordnung) (Section 4 Para. 1) of 01.06.2015:

Switch off the machine when folding away the  
drilling protection.

**Series 10 STW/P18/M1/E1/E2/E3/E4/E5**

Order number 290.832

**Replacement sight protection: (W x L) 120 x 170 mm**

Order number 290.825

**Series M2/M3/M4/M5 / P23/P30/P35/P40**

Order number 290.855

**Replacement sight protection: (W x L) 120 x 250 mm**

Order number 290.854

## Grinding machines contents

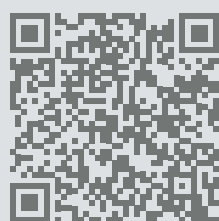
<b>Double grinding machine</b>	Grinding disc size mm	Motor speed 1/min	Motor AC 230 V kW	Motor three-phase current 400 V kW	Weight kg	Suction socket Ø mm	<b>Page</b>
<b>TS 150 SW</b>	150 x 25 x 32	2,800	0.52	–	14	42	80
<b>TS 175 SW</b>	175 x 25 x 32	2,800	0.52	–	15	42	80
<b>TS 150 SDP</b>	150 x 25 x 32	2,840	–	0.6	14	42	80
<b>TS 175 SDP</b>	175 x 25 x 32	2,740	–	0.7	15	42	80
<b>TS 200 SDP</b>	200 x 32 x 32	2,550	–	1.0	20	42	82
<b>TS 250 SDP</b>	250 x 40 x 51	1,400	–	1.4	32	42	82
<b>TS 300 SDP</b>	300 x 40 x 51	1,250	–	2.2	40	42	82
<b>TS 175 Pro</b>	175x25x32	2,750	–	0.7	15	42	86
<b>TS 200 Pro</b>	200 x 32 x 32	2,550	–	0.75	20	42	86
<b>TS 250 Pro</b>	250 x 40 x 51	1,400	–	0.8	32	42	86
<b>TSB 250 P</b>	250 x 40 x 51	1,400	–	1.4	35	42	88

<b>Belt sanders</b>	Belt length mm	Belt width mm	Motor AC 230 V kW	Motor three-phase current 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	90
<b>BSM 75</b>	2,000	75	–	3.75	80	60	92
<b>BSM 75 A</b>	2,000	75	–	3.75	90	60	92
<b>BSM 75 A/pol</b>	2,000	75	–	3.0/3.75	105	60	92
<b>BSM 150</b>	2,000	150	–	3.75	90	60	94
<b>BSM 150 A</b>	2,000	150	–	3.75	100	60	94
<b>BSM 150 A/pol</b>	2,000	150	–	3.0/3.75	105	60	94

<b>Brush deburring machine</b>	Brush diameter mm	Brush width normal mm	Speed/pole- changeable RPM	Drive power (Three-phase motor) kW	Weight kg	<b>Page</b>
<b>BEM 250 Plus</b>	250	60	2,800/1,400	1.8/2.1	85	96
<b>BEM 250 Pro</b>	250 (3 pieces)	60	600-2,700	3	410	98

You can find the right dust suction in the technical data for the machine in question.





# Grinding technology

# Double grinding machine

TS 150 SW /

TS 175 SW

TS 150 SD P /

TS 175 SD P



Figure below: TS 150 SW / TS 150 SD P

Fig. above: TS 175 SW / TS 175 SD P

## Standard equipment

- ▶ Smooth, no-maintenance motor
- ▶ Protective hood closed at the sides
- ▶ Stable workpiece supports that can be adjusted
- ▶ 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)
- ▶ Coarse and fine for each grinding wheel
- ▶ 12-month warranty for single-shift operation

## Accessories

- ▶ Machine stand with submersible container, Dimensions: 355 x 300 mm, Weight: 12 kg  
**Order number 350.435**
- ▶ Wall bracket  
**Order number 315.035**
- ▶ Separate spare grinding wheel  
Normal corundum coarse  
**Order number for TS 150: 315.522**  
**Order number for TS 175: 317.526**
- ▶ Separate spare grinding wheel  
Normal corundum fine  
**Order number for TS 150: 315.523**  
**Order number for TS 175: 317.527**
- ▶ Dressing stone  
**Order number 350.101**
- ▶ Dust extraction system MA 400 D (only TS 150 SD P and TS 175 SD P)  
**Order number 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

#### TS 150 SW

Dimensions of the grinding wheel (mm)	150 x 25 x 32
Speed (1/min)	2,800
Motor AC 230 V (kW)	0.52, S3-25% (periodic)
Weight (kg)	14
<b>Order number</b>	<b>317.760</b>

#### TS 175 SW

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 number</b>	<b>317.766</b>

#### TS 150 SD P

Dimensions of the grinding wheel (mm)	150 x 25 x 32
Speed (1/min)	2,840
Motor three-phase current 400 V (kW)	0.6, S2-30 min (short time operation)
Weight (kg)	14
<b>Order number</b>	<b>317.765</b>

#### TS 175 SD P

Dimensions of the grinding wheel (mm)	175 x 25 x 32
Speed (1/min)	2,740
Motor three-phase current 400 V (kW)	0.7, S2-30 min (short time operation)
Weight (kg)	15
<b>Order number</b>	<b>317.761</b>



# Double grinding machine

TS 200 SD P

TS 250 SD P

TS 300 SD P



AVAILABLE  
IMMEDIATELY! **to go**



Fig.: TS 200 DP with machine stand, emergency stop button, emergency stop pedal, brake and suction system

Fig.: TS 300 SD P with machine stand 350.436

## Standard equipment

- ▶ Smooth, no-maintenance motor
- ▶ Protective hood closed at the sides
- ▶ Stable workpiece supports that can be adjusted
- ▶ 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
- ▶ Coarse and fine for each grinding wheel
- ▶ 12-month warranty for single-shift operation
- ▶ Available optionally\*  
Complete with **EMERGENCY STOP button and brake!**  
(Only in combination with machine stand or suction system)

## Special equipment

- ▶ With machine stand, EMERGENCY STOP button and brake\*  
Order number for TS 200: 317.774  
Order number for TS 250: 317.775  
Order number for TS 300: 317.776
- ▶ With machine stand, EMERGENCY STOP button, brake and suction system\*  
Order number for TS 200: 317.777  
Order number for TS 250: 317.778  
Order number for TS 300: 317.779
- ▶ Different colour shade  
(One-component RAL paint)  
Order number 309.010
- ▶ Foot switch emergency stop  
(can only be ordered in connection with brake, machine stand and/or suction system)  
Order number 317.859

## Accessories

- ▶ Machine stand with submersible container, Dimensions: 355 x 300 mm, Weight: 12 kg (only TS 200 SD P)  
Order number 350.435
- ▶ Machine stand with submersible container, Dimensions: 420 x 520 mm, Weight: 15 kg (only TS 250 SD P and TS 300 SD P)  
Order number 350.436
- ▶ Wall bracket (only TS 200 SD P)  
Order number 315.035
- ▶ Separate spare grinding wheel  
Normal corundum coarse  
Order number for TS 200: 317.532  
Order number for TS 250: 317.542  
Order number for TS 300: 317.622

## Technical data

Suction piece Ø (mm)	42
<b>TS 200 SD P</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
Motor three-phase current 400 V (kW)	1.0, S2-30 min (short time operation)
Weight (kg)	20
<b>Order number</b>	<b>317.762</b>
<b>TS 250 SD P</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
Motor three-phase current 400 V (kW)	1.4, S2-30 min (short time operation)
Weight (kg)	32
<b>Order number</b>	<b>317.763</b>
<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)	Range
Speed (1/min)	1,250
Motor three-phase current 400 V (kW)	2.2, S2-30 min (short time operation)
Weight (kg)	40
<b>Order number</b>	<b>317.764</b>

- ▶ Separate spare grinding wheel  
Normal corundum fine  
Order number for TS 200: 317.533  
Order number for TS 250: 317.543  
Order number for TS 300: 317.624
- ▶ Dressing stone  
Order number 350.101
- ▶ Dust extraction system MA 400 D (only TS 200 SD P)  
Order number 330.295
- ▶ Dust extraction system MA 600 D (only TS 250 SD P and TS 300 SD P)  
Order number 330.080

TO  
TAL  
LY  
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PPY



AVAILABLE IMMEDIATELY! ▶ **to go**

WITH THE TS 200 SD P

## The complete package: Double grinding machine TS 200 SD P

with brake, EMERGENCY STOP button and  
machine stand with integrated suction system

- ▶ Standard equipment
- ▶ Smooth, no-maintenance motor
- ▶ Protective hood closed at the sides
- ▶ Stable workpiece supports that can be adjusted
- ▶ 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
- ▶ Coarse and fine for each grinding wheel
- ▶ Machine stand with submersible container,  
Dimensions: 355 x 300 mm, Weight: 12 kg
- ▶ Dust extraction system MA 400 D
- ▶ EMERGENCY STOP BUTTON and brake
- ▶ 12-month warranty for single-shift operation

**ONE NUMBER WITH  
EVERYTHING INCLUDED!**  
**Order number 317.777**

You can find out more about  
**TS 200 SD P** on Page 82/83  
in our catalogue!

# Double grinding machine

TS 175 Pro

TS 200 Pro

TS 250 Pro



Fig.: TS 200 Pro with machine stand,  
EMERGENCY STOP button, brake and suction system

## Standard equipment

- ▶ Smooth, no-maintenance motor  
**Operating type S1 (continuous operation)**
- ▶ Protective hood closed at the sides
- ▶ Stable workpiece supports that can be adjusted
- ▶ 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
- ▶ Coarse and fine for each grinding wheel
- ▶ 12-month warranty for single-shift operation
- ▶ **Available optionally\***  
**Complete with EMERGENCY STOP button and brake!**  
**(Only in combination with machine stand or suction system)**

## Special equipment

- ▶ With machine stand, EMERGENCY STOP button and brake\*  
**Order number for TS 175: 317.841**  
**Order number for TS 200: 317.846**  
**Order number for TS 250: 317.851**
- ▶ With machine stand, EMERGENCY STOP button, brake and suction system\*  
**Order number for TS 175: 317.842**  
**Order number for TS 200: 317.847**  
**Order number for TS 250: 317.852**
- ▶ different colour shade  
(One-component RAL paint)  
**Order number 309.010**
- ▶ Foot switch emergency stop  
(can only be ordered in connection with brake, machine stand and/or suction system)  
**Order number 317.859**

## Accessories

- ▶ Separate spare grinding wheel  
Normal corundum coarse  
**Order number for TS 175: 317.526**  
**Order number for TS 200: 317.532**  
**Order number for TS 250: 317.542**
- ▶ Separate spare grinding wheel  
Normal corundum fine  
**Order number for TS 175: 317.527**  
**Order number for TS 200: 317.533**  
**Order number for TS 250: 317.543**
- ▶ Dressing stone  
**Order number 350.101**
- ▶ Machine stand with submersible container,  
Dimensions: 355 x 300 mm, Weight: 12 kg  
(only TS 175 Pro / TS 200 Pro)  
**Order number 350.435**

## Technical data

Suction piece Ø (mm)	42
<b>TS 175 Pro</b>	
Dimensions of the grinding wheel (mm)	175 x 25 x 32
Machine dimensions without VP (mm)	230 x 440 x 210
Machine dimensions with VP (mm)	260 x 450 x 250
Speed (1/min)	2,750
Motor three-phase current 400 V (kW)	0.7, S1 (continuous operation)
Weight (kg)	15
<b>Order number</b>	<b>317.840</b>
<b>TS 200 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
Motor three-phase current 400 V (kW)	0.75, S1 (continuous operation)
Weight (kg)	20
<b>Order number</b>	<b>317.845</b>
<b>TS 250 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
Motor three-phase current 400 V (kW)	0.8, S1 (continuous operation)
Weight (kg)	32
<b>Order number</b>	<b>317.850</b>

- ▶ Machine stand  
(only TS 250 Pro)  
**Order number 350.436**
- ▶ Dust extraction system MA 400 D  
(only for TS 175 Pro / TS 200 Pro)  
**Order number 330.295**
- ▶ Dust extraction system MA 600 D  
(only for TS 250 Pro)  
**Order number 330.080**

Combined  
belt sander/  
grinding machine  
TSB 250 P



AVAILABLE  
IMMEDIATELY! **to go**

Fig.: TSB 250 P with machine stand

## Standard equipment

- ▶ High performance
- ▶ Belt sanding equipment, 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 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 arrester
- ▶ Connecting cable with CEE plug
- ▶ 12-month warranty for single-shift operation

## Special equipment

- ▶ With machine stand, EMERGENCY STOP button and brake\*  
**Order number 330.365**
- ▶ With machine stand, EMERGENCY STOP button, brake and suction system\*  
**Order number 330.370**

## Accessories

- ▶ Grinding wheel 250 x 40 x 51 mm  
Grain 36 coarse  
**Order number 317.542**
- ▶ Grinding wheel 250 x 40 x 51 mm  
Grain 80 fine  
**Order number 317.543**
- ▶ Standard grinding belt (brown) 1,300 x 75 mm, 5 pieces, grain 40  
**Order number 316.042**
- ▶ Standard grinding belt (brown) 1,300 x 75 mm, 5 pieces, grain 80  
**Order number 316.041**
- ▶ Graphite coating 80 x 350 mm  
**Order number 316.045**
- ▶ Machine stand with submersible container  
**Order number 350.436**
- ▶ Machine stand with integrated dust suction system (MA 600)  
**Order number 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)	650 x 800 x 350
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
Motor three-phase current 400 V (kW)	1.4
Measurement with grinding arm position (vertical) (mm)	560 x 320 x 680
<b>Order number</b>	<b>330.360</b>
<b>Additional accessories</b>	<b>from Page 100</b>



# Belt sander 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 number 371.764
- ▶ Grinding belt: 1,220 x 100 mm, 5 pieces, grain 40  
Order number 371.765
- ▶ Grinding belt: 1,220 x 100 mm, 5 pieces, grain 60  
Order number 371.766
- ▶ Grinding belt: 1,220 x 100 mm, 5 pieces, grain 80  
Order number 371.767
- ▶ Grinding belt: 1,220 x 100 mm, 5 pieces, grain 100  
Order number 371.768
- ▶ Grinding belt: 1,220 x 100 mm, 5 pieces, grain 120  
Order number 371.769
- ▶ Machine stand  
Height 792 mm  
Order number 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
Motor three-phase current, 1 x 230 V (kW)	0.75
Machine dimensions without VP (mm)	650 x 380 x 260
Machine dimensions with VP (mm)	700 x 400 x 300
Order number	371.760

**Belt  
sander  
BSM 75  
BSM 75 A  
BSM 75 A pol.**



AVAILABLE  
IMMEDIATELY! **to go**

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 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 sander 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 burning to the greatest extent possible
- ▶ Model equipped with suction 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 suction system)
- ▶ 5-year warranty on the drive motor for single-shift operation

## Accessories

- ▶ Connecting cable with CEE plug (3 m)  
Order number 488.761
- ▶ Suction hose  
(Length: 1.50 m, overall length in 2 parts)  
Order number 374.040
- ▶ Graphite coating 75 x 620 mm  
Order number 374.042
- ▶ Dust bag  
Order number 371.055
- ▶ Spark guide plate BSM 75  
Order number 374.071
- ▶ Grinding belt: 2,000 x 75 mm, 5 pieces, grain 40  
Order number 371.150
- ▶ Grinding belt: 2,000 x 75 mm, 5 pieces, grain 60  
Order number 371.151
- ▶ Grinding belt: 2,000 x 75 mm, 5 pieces, grain 80  
Order number 371.152
- ▶ Grinding belt: 2,000 x 75 mm, 5 pieces, grain 100  
Order number 371.153
- ▶ Grinding belt: 2,000 x 75 mm, 5 pieces, grain 120  
Order number 371.154
- ▶ Grinding belt for steel and grey cast iron:  
2,000 x 75 mm, 5 pieces, grain 40  
Order number 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 600 x 1,450

### BSM 75

Belt speed (m/s)	30
Motor three-phase current, 400 V (kW)	3.75
Suction output (m³/h)	–
Suction motor (kW)	–
Weight (kg)	80
Order number	374.000

### BSM 75 A

Belt speed (m/s)	30
Motor three-phase current, 400 V (kW)	3.75
Suction output (m³/h)	approx. 630
Suction motor (kW)	0.37
Weight (kg)	90
Order number	374.001

### BSM 75 A pol.

Belt speed (m/s)	15/30
Motor three-phase current, 400 V (kW)	3.0/3.75
Suction output (m³/h)	approx. 630
Suction motor (kW)	0.37
Weight (kg)	105
Order number	374.002

**Additional accessories** from Page 100

- ▶ Grinding belt for steel and grey cast iron:  
2,000 x 75 mm, 5 pieces, grain 60  
Order number 371.825
- ▶ Grinding belt for steel and grey cast iron:  
2,000 x 75 mm, 5 pieces, grain 80  
Order number 371.826
- ▶ Grinding belt for steel and grey cast iron:  
2,000 x 75 mm, 5 pieces, grain 120  
Order number 371.827

▶ **to go ... CAN BE SUPPLIED STRAIGHT AWAY!**

**BSM 75 / BSM 75 A**

Belt  
sander  
BSM 150  
BSM 150 A  
BSM 150 A pol.



AVAILABLE IMMEDIATELY! **to go**



Fig.: BSM 150 A with suction 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 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 sander 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 burning to the greatest extent possible
- ▶ Model equipped with suction 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 suction system)
- ▶ 5-year warranty on the drive motor for single-shift operation

## Accessories

- ▶ Connecting cable with CEE plug (3 m)  
Order number 488.761
- ▶ Suction hose  
(Length: 1.50 m, overall length in 2 parts)  
Order number 374.040
- ▶ Graphite coating 150 x 620 mm  
Order number 374.043
- ▶ Dust bag  
Order number 371.055
- ▶ Spark guide plate BSM 150  
Order number 374.070
- ▶ Grinding belt: 2,000 x 150 mm, 5 pieces, grain 40  
Order number 371.125
- ▶ Grinding belt: 2,000 x 150 mm, 5 pieces, grain 60  
Order number 371.126
- ▶ Grinding belt: 2,000 x 150 mm, 5 pieces, grain 80  
Order number 371.127
- ▶ Grinding belt: 2,000 x 150 mm, 5 pieces, grain 100  
Order number 371.128
- ▶ Grinding belt: 2,000 x 150 mm, 5 pieces, grain 120  
Order number 371.129
- ▶ Grinding belt for steel and grey cast iron:  
2,000 x 150 mm, 5 pieces, grain 40  
Order number 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 600 x 1,450

### BSM 150

Belt speed (m/s)	30
Motor three-phase current, 400 V (kW)	3.75
Suction output (m³/h)	–
Suction motor (kW)	–
Weight (kg)	90
Order number	374.020

### BSM 150 A

Belt speed (m/s)	30
Motor three-phase current, 400 V (kW)	3.75
Suction output (m³/h)	approx. 630
Suction motor (kW)	0.37
Weight (kg)	100
Order number	374.021

### BSM 150 A pol.

Belt speed (m/s)	15/30
Motor three-phase current, 400 V (kW)	3.0/3.75
Suction output (m³/h)	approx. 630
Suction motor (kW)	0.37
Weight (kg)	105
Order number	374.022

**Additional accessories** from Page 100

- ▶ Grinding belt for steel and grey cast iron:  
2,000 x 150 mm, 5 pieces, grain 60  
Order number 371.829
- ▶ Grinding belt for steel and grey cast iron:  
2,000 x 150 mm, 5 pieces, grain 80  
Order number 371.830
- ▶ Grinding belt for steel and grey cast iron:  
2,000 x 150 mm, 5 pieces, grain 120  
Order number 371.831

▶ **to go ... CAN BE SUPPLIED STRAIGHT AWAY!**

BSM 150 / BSM 150 A

# Brush deburring machine BEM 250 Plus



AVAILABLE  
IMMEDIATELY! **to go**

Fig.: BEM 250 Plus

## Standard equipment

- ▶ Robust industrial three-phase motor
- ▶ Adjustable eye protection
- ▶ Easily adjustable sliding unit (via adjustment screw) in case of wear to 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 the material size)
- ▶ Ø 80 mm suction piece with end plate (for connection to external suction 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 tool
- ▶ 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 number 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 number 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 number 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 number 373.179**

More brushes for materials, such as aluminium or anodised profiles, on request

## 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 size (mm)	500 x 560 x 1250
<b>Order number</b>	<b>373.150</b>



# Brush deburring machine BEM 250 Pro



AVAILABLE  
IMMEDIATELY! **to go**

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 settings to achieve the required speed (600-2,700 1/min)
- ▶ 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)
- ▶ Drawer for dust residues that can be easily removed
- ▶ Robust sheet steel housing construction with preparation (opening) for connection to an external suction 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 tool
- ▶ 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 number 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 number 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 number 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 number 373.179**

More brushes for materials, such as aluminium or anodised profiles, on request

## Technical data

### BEM 250 Plus\*

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 size (mm)	680 x 1,200 x 1,380
<b>Order number</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.

## Accessories / spare parts

### Wall bracket



Order number 315.035

### Complete spark arrest protective glass

with holder (1 piece)  
for **BSM 75**



Order number 374.011

### Complete spark arrest protective glass

with holder (2 pieces)  
for **TS 150 – TS 175**



Order number 315.311

### Complete spark arrest protective glass

with holder (1 piece)  
for **BSM 150**



Order number 374.012

### Complete spark arrest protective glass

with holder (2 pieces)  
for **TS 200, TS 250 and  
TSB 250**



Order number 315.312

### Complete contact wheel

(from construction  
year 2014)  
for **BSM 75**



Order number 374.032

### Complete spark arrest protective glass

with holder (2 pieces)  
for **TS 300**



Order number 315.313

### Complete contact wheel

(from construction  
year 2014)  
for **BSM 150**



Order number 374.033

### Dust bag

With suction system  
for **BSM**



Order number 371.055

### Suction hose

With suction system  
for **BSM**



Order number 374.040

### Note:

In order to allow us to process your spare parts request as quickly as possible,  
please keep the **machine number** and the **machine type** at hand!



Advice via WhatsApp  
It doesn't get any easier than that  
Telephone: +49 (162) 18 54 000



## Sawing contents

<b>Metal band saws</b>	Band saw blade size mm	○* at 0° mm	□* at 0° mm	□* at 0° mm	<b>Page</b>
<b>HBS 225 A</b>	2,720 x 27 x 0.9	230	275 x 200	230 x 230	104
<b>HBS 250 A</b>	2,910 x 27 x 0.9	250	320 x 190	240 x 240	106
<b>HBS 250 HA</b>	2,910 x 27 x 0.9	250	320 x 190	240 x 240	108
<b>HBS 350 HA</b>	4,780 x 34 x 1.1	350	510 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 350 ANC</b>	4,780 x 34 x 1.1	350	510 x 350	350 x 350	114
<b>HBS 350 SANC</b>	4,780 x 34 x 1.1	350	420 x 350	350 x 350	116
<b>HBS 450 SANC</b>	6,020 x 41 x 1.3	450	520 x 450	450 x 450	118
<b>VBS 400 Plus</b>	3,600 x 13 x 0.9		400 x 390		120

<b>Metal circular saw</b>	Saw blade Ø mm	○* at 0° mm	□* at 0° mm	□* at 0° mm	<b>Page</b>
<b>KS 315M</b>	315 x 32	95	100 x 70	80	122

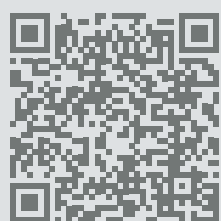
<b>Portable metal band saws</b>	Band saw blade size mm	○* at 0° mm	□* at 0° mm	□* at 0° mm	<b>Page</b>
<b>PBS 120 Plus</b>	1,620 x 13 x 0.65	120	60 x 70	120 x 120	124

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

### Explanation of abbreviations

Manual lowering (handle)	<b>MA</b>	Automatic NC	<b>ANC</b>	Vertical band saw	<b>VBS</b>
Lowering (Hydraulic cylinder)	<b>A</b>	Column-guided automatic NC	<b>SANC</b>	Circular saw	<b>KS</b>
Semi-automatic	<b>HA</b>	High-performance band saw	<b>HBS</b>	Portable band saw	<b>PBS</b>





# Sawing technology

# FLOTT

## Metal band saw

### HBS 225 A



AVAILABLE  
IMMEDIATELY! **to go**



**Precise guiding**  
The saw blade is guided precisely using sanded carbide plates



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



**Round supporting table**  
The machine has a supporting table that rotates along with mitre cuts. This means that there are no recesses



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



**Powered chip removal brush**

## Standard equipment

- ▶ New saw concept with lots of standards – for all workshops
- ▶ 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 (continuous control)
- ▶ Electric coolant pump
- ▶ Precision carbide saw blade guides, sanded (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 number 570.172**
- ▶ Micro spraying system  
**Order number 570.170**
- ▶ LED work light  
**Order number 570.174**

## Accessories

- ▶ Blade tension measurement device with dial indicator (Flottomat-BS)  
**Order number 570.175**
- ▶ Connection L-SR (steel coil), left, 330 mm wide (incl. fastening set)  
**Order number 570.176**
- ▶ Connection L-SR (steel coil), right, 330 mm wide (incl. fastening set)  
**Order number 570.177**
- ▶ Roller conveyor L-SR (steel coil), 330 mm wide, basic version 2,000 mm, 150 kg/m  
**Order number 570.178**
- ▶ Roller conveyor L-SR (steel coil), 330 mm wide, basic version 3,000 mm, 150 kg/m  
**Order number 570.179**

## Technical data

### HBS 225 A

Motor three-phase current, 400 V, pole-changeable (kW)	1.1/1.5
Saw blade size (mm)	2,720 x 27 x 0.9
Band wheels Ø (mm)	300
Cutting speed (m/min)	40/80
Vice span width (mm)	275
Working height (mm)	978
Machine dimension (mm)	1,150 x 1,588 x 1,477
Weight (kg)	370
<b>Order number</b>	<b>570.050</b>
<b>Additional accessories</b>	<b>From Page 126</b>

## Sawing area

	0°	45° R	45° L	60° R
○	230	190	170	120
□	275 x 200	190 x 160	185 x 100	120 x 85
□	230 x 230	190 x 190	150 x 150	85 x 85

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

Order number	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> Additional saw blades on request

- ▶ Extension roller conveyor L-SR (steel coil), 2,000 mm, 150 kg/m  
**Order number 570.180**
- ▶ Extension roller conveyor L-SR (steel coil), 3,000 mm, 150 kg/m  
**Order number 570.181**
- ▶ Adjustable vertical rollers  
**Order number 570.190**
- ▶ Adjustable vertical rollers  
**Order number 570.188**



# FLOTT

## Metal band saw

### HBS 250 A



AVAILABLE  
IMMEDIATELY! **to go**



Pistol for rinsing the chips  
(optional)



Roller conveyor  
with vertical rollers  
(accessory)

## Standard equipment

- ▶ High-performance band saw machine 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 motor (cylindrical gear) for all requirements (frequency-regulated)
- ▶ Chip removal brush, rotating
- ▶ Precisely sanded 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 number 570.110
- ▶ Laser line for cutting  
Order number 570.172
- ▶ Micro spraying system  
Order number 570.170
- ▶ LED work light  
Order number 570.174

## Accessories

- ▶ Blade tension measurement device with dial indicator (Flottomat-BS)  
Order number 570.175
- ▶ Connection L-SR (steel coil), left, 330 mm wide (incl. fastening set)  
Order number 570.282
- ▶ Connection L-SR (steel coil), right, 330 mm wide (incl. fastening set)  
Order number 570.281
- ▶ Roller conveyor L-SR (steel coil), 330 mm wide, basic version 2,000 mm, 150 kg/m  
Order number 570.178
- ▶ Roller conveyor L-SR (steel coil), 330 mm wide, basic version 3,000 mm, 150 kg/m  
Order number 570.179




## Technical data

### HBS 250 A

Motor three-phase current, 400 V, frequency-regulated (kW)	1.5
Saw blade size (mm)	2,910 x 27 x 0.9
Band wheels Ø (mm)	325
Cutting speed (m/min)	20-120
Vice span width (mm)	320
Working height (mm)	760
Machine dimension (mm)	1,480 x 1,700 x 2,000
Weight (kg)	390
Order number	570.005

**Additional accessories** From Page 126

## Sawing area

	0°	45° R	45° L	60° R
	250	220	180	130
	320 x 190	220 x 120	200 x 100	130 x 100
	240 x 240	210 x 210	160 x 160	100 x 100

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

Order number	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> Additional saw blades on request

- ▶ Extension roller conveyor L-SR (steel coil), 2,000 mm, 150 kg/m  
Order number 570.180
- ▶ Extension roller conveyor L-SR (steel coil), 3,000 mm, 150 kg/m  
Order number 570.181
- ▶ Adjustable vertical rollers  
Order number 570.190
- ▶ Adjustable vertical rollers  
Order number 570.188

# FLOTT

## Metal band saw

### HBS 250 HA



AVAILABLE  
IMMEDIATELY! **to go**



Mitre display



Saw blade guide  
made from carbide



Laser line for cutting  
(optional)



LED lighting  
for the working area  
(optional)



Pistol for rinsing the chips  
(optional)

## Standard equipment

- ▶ Fully hydraulic lowering and lifting system for the saw frame
- ▶ Hydraulic Opening and closing 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 ribs)
- ▶ Hydraulic short-stroke cylinder for vice
- ▶ Precisely sanded 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 number 570.110
- ▶ Laser line for cutting  
Order number 570.172
- ▶ Micro spraying system  
Order number 570.170
- ▶ LED work light  
Order number 570.174

## Accessories

- ▶ Blade tension measurement device with dial indicator (Flottomat-BS)  
Order number 570.175
- ▶ Connection L-SR (steel coil), left, 330 mm wide (incl. fastening set)  
Order number 570.282
- ▶ Connection L-SR (steel coil), right, 330 mm wide (incl. fastening set)  
Order number 570.281
- ▶ Roller conveyor L-SR (steel coil), 330 mm wide, basic version 2,000 mm, 150 kg/m  
Order number 570.178
- ▶ Roller conveyor L-SR (steel coil), 330 mm wide, basic version 3,000 mm, 150 kg/m  
Order number 570.179

## Technical data

### HBS 250 HA

Motor three-phase current, 400 V, frequency-regulated (kW)	1.5
Saw blade size (mm)	2,910 x 27 x 0.9
Band wheels Ø (mm)	325
Cutting speed (m/min)	20-120
Vice span width (mm)	320
Working height (mm)	760
Machine dimension (mm)	1,480 x 1,700 x 2,000
Weight (kg)	390
Order number	570.010

**Additional accessories** From Page 126

## Sawing area

	0°	45° R	45° L	60° R
○	250	220	180	130
□	320 x 190	220 x 120	200 x 100	130 x 100
□	240 x 240	210 x 210	160 x 160	100 x 100

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

Order number	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> Additional saw blades on request

- ▶ Extension roller conveyor L-SR (steel coil), 2,000 mm, 150 kg/m  
Order number 570.180
- ▶ Extension roller conveyor L-SR (steel coil), 3,000 mm, 150 kg/m  
Order number 570.181
- ▶ Adjustable vertical rollers  
Order number 570.190
- ▶ Adjustable vertical rollers  
Order number 570.188

# FLOTT

## Metal band saw

### HBS 350 HA



Pistol for rinsing 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 welding frame construction in new appealing design for mitre cuts from 0° to 60° right /left
- ▶ Stable, low vibration frame construction with arm joint stored in bearings
- ▶ Simple operation console for the operators
- ▶ Simple, easy-to-understand control system
- ▶ Precisely sanded carbide saw blade guides (adjustable) for the highest standards in terms of cutting accuracy
- ▶ Synchronous powered chip removal brush
- ▶ Semi-automatic sawing cycle: fully hydraulic
- ▶ Hydraulic cut feed including automatic cutting pressure regulation
- ▶ Mitre settings and clamping (manual)
- ▶ Hydraulic full-lift cylinder for the vice (Pull-down design) of floating vice
- ▶ Blade tension and saw blade break monitoring system
- ▶ Integrated coolant supply (30 l 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 number 570.110
- ▶ Laser line for cutting  
Order number 570.109
- ▶ Hydraulic bundle tensioning device  
Order number 570.107
- ▶ Clamping pressure regulation for vice  
Order number 570.076
- ▶ Material stop 500 mm (measuring scale)  
Order number 570.268

## Accessories




- ▶ Connection T-SR (steel coil), left, 540 mm wide (incl. fastening set)  
Order number 570.111
- ▶ Connection T-SR (steel coil), right, 540 mm wide (incl. fastening set)  
Order number 570.112
- ▶ Roller conveyor T-SR (steel coil), 540 mm wide, basic version 2,000 mm, 600 kg/m  
Order number 570.113

## Technical data

### HBS 350 HA

Motor three-phase current, 400 V, frequency-regulated (kW)	3
Saw blade size (mm)	4,780 x 34 x 1.1
Band wheels Ø (mm)	450
Cutting speed (m/min)	20-120
Vice span width, full-lift cylinder (mm)	510
Working height (mm)	761
Machine dimension (mm)	2,568 x 1,070 x 1,500
Weight (kg)	710
Order number	570.020
Additional accessories	From Page 126

## Sawing area

	0°	45° R	45° L	60° R	60° L
	350	350	350	250	270
	510 x 350	400 x 100	415 x 100	260 x 100	280 x 100
	350 x 350	340 x 340	350 x 350	240 x 240	260 x 260

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

Order number	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	10/14	1

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

- ▶ Roller conveyor T-SR (steel coil), 540 mm wide, basic version 3,000 mm, 600 kg/m  
Order number 570.114
- ▶ Extension roller conveyor T-SR (steel coil), 2,000 mm, 600 kg/m  
Order number 570.115
- ▶ Extension roller conveyor T-SR (steel coil), 3,000 mm, 600 kg/m  
Order number 570.116
- ▶ Adjustable vertical rollers  
Order number 570.190
- ▶ Adjustable vertical rollers  
Order number 570.188

# FLOTT

## Metal band saw

### HBS 450 HA



Pistol for rinsing 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 welding frame construction in new appealing design for mitre cuts from 0° to 60° right /left
- ▶ Stable, low vibration frame construction with arm joint stored in bearings
- ▶ Simple operation console for the operators
- ▶ Simple, easy-to-understand control system
- ▶ Precisely sanded carbide saw blade guides (adjustable) for the highest standards in terms of cutting accuracy
- ▶ Synchronous powered chip removal brush
- ▶ Semi-automatic sawing cycle: fully hydraulic
- ▶ Hydraulic cut feed including automatic cutting pressure regulation
- ▶ Mitre settings and clamping (manual)
- ▶ Hydraulic full-lift cylinder for the vice (Pull-down design) of 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 number 570.109
- ▶ Clamping pressure regulation for vice  
Order number 570.076
- ▶ Material stop 500 mm (measuring scale)  
Order number 570.269
- ▶ Hydraulic Bundle tensioning device  
Order number 570.066

## Accessories




- ▶ Connection T-SR (steel coil), left, 640 mm wide (incl. fastening set)  
Order number 570.067
- ▶ Connection T-SR (steel coil), right, 640 mm wide (incl. fastening set)  
Order number 570.068
- ▶ Roller conveyor T-SR (steel coil), 640 mm wide, basic version 2,000 mm, 600 kg/m  
Order number 570.069

## Technical data

### HBS 450 HA

Motor three-phase current, 400 V, frequency-regulated (kW)	3
Saw blade size (mm)	5,200 x 34 x 1.1
Band wheels Ø (mm)	480
Cutting speed (m/min)	20-120
Vice span width, full-lift cylinder (mm)	610
Working height (mm)	781
Machine dimension (mm)	2,780 x 1,440 x 1,560
Weight (kg)	800
Order number	570.525
Additional accessories	From Page 126

## Sawing area

	0°	45° R	45° L	60° R	60° L
	450	450	450	310	340
	610 x 450	480 x 100	500 x 100	320 x 100	350 x 100
	450 x 450	420 x 420	420 x 420	300 x 300	320 x 320

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

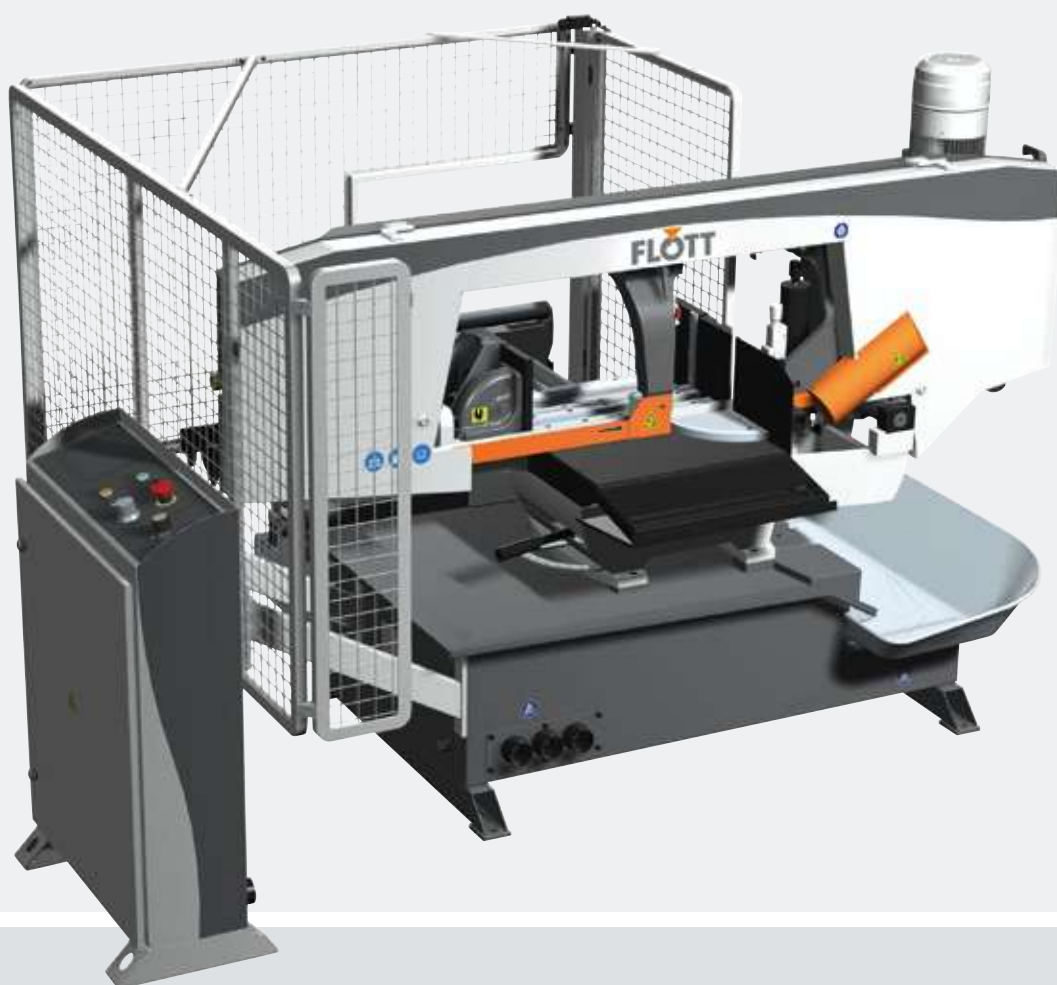
Order number	Dimensions in mm	Combination toothing	VPE set = 2 pcs.
570.220	5,200 x 34 x 1.1	2/3	1
570.221	5,200 x 34 x 1.1	3/4	1
570.222	5,200 x 34 x 1.1	4/6	1
570.223	5,200 x 34 x 1.1	5/8	1

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

- ▶ Roller conveyor T-SR (steel coil), 640 mm wide, basic version 3,000 mm, 600 kg/m  
Order number 570.070
- ▶ Extension roller conveyor T-SR (steel coil), 2,000 mm, 600 kg/m  
Order number 570.071
- ▶ Extension roller conveyor T-SR (steel coil), 3,000 mm, 600 kg/m  
Order number 570.080
- ▶ Adjustable vertical rollers  
Order number 570.083
- ▶ Adjustable vertical rollers  
Order number 570.084



**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 welding frame construction
- ▶ Control panel that can be freely positioned with a clear 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
- ▶ Remnant length: 60 mm
- ▶ The smallest cut piece (L x H): 15 x 5 mm
- ▶ Hydraulic full-lift cylinder for the vice (Pull-down design)
- ▶ Cut feed including automatic cutting pressure regulation
- ▶ Double-pump hydraulic unit
- ▶ Precisely sanded 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 number 570.064
- ▶ Hydraulic blade tension display  
Order number 570.065
- ▶ Micro spraying system 24 V  
Order number 570.254
- ▶ Laser line for cutting  
Order number 570.109

## Technical data

### HBS 350 ANC

Motor three-phase current, 400 V, frequency-regulated (kW)	3
Saw blade size (mm)	4,780 x 34 x 1.1
Band wheels Ø (mm)	450
Cutting speed (m/min)	20-120
Vice span width (mm)	510
Working height (mm)	761
Machine dimension (mm)	2,440 x 2,880 x 1,540
Weight (kg)	950
Order number	570.025
Additional accessories	From Page 126

## 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) saw blades <sup>1</sup>

Order number	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	10/14	1

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

## Accessories

- ▶ Connecting part T-SR, left (incl. fastening set)  
Order number 570.284
- ▶ Connecting part T-SR, right (incl. fastening set)  
Order number 570.112
- ▶ Roller conveyor T-SR (steel coil), 540 mm wide, basic version 2,000 mm, 600 kg/m  
Order number 570.113
- ▶ Roller conveyor T-SR (steel coil), 540 mm wide, basic version 3,000 mm, 600 kg/m  
Order number 570.114
- ▶ Extension roller conveyor T-SR (steel coil), 2,000 mm, 600 kg/m  
Order number 570.115
- ▶ Extension roller conveyor T-SR (steel coil), 3,000 mm, 600 kg/m  
Order number 570.116

**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 free from clearance in a preloaded 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
- ▶ Remnant 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 using the limit 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 number 570.063
- ▶ Micro spraying system 24 V  
Order number 570.254
- ▶ Additional (3) coolant supplies  
Order number 570.173
- ▶ Chip rinsing pistol  
Order number 570.110
- ▶ Hydraulic blade tension display  
Order number 570.065



## Technical data

### HBS 350 SANC

Motor three-phase current, 400 V, frequency-regulated (kW)	3
Saw blade size (mm)	4,780 x 34 x 1.1
Band wheels Ø (mm)	450
Cutting speed (m/min)	20-120
Vice span width (mm)	420
Working height (mm)	780
Machine dimension (mm)	2,300 x 2,050 x 2,000
Weight (kg)	1,200
Order number	570.030

**Additional accessories** From Page 126

## Sawing area

	0°
	350
	420 x 350
	350 x 350

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

Order number	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	10/14	1

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

## Accessories

- ▶ Connecting part X-SR, left (incl. fastening set)  
Order number 570.255
- ▶ Roller conveyor X-SR (steel coil x 2 pieces), 450 mm wide, basic version 2,000 mm, 1,500 kg/m  
Order number 570.256
- ▶ Roller conveyor X-SR (steel coil x 3 pieces), 450 mm wide, basic version 3,000 mm, 1,500 kg/m  
Order number 570.258
- ▶ Extension roller conveyor X-SR (steel coil x 2 pieces), 2,000 mm, 1,500 kg/m  
Order number 570.260
- ▶ Extension roller conveyor X-SR (steel coil x 3 pieces), 3,000 mm, 1,500 kg/m  
Order number 570.262

**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 free from clearance in a preloaded 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
- ▶ Remnant 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 number 570.063
- ▶ Micro spraying system 24 V  
Order number 570.254
- ▶ Additional (3) coolant supplies  
Order number 570.173
- ▶ Chip rinsing pistol  
Order number 570.110

## Technical data

### HBS 450 SANC

Motor three-phase current, 400 V, frequency-regulated (kW)	4
Saw blade size (mm)	6,020 x 41 x 1.3
Band wheels Ø (mm)	550
Cutting speed (m/min)	20-120
Vice span width (mm)	520
Working height (mm)	780
Machine dimension (mm)	2,890 x 2,055 x 2,030
Weight (kg)	1,600
Order number	570.035
Additional accessories	From Page 126

## Sawing area

	0°
	450
	520 x 450
	450 x 450

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

Order number	Dimensions in mm	Combination toothing	VPE set = 2 pcs.
570.227	6,020 x 41 x 1.3	2/3	1
570.228	6,020 x 41 x 1.3	3/4	1
570.229	6,020 x 41 x 1.3	4/6	1
570.230	6,020 x 41 x 1.3	5/8	1
570.231	6,020 x 41 x 1.3	10/14	1

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

## Accessories

- ▶ Connecting part X-SR, left (incl. fastening set)  
Order number 570.136
- ▶ Roller conveyor X-SR (steel coil x 4 pieces), 550 mm wide, basic version 2,000 mm, 1,500 kg/m  
Order number 570.139
- ▶ Roller conveyor X-SR (steel coil x 6 pieces), 550 mm wide, basic version 3,000 mm, 1,500 kg/m  
Order number 570.141
- ▶ Extension roller conveyor X-SR (steel coil x 4 pieces), 2,000 mm, 1,500 kg/m  
Order number 570.143
- ▶ Extension roller conveyor X-SR (steel coil x 6 pieces), 3,000 mm, 1,500 kg/m  
Order number 570.145

# FLOTT

## Vertical band saw

### VBS 400 Plus



Minimum quantity  
lubrication  
Order number 410.031



Longitudinal stop  
Order number 410.030



Standard  
height-adjustable  
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
- ▶ Treads coated with hard rubber
- ▶ Hardened and sanded 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 that can be moved manually using crank  
**Order number 410.032**
- ▶ Saw blade welding device  
**Order number 410.033**
- ▶ Tilting table, 15° to the left, right, front and back  
**Order number 410.034**
- ▶ Longitudinal stop für 90° cuts  
**Order number 410.030**
- ▶ Minimal lubrication  
**Order number 410.031**

## Accessories

- ▶ Band saw blade: 3,600 x 13 x 0.9 mm, 5 pieces, Tothing 14 teeth  
**Order number 410.040**
- ▶ Band saw blade: 3,600 x 13 x 0.9 mm, 5 pieces, Tothing 10/14 teeth  
**Order number 410.041**
- ▶ Band saw blade: 3,600 x 13 x 0.9 mm, 5 pieces, Tothing 6 teeth  
**Order number 410.042**

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 motor, electronically regulated
Connected value (kW / A)	4.0 / 7.5
Machine dimension (mm)	2,225 x 1,120 x 770
Weight (kg)	465
<b>Order number</b>	<b>410.010</b>
<b>With minimum quantity lubrication and longitudinal stop</b>	
<b>Order number</b>	<b>410.020</b>
<b>Additional accessories</b>	<b>From Page 126</b>



# FLOTT

## Metal circular saw

### KS 315 M



AVAILABLE  
IMMEDIATELY! **to go**

## Standard equipment

- ▶ With swivelling head (left/right) for mitre cuts
- ▶ Two speeds
- ▶ Stable cast construction of the machine housing
- ▶ Reduction gear in oil bath consisting of bronze wheel and hardened, sanded steel worm wheel
- ▶ Quick-change vice with counter-tension device for double work piece tensioning
- ▶ Mechanical coolant pump with long service life
- ▶ 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 number 560.830**

## Technical data

### KS 315 M

Motor three-phase current, 400 V, pole-changeable (kW)	1.3/1.9
Vice span width (mm)	110
Cooling tank capacity (l)	5
Work height with underframe (mm)	980
2 speeds (rpm)	50-1,000
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 number</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 number	Dimensions in mm	Number of teeth	VPE
<b>560.310</b>	315 x 2.5 x 32	220	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



AVAILABLE  
IMMEDIATELY! **to go**



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 processing location
- ▶ 12-month warranty for single-shift operation

## Accessories




- ▶ Underframe  
Order number 570.508
- ▶ Coolant container  
Order number 570.509
- ▶ Material stop 300 mm  
Order number 570.510
- ▶ Connecting part, left  
Order number 570.511
- ▶ Connecting part, right  
Order number 570.512
- ▶ Roller conveyor, 2 m (150 kg/m)  
Order number 570.507

## 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 dimension (mm)	810 x 530 x 450
Weight (kg)	38
Order number	570.505

## 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 blade <sup>1</sup>

Order number	Dimensions in mm	Teeth per inch	VPE set = 5 pcs.
570.514	1,620 x 13 x 0.65	6/10	1
570.515	1,620 x 13 x 0.65	8/12	1
570.516	1,620 x 13 x 0.65	10/14	1

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

## Accessories

### Roller conveyor system L-SR/K330

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



on request

### Digital measuring stop

Digital material stop with handwheel and pneumatic brake



on request

### Stop systems

Stop systems – from simple, convenient, manual measurement units to NC-controlled modern measurement systems, including programme storage.



on request

### Manual measuring stop

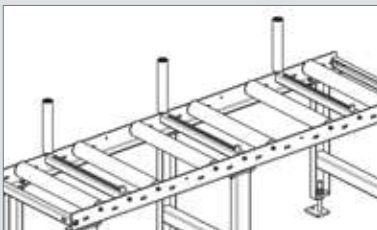
The contact surface for the stop ensures that the material can be fixed securely before cutting to the desired length.



on request

### Roll-off safety

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

### Hydraulic bundle tensioning

The hydraulic bundle tensioning device enables layers and bundles to be tensioned using an additional hydraulic vertical tensioning unit.



on request

### Digital measuring stop – display

The stop carriage is manually adjusted, and the position is displayed on the digital display to 0.1 mm accuracy. The stop arm can be folded up to allow the material to pass through.



on request

### Controlled material feed



on request

### Vertical rollers

If the alignment is ideal, the vertical rollers ensure exact perpendicularity, simple work processes and safety for the operating personnel and persons in the vicinity.



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

Stable, fixed pipes made of high-quality plastic are used as rollers. Thanks to their properties, the material that is fed through is protected against damage.



on request

### Connecting parts

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



on request

**Safety systems for individual solutions  
available on request**



Advice via WhatsApp  
It doesn't get any easier than that  
Telephone: +49 (162) 18 54 000



## Information contents

Topic	Page
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## ZERTIFIKAT

Die AGQS Qualitäts- und Umweltmanagement GmbH bestätigt, dass das Unternehmen

**FLOTT**  
Werkzeugmaschinen  
Arnz Flott GmbH Werkzeugmaschinen  
Vieringhausen 131  
D-42857 Remscheid  
an den Standorten

Vieringhausen 131, D-42857 Remscheid  
Weststraße 42, D-42857 Remscheid  
für den Geltungsbereich

Entwicklung, Marketing und Vertrieb sowie  
Montage von Werkzeugmaschinen für die Bohr-,  
Säge- und Schleifbearbeitung

ein Managementsystem eingeführt hat und aufrecht erhält.  
Ein Audit, dokumentiert in einem Bericht, hat bestätigt,  
dass dieses Managementsystem die Anforderungen der  
folgenden Norm erfüllt:

**DIN EN ISO 9001:2015**



*[Signature]*  
Remscheid, 2017-08-01

Audit 297-QMS-R30 AGQS Qualitäts- und Umweltmanagement GmbH  
Zertifikat 297-QMS-08-03 Eberfelder Straße 77 D-42853 Remscheid  
Gültig ab 2017-07-28 Telefon +49 2191 438 24  
Gültig bis 2020-07-27 Telefax +49 2191 438 26  
Erstzertifizierung 2008-07-28 email@agqs.de







# Information



## 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



Drilling protection for long tools

### Drilling protection for long tools

- ▶ Extra-large, telescopic drilling protection
- ▶ Standard EMERGENCY STOP button and spindle stop function

### Vice [felix]

- ▶ Prism jaws with an indentation, as well as horizontal and vertical recesses for a broad range of work pieces
- ▶ Patented easy clamping via hexagon socket screw



### Double grinding machine with brake, machine stands and suction system

- ▶ Emergency stop button and optional emergency stop foot pedal
- ▶ The grinding wheels come to a standstill within just a few seconds



Double grinding machine



Belt sander

### Belt trimmer with brake

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



Advice via WhatsApp  
It doesn't get any easier than that  
Telephone: +49 (162) 18 54 000



You can find information about new releases and the current status of these new releases at: [www.flott.de](http://www.flott.de)

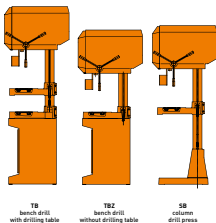
## Education and further training

### FLOTT teaching board

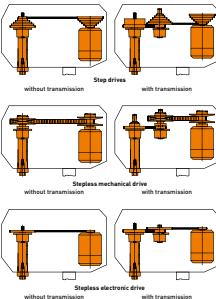
This board is used to explain how to work safely with the drilling machines, as well as the various constructions, work processes and clamping devices. Ideal for schools and training organisations. These teaching boards are delivered free of charge.

## Drilling with FLOTT Werkzeugmaschinen

### Designs



### Drive systems



### Display and control panel



Extract from the FLOTT Programme  
Drilling, grinding and sawing:



Digital display for drill depth, torque and feed rate display with control panel

Main switch

Emergency stop button

Drill depth fine tuning

Drill spindle

Drill machine protection with electrical locking device

Drilling table

Columns

Base plate (processed with T-slots)

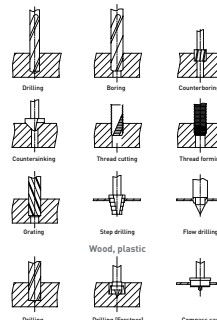
Drill handle with push-button for turning the feed rate on/off

Crank for adjusting the table height

Gear rack

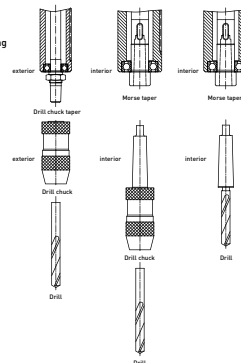
### Work process

Metal, plastic



### Clamping devices

For tools



### Drilling safety



## FLOTT demonstration spaces and training centres ●

Extensive and practice-oriented training and service – at its training centres which feature modern equipment, 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 application-focused solutions for almost all areas of application.

**Current training dates at [www.flott.de](http://www.flott.de).**

Registration for the FLOTT newsletter is a convenient and fast way of being automatically notified of upcoming training dates and current activities at all training centres.

## FLOTT service and support locations ●

A convenient and fast way of getting qualified service support. 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 centres

#### Remscheid

Arnz FLOTT GmbH  
Werkzeugmaschinen  
Administration  
Vieringhausen 131  
42857 Remscheid

Mr Wolschon  
Phone: +49 2191 979-157  
[hj.wolschon@flott.de](mailto:hj.wolschon@flott.de)

#### Heusweiler

Arthur Martini GmbH  
Schacht Dilsburg 5  
66265 Heusweiler  
Phone: +49 6806 9221-53  
[www.a-martini.com](http://www.a-martini.com)

#### Nuremberg

BFS GmbH  
Meckenloher Straße 1  
91126 Rednitzhembach  
Phone: +49 9122 78550  
[www.bfs-maschinen.de](http://www.bfs-maschinen.de)



## Area representatives

### 1 Hamburg

Holger Zutter e. K.  
Industrial  
representatives  
Phone: +49 40 3902066  
hzutter.hh@gmail.com

**FLOTT support:**

Mr Wolschon  
Phone: +49 2191 979-157  
hj.wolschon@flott.de

### 2 Individual support

Mr Wolschon  
Phone: +49 2191 979-157  
hj.wolschon@flott.de

### 3 Individual support

Mr Picarra  
Phone: +49 2191 979-150  
Mobile: +49 163 8334507  
humberto.picarra@flott.de

Mr Wolschon  
Phone: +49 2191 979-157  
hj.wolschon@flott.de

### 4 Seeheim-Jugenheim

Layer OHG  
Phone: +49 6257 8696-0  
info@layer-ohg.de

**FLOTT support:**

Mr Wächter  
Phone: +49 2191 979-159  
volker.waechter@flott.de

### 5 Nuremberg

BFS GmbH  
Phone: +49 9122 78550  
info@bfs-maschinen.de

**FLOTT support:**

Mr Dragano  
Phone: +49 2191 979-153  
toni.dragano@flott.de

### 6 Leinfelden-Echterdingen

Jürgen Krämer  
Phone: +49 711 796476  
j.kraemer.l-e@t-online.de

**FLOTT support:**

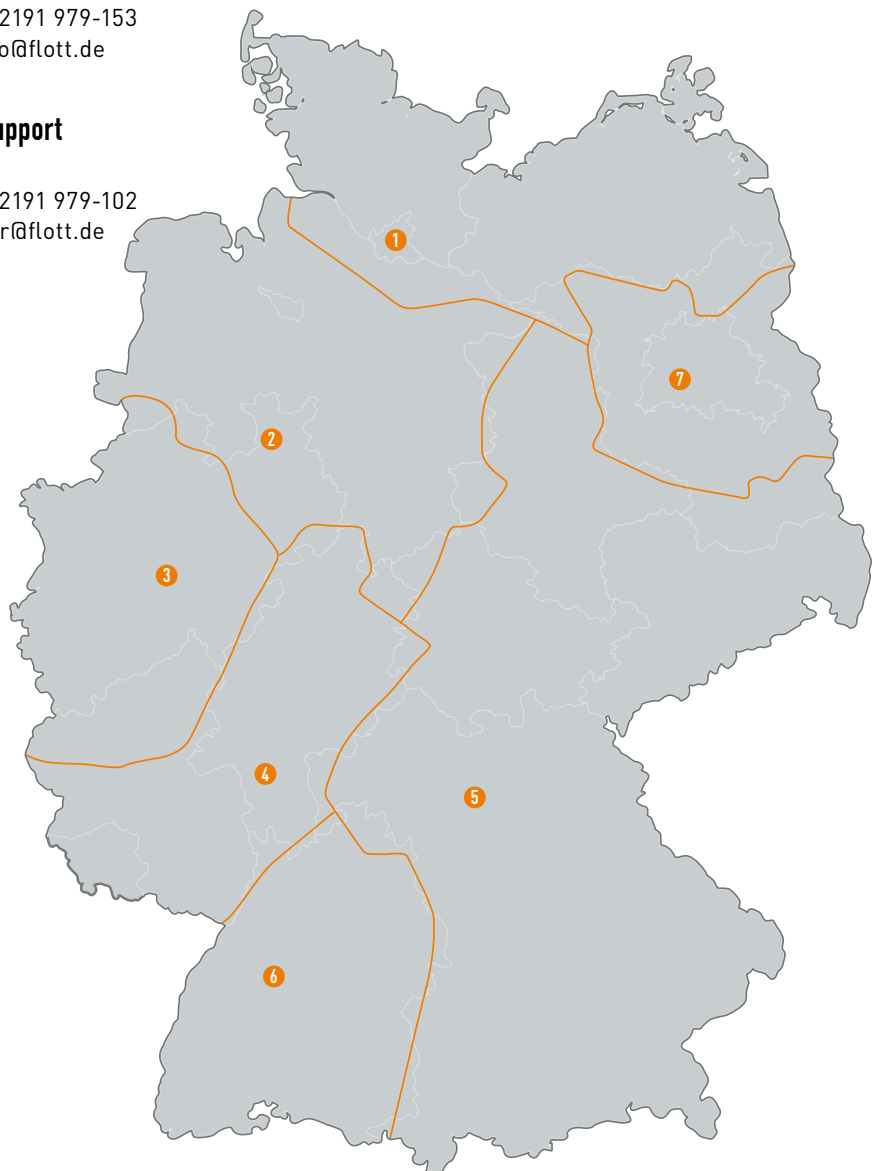
Mr Dragano  
Phone: +49 2191 979-153  
toni.dragano@flott.de

### 7 Individual support

Dr Becker  
Phone: +49 2191 979-102  
peter.becker@flott.de

## FLOTT area representatives

Support and advice is always accessible. With its six area representatives across the country and its office service in Remscheid, FLOTT ensures that it provides an efficient service network and optimum customer proximity.



## Export

**FLOTT support:**

Mr Wächter  
Phone: +49 2191 979-159  
volker.waechter@flott.de

Dr Becker  
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## FLOTT service

Our FLOTT team will be happy to help!

### FLOTT technical service

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**Holger Paucke**

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### FLOTT spare parts service

**Mareike Goerzen**

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**Lorena Tairi**

Phone: +49 2191 46408-120  
lorena.tairi@flott.de

The direct link  
to your  
service partner



Advice via WhatsApp  
It doesn't get any easier than that  
Telephone: +49 (162) 18 54 000



#### Note:

In order to allow us to process your spare parts request as quickly as possible, please keep the **machine number** and the **machine type** at hand!

## Extract from our Terms of Sale

- ▶ Delivery ex works, excluding packaging.  
Shipping location: 42857 Remscheid
- ▶ Extra charges incurred for "seaworthy" packaging.
- ▶ Standard paint (One-component paint)
  - Series TB 10 Eco Plus up to 20 Plus (Hood 7005 and base black RAL 9005)
  - Series from 23 Plus entirely in RAL 7005
  - Grinding machines RAL 9007
  - Saws: Saw frame RAL 7035, Machine body RAL 7005
- ▶ Construction and dimensions are subject to change without notice 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: B 50 MV, GB 50 MV Plus, SB P50 STG MV, GB 70 MV Plus and BFM 40;
  - 12 months for single-shift operation here.
  - 12 months for grinding machines and saws for single-shift operation from delivery, excluding wear parts; 6 months for replacement parts
- ▶ Full Terms and Conditions at [www.flott.de](http://www.flott.de)



## Freight charges\*

### Freight table for Germany \*

Guide values in EUR plus VAT and service costs (transport insurance / tolls, P&P)

Updated 2019

Area post-code	up to 50 kg	up to 100 kg	up to 200 kg	up to 300 kg	up to 400 kg	up to 550 kg
2/3/6/7	55	75	90	125	155	205
0/1/8/9	60	80	125	140	165	215
4/5	50	65	80	105	135	185
*Export freight	on request					

### Shipment with parcel service:

Double grinding machines up to TS 175, except on machine stand

### Forwarding companies

Administration fee in EUR plus VAT.

Updated 2019

Domestic	25
Foreign	50

Subject to change without notice. Errors excepted.

**High Quality –  
made in Germany  
since 1854.**



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Werkzeugmaschinen**

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