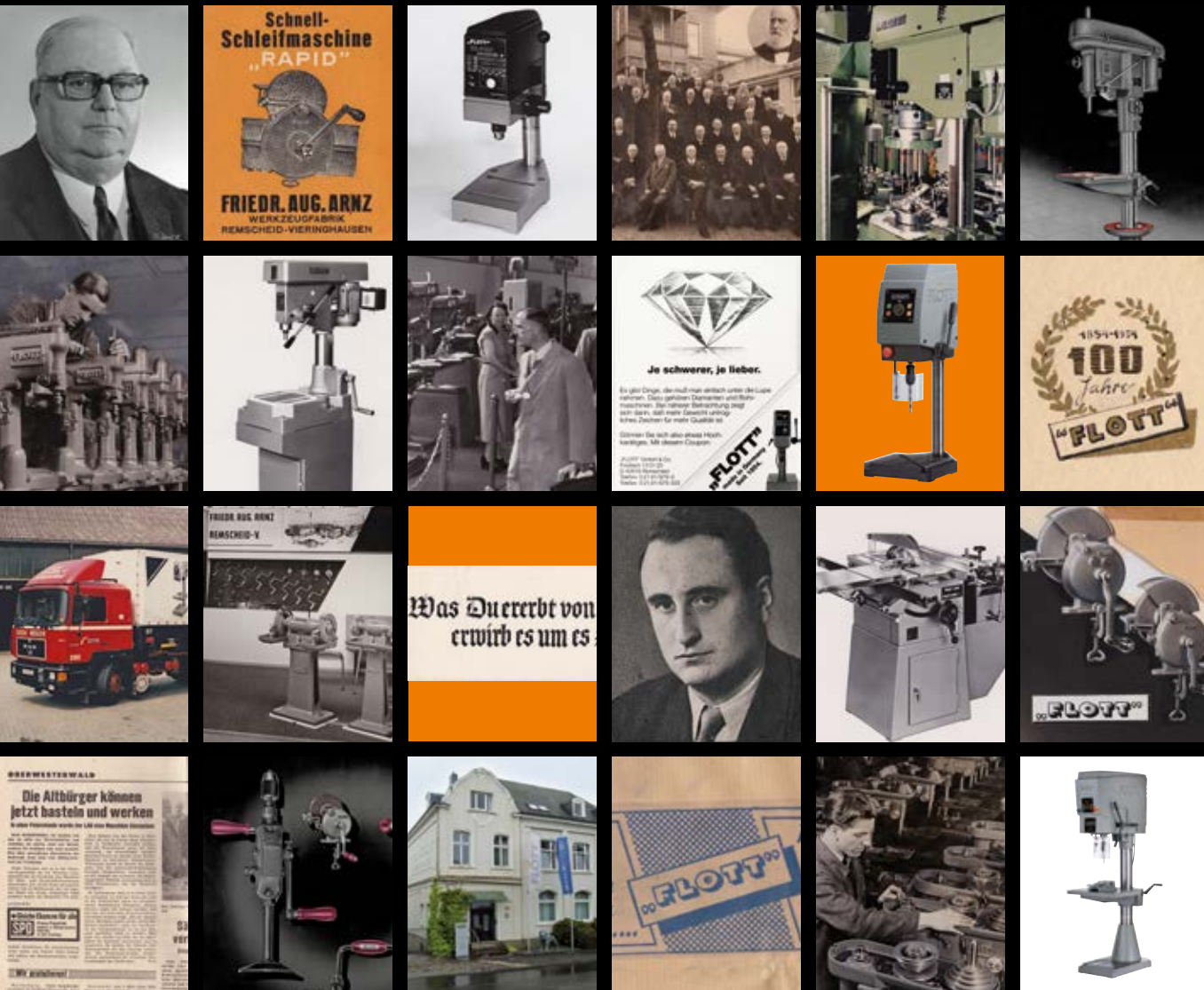


**CA  
TAL  
OG  
UE!**

**TWO THOUSAND AND NINETEEN  
& TWO THOUSAND AND TWENTY**

# We have been in drilling since 165 years



1854 - 2019  
**165** years

# Contents

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

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## Drilling machines contents


Machine	Drilling capacity / normal drilling performance* in mm steel St60/ E335	Thread cutting performance* steel St60/ E335	Revolutions per minute 1/min	Frequency inverter 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 ST6 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 ST6 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 ST6 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


\*steel St60/E335

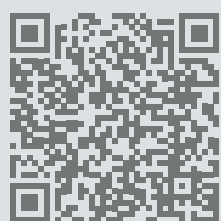
You can find the right drill kits in the technical data for the machine in question.

### Colour description

 Plus series

 P series

 Gear box 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 molded 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 torque 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 CE Industrial Safety Ordinance.
- ▶ All machines are equipped with LED light as standard.
- ▶ Standard interfaces ensure that additional devices can be connected and it is possible link the machines to integrate them into product lines (optional).
- ▶ Electronically controlled 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).

**PLEASE HAVE A CLOSER LOOK  
AT OUR NEW PRODUCTS**  
**on the next pages!**

**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 the best choice in the drilling range of between 1 and 70 mm.

The drilling machine types are **sorted** by drilling and/or thread cutting performance. The key **accessories / special equipment** are listed for each machine type.

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

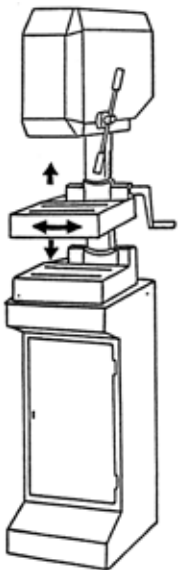
**Modern electronics**, for example, **digital** depth and speed displays, as well as **electronic stepless** drives, have been the standard at FLOTT machines for years.

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

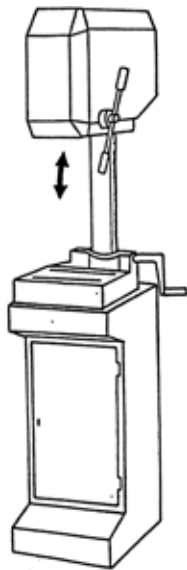
**Safety** has always been a top priority for FLOTT. All FLOTT machines do meet the latest CE labor safety requirements.

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

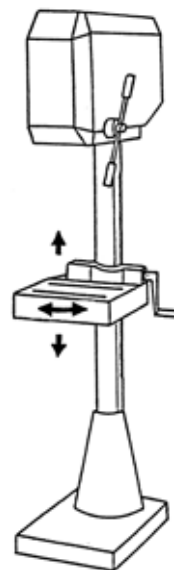
## Models



**TB**  
Bench drill with  
work table



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



**SB**  
Column drill press  
with work table

### Explanation of abbreviations

Flow drilling  
Mechanical feed, with electromagnetic coupling  
Programmable feed with electromagnetic feed coupling  
with electronic controls; digital multi-function display  
Gear box driven drilling machines  
Numeric 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), extendable on request to 4 or 5 years against surcharge**

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

### The control panel with display

- ▶ Clear organized 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

- ▶ Clearly structured 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 pre setted operating modes:

- ▶ Drilling
- ▶ Reaming/rolling
- ▶ Countersinking
- ▶ Flow drilling/Thermal drilling
- ▶ Thread cutting

Additional Mode for individual machine programming



# Drilling machine – vice [felix]



Fig. above: Flott [felix] 100

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

# jugend forscht

1st price 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, it 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 single-phase  
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 light
- ▶ Ergonomic and quickly adjustable depth end stop
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop punch button button
- ▶ Thermal overload protection
- ▶ Under-voltage release
- ▶ Drill protection with micro switch
- ▶ 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 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 action drill chuck  
(1-13 mm), B16  
Rotational accuracy: 0.17 mm  
**Order number 285.133**
- ▶ Quick action drill chuck  
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
Soft wood 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 with LED Display and central knob for easy read out and entry of the speed
- ▶ LED light
- ▶ Ergonomic and quickly adjustable depth end stop
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop punch button
- ▶ Thermal overload protection
- ▶ Under-voltage release
- ▶ Drill protection electronically guarded
- ▶ Connecting cable with two-pin earthed plug (1.2 m)
- ▶ 3-year warranty for single-shift operation

## Special equipment

- ▶ Drill depth fixed end stop for best 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 action drill chuck (1-13 mm), B16  
Rotational accuracy: 0.17 mm  
**Order number 285.133**
- ▶ Quick action drill chuck 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
Soft wood Ø (mm)	40
Spindle speed, stepless, electronically controlled (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 ergonomically inclined front plate
- ▶ LED light
- ▶ Ergonomic and quickly adjustable depth end stop
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop punch button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection electronically guarded
- ▶ Connecting cable with two-pin earthed plug 1.5 m
- ▶ 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 end stop for best 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 action drill chuck (1-13 mm), B16  
Rotational accuracy: 0.17 mm  
**Order number 285.133**
- ▶ Quick action drill chuck 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, electronically controlled (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 ergonomically designed front plate
- ▶ LED light
- ▶ Ergonomic and quickly adjustable depth end stop
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop punch button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with electronically guarding
- ▶ 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 end stop for best 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
<b>Turbo Drill*</b>	
Drilling capacity / normal drilling performance (mm)	6/8 (in E335/ST60)
Thread cutting performance (depends on gradient) max.	M5
Spindle speed, stepless, electronically controlled (1/min)	100-10,000
<b>Order number</b>	<b>212.506</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.

# 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 ergonomically inclined front plate LED light
- ▶ Ergonomic easily adjustable depth end stop
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop punch button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection electronically guarded
- ▶ Connecting cable with two-pin earthed plug
- ▶ 3-year warranty for single-shift operation

## Special equipment

- ▶ Drill depth fixed end stop for best 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 (TB)**  
**Order number 201.160 (TBZ)**

### 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, electronically controlled (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, electronically controlled (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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## Standard equipment

- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head with ergonomically inclined front plate LED lighting
- ▶ Ergonomic easily adjustable depth end stop
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop punch button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection electronically guarded
- ▶ Connecting cable with two-pin earthed plug
- ▶ 3-year warranty for single-shift operation

## Special equipment

- ▶ Drill depth fixed end stop for best 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 (TB)**  
**Order number 201.160 (TBZ)**

### 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, electronically controlled (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, electronically controlled (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 ergonomically inclined front plate
- ▶ LED light
- ▶ Ergonomic quickly adjustable depth end stop
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop punch button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection electronically guarded
- ▶ 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 light with flexible 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 operated switch  
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 voltage 230 V with frequency converter (kW)	0.75
Spindle speed, stepless, electronically controlled (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 with ergonomically inclined front plate
- ▶ LED light
- ▶ Ergonomic quickly adjustable depth end stop
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop punch button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection electronically guarded
- ▶ 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 light with flexible arm  
**Order number 290.020**
- ▶ Coolant system (separate container)  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.340**
- ▶ Foot operated switch  
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 voltage 400 V with frequency converter (kW)	1.5
Spindle speed, stepless, electronically controlled (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



Fig.: TBZ 23 ▶ Plus with special equipment



AVAILABLE  
IMMEDIATELY! **▶ to go**

Fig.: SB 23 ▶ Plus with special equipment

## Standard equipment

- ▶ Main switch
- ▶ Thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head with ergonomically inclined front plate
- ▶ LED light
- ▶ Ergonomic easily adjustable depth end stop
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop punch button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection electronically guarded
- ▶ 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 light with flexible arm  
**Order number 290.020**
- ▶ Coolant system (separate container)  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.340**
- ▶ Foot operated switch  
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 voltage 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 with ergonomically inclined front plate
- ▶ LED light
- ▶ Ergonomic and quickly adjustable depth end stop
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop punch button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection electronically guarded
- ▶ 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 light with flexible arm  
**Order number 290.020**
- ▶ Coolant system (separate container)  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.340**
- ▶ Foot operated switch  
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 voltage 400 V with frequency converter (kW)	1.5
Spindle speed, stepless, electronically controlled (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 with ergonomically inclined front plate
- ▶ LED light
- ▶ Ergonomic and quickly adjustable depth end stop
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop punch button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection electronically guarded
- ▶ 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

- ▶ Multi-functional working 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 operated switch  
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 voltage 400 V with frequency converter (kW)	
3.0	
Spindle speed, stepless, electronically controlled (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

- ▶ Electronically controlled thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality drill head with ergonomically inclined front plate
- ▶ LED light
- ▶ Ergonomic and quickly adjustable depth end stop
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop punch button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Spindle guard electronically controlled
- ▶ 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
- ▶ Easy-to-understand input menu
- ▶ 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

- ▶ Multi functional working 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 operated switch  
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	
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, electronically controlled (1/min)	
R1 (1-stage)	0-1,000
R2 (1-stage)	0-1,600
R3 (2-stage with transmission)	0-4,000
<b>SB 30 NC Plus</b>	
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 punch button
- ▶ Continuous speed control
- ▶ Table height adjustment via toothed rack
- ▶ Connecting cable (1.5 m) with CEE plug
- ▶ Spindle guard with micro switch
- ▶ 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 charge
- ▶ LED light by standard

## Special equipment

- ▶ Motor with additional ventilation  
**Order number 290.617**
- ▶ Multi functional working 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 with integrated coolant system  
Filling quantity: max. 15 l  
Output: max. 30 l/min  
**Order number 290.160B**
- ▶ LED light with flexible 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 available for PV machines only

- ▶ 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 hood with front that is tilted ergonomically
- ▶ LED light
- ▶ Ergonomic and quickly adjustable depth end stop
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop punch button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Spindle guard with electronic control
- ▶ 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**
- ▶ Multifunction working table with vice table, can be rotated 360° with scale, jaw width 120 mm, span width 105 mm, differing column diameter 125 mm  
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 operated switch  
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	
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 Plus

Feed	by hand
Weight (kg)	400
<b>Order number R1</b>	<b>230.530</b>
<b>Order number R2</b>	<b>230.531</b>
<b>Order number R3</b>	<b>230.532</b>

### SB 40 MV Plus

Feed (mm/rotation)	0.10/0.16/0.25
Weight (kg)	420
<b>Order number R1</b>	<b>230.535</b>
<b>Order number R2</b>	<b>230.536</b>
<b>Order number R3</b>	<b>230.537</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 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

- ▶ Electronically controlled thread cutting system
- ▶ Control panel with OLED display
- ▶ Robust, high-quality hood with front that is tilted ergonomically
- ▶ LED light
- ▶ Ergonomic and quickly adjustable depth end stop
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop punch button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with micro switch
- ▶ 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
- ▶ 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**
- ▶ Multi functional working table with vice table, can be rotated 360° with scale, jaw width 120 mm, span width 105 mm, differing column diameter 125 mm Table surface 350 x 350 mm  
**Order number 290.135**
- ▶ Machined base plate with 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 operated switch  
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**
- ▶ Warranty extension 4 years  
**Order number 290.018**

## 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	
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 end 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 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 punch button
- ▶ Continuous speed control
- ▶ Connecting cable (1.5 m) with CEE plug
- ▶ Drill protection with micro switch
- ▶ 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 light as standard

## Special equipment

- ▶ Motor with additional ventilation  
**Order number 290.619**
- ▶ Multifunctional working table with vice, 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 light with flexible 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 available for PV electronic machines only

- ▶ 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

**Order number transparent hood, R1 205.226**

**Order number transparent hood, R2 205.227**

**Order number grey hood, R1 205.208**

**Order number grey hood, R2 205.209**

**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 light
- ▶ 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 micro switch
- ▶ 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 400 V with frequency converter (kW)	1.5
Spindle speed, stepless (1/min)	40-4,000

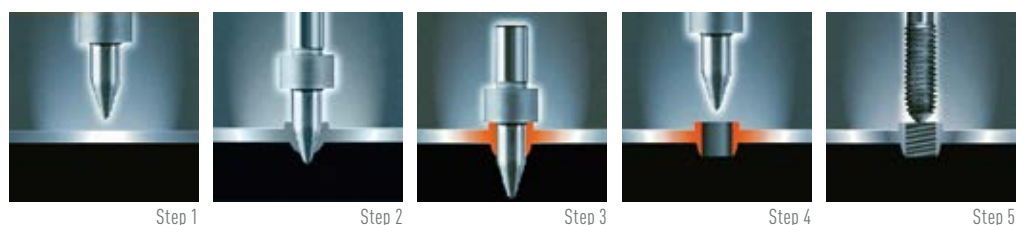
### SB 20 FB Plus

Spindle/table (mm)	160-880
Machine 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 with ergonomically inclined front plate
- ▶ LED light
- ▶ Ergonomic easily adjustable depth end stop
- ▶ Continuous speed regulation via the central knob
- ▶ Emergency stop punch button
- ▶ Thermal overload protection
- ▶ Spindle stop
- ▶ Drill protection with micro switch
- ▶ 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

- ▶ Multifunctional working table with vice, 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 drilling 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 undervoltage release
- ▶ Emergency stop punch button
- ▶ Drill protection with micro switch
- ▶ 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-months 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 drilling 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 undervoltage release
- ▶ Emergency stop punch button
- ▶ Drill protection with micro switch
- ▶ 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-months 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
<b>GB 50 MV Plus</b>	
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
- ▶ Machine light
- ▶ Circuit breaker with undervoltage release
- ▶ Emergency stop punch button
- ▶ Drill protection with micro switch
- ▶ 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-months 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 drilling 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 undervoltage release
- ▶ Emergency stop punch button
- ▶ Drill protection with micro switch
- ▶ 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-months 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
<b>GB 70 MV Plus</b>	
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 undervoltage release
- ▶ Emergency stop punch button
- ▶ Drill protection with micro switch
- ▶ 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 with feed on/off function on cross handle
- ▶ 12-months 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-Y 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 (cm <sup>3</sup> /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, 400 V (kW)	0.9/1.5
Spindle speed in 16 steps (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 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 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: Drilling, thread cutting and flow drilling manually

**FLOTT Drilling lines BS 15plus are designed individually as per your requirements.**

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

## Technical data

Infeed conveyor roller (L x W) (mm)	5,000 x 330
Outfeed conveyor roller (L x W) (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>
<b>Combination with TBZ 15 Plus*</b>	
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**  
**and**  
**BA 40 CNC ▶ Plus**



## Standard equipment

- ▶ X- and Y-axes NC controlled
- ▶ 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 light
- ▶ Pendulum machining  
2 independent processing areas
- ▶ Chip tray

FLOTT Drilling systems BA 30 CNC and BA 40 CNC are designed individually as per 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) (mm)	0.1

### Combination with SB 30 NC Plus

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

### 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
<b>Order no.:</b>	<b>on request</b>

\* The drilling machines are fitted with a frequency converter and comply with standards DIN E 55011-20 and AT 2017

# 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

FLOTT gang drilling machines are designed individually as per 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. Available for machines with column diameter from 82mm and up.



Order number 290.378

### Option 6

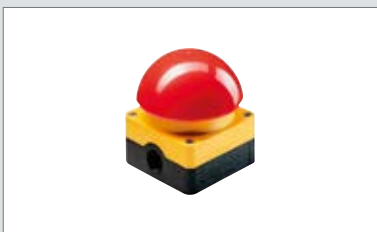
Column extension Ø 82 max. extension 150 mm



Order number 296.287

### Option 3

Foot operated switch with Emergency off function (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 operated switch, function following FLOTT technical advise and your requirements



Order number on request

### Option 8

Column extension Ø 125 max. extension 300 mm



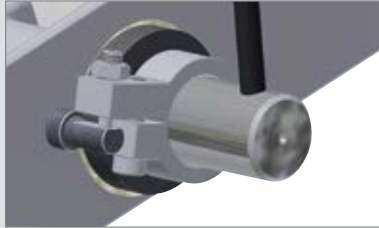
Order number 296.289




**Advice via WhatsApp**  
**It couldn't be easier**   
 Phone: +49 (162) 18 54 000 

### Option 9

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



Order number 212.716

### Option 13

**Extended warranty**  
5 years



Order number 290.019

### Option 10

**Special colour**  
Base (One component paint as per RAL color chart)



Order number 290.200

### Option 14

**Combination drilling table for 110 columns**  
with vice and square table, rotatable 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, rotatable 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 up, except SB 20 FB and SB 30 FB/FB NC, and all gear-box machines
- ▶ 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 loadable 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**



Order number 281.105

### Drilling machine vice Flott [felix]

#### [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 support

- ▶ 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 support

- ▶ 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

- ▶ Span width: 0.5-8 mm
- ▶ Socket B12 for turbo drill
- ▶ Concentricity: 0.20 mm

Order number 285.103

### Precision keyless chuck

- ▶ Sanded, self-tensioning
- ▶ Span width: 0.5-6 mm
- ▶ Socket B12
- ▶ Concentricity: 0.05 mm

Order number 285.104



Order number 285.064

### Precision quick-change drill chuck sanded, self tightening, for clockwise and counter-clockwise work rotation max. 8,000 1/min.

- ▶ Span width: 1-13 mm
- ▶ Socket B16
- ▶ Concentricity: 0.06 mm

Order number 285.064



## Accessories



Order number 285.133

### Keyless chuck, self-tensioning

- ▶ Span width: 1-13 mm
- ▶ Socket B16
- ▶ Concentricity: 0.17 mm

Order number 285.133

### Keyless chuck, self-tensioning

- ▶ Span width: 3-16 mm
- ▶ Socket B18
- ▶ Concentricity: 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 compression and tension  
Suitable for clockwise and counter-clockwise work**



Order number 285.083

**GBF 12/MK 2**

- ▶ Clamping range 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 range 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 range M10 - M30
- ▶ without gripping collet

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



Order number 285.089

## 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 split and extendable drill guard with micro-switch locking

**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 (Betriebsstättenverordnung) (Section 4 Para. 1) of 01.06.2015:

Folding away the drill guard shuts off the machine.

**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

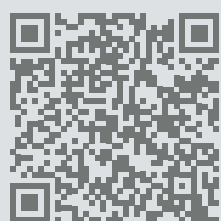
## Grinding machines contents

Double grinding machine	Grinding disc size	Motor speed 1/min	Motor AC 230 V	Motor three-phase Voltage 400 V	Weight kg	Suction socket Ø mm	Page
	mm		kW	kW			
<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>	175 x 25 x 32	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

Belt sanders	Belt length	Belt width mm	Motor AC 230 V	Motor three-phase Voltage 400 V	Weight kg	Suction socket Ø mm	Page
	mm		kW	kW			
<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

Brush deburring machine	Brush diameter mm	Brush width normal mm	Motor speed 1/min	Drive power (Three-phase motor) Voltage 400 V	Weight kg	Page
				kW		
<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 concerned.



# Grinding technology

# Double grinding machine

TS 150 SW /

TS 175 SW

TS 150 SD P /

TS 175 SD P



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Figure below: TS 150 SW / TS 150 SD P

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



## Standard equipment

- ▶ Smooth running and maintenance free motor
- ▶ Protective hood closed at the sides
- ▶ Stable and adjustable work piece support
- ▶ High safety level
- ▶ 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)
- ▶ One coarse and one fine grinding wheel preinstalled
- ▶ 12-months warranty for single-shift operation

## Accessories

- ▶ Machine stand with water dip tank,  
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**
- ▶ Wheel dresser  
**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 socket 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



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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 running and maintenance-free motor
- ▶ Protective hood closed at the sides
- ▶ Adjustable work piece support
- ▶ High safety level
- ▶ 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
- ▶ One coarse and one fine grinding wheel preinstalled
- ▶ 12-months 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 water dip tank, Dimensions: 355 x 300 mm, Weight: 12 kg (only TS 200 SD P)  
**Order number 350.435**
- ▶ Machine stand with water dip tank, 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 socket 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**
- ▶ Wheel dresser  
**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



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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 running, maintenance-free motor
- ▶ Protective hood closed at the sides
- ▶ Stable and adjustable work piece support
- ▶ High safety level
- ▶ 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
- ▶ One coarse and one fine grinding wheel preinstalled
- ▶ Machine stand with water dip tank,  
Dimensions: 355 x 300 mm, Weight: 12 kg
- ▶ Dust extraction system MA 400 D
- ▶ EMERGENCY STOP BUTTON and brake
- ▶ 12-months warranty for single-shift operation

**ONE NUMBER**

**ALL-IN!**

**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 running and maintenance-free motor  
**Operating type S1 (continuous operation)**
- ▶ Protective hood closed at the sides
- ▶ Stable and adjustable workpiece support
- ▶ High safety level
- ▶ 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
- ▶ One coarse and one fine grinding wheel preinstalled
- ▶ 12-months 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**
- ▶ Wheel dresser  
**Order number 350.101**
- ▶ Machine stand with water dip tank, Dimensions: 355 x 300 mm, Weight: 12 kg (only TS 175 Pro / TS 200 Pro)  
**Order number 350.435**

## Technical data

Suction socket 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



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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 end stop
- ▶ 1 standard grinding belt (brown), grain 80
- ▶ 1 grinding wheel 250 x 40 x 51 mm, grain 80
- ▶ Spark arrester
- ▶ Connecting cable with CEE plug
- ▶ 12-months 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 water dip tank  
**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



## 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-months 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
<b>Order number</b>	<b>371.760</b>

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



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## Standard equipment

- ▶ High-quality construction
- ▶ The drive roller is cyclical (self-centering grinding belt)
- ▶ Completely vulcanised contact roll for the longest lifetime and best smoothness
- ▶ Changing the grinding belt does not require any tools and is therefore a faster and simple process
- ▶ Stepless 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 available
- ▶ 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 (m <sup>3</sup> /h)	–
Suction motor (kW)	–
Weight (kg)	80
<b>Order number</b>	<b>374.000</b>

### BSM 75 A

Belt speed (m/s)	30
Motor three-phase current, 400 V (kW)	3.75
Suction output (m <sup>3</sup> /h)	approx. 630
Suction motor (kW)	0.37
Weight (kg)	90
<b>Order number</b>	<b>374.001</b>

### BSM 75 A pol.

Belt speed (m/s)	15/30
Motor three-phase current, 400 V (kW)	3.0/3.75
Suction output (m <sup>3</sup> /h)	approx. 630
Suction motor (kW)	0.37
Weight (kg)	105
<b>Order number</b>	<b>374.002</b>

**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.



Fig.: BSM 150 A with suction system

Fig.: BSM 150 A Pol with option

## Standard equipment

- ▶ High-quality construction
- ▶ The drive roller is cyclical self centering grinding belt
- ▶ Completely vulcanised contact roll for the longest lifetime and best smoothness
- ▶ Changing the grinding belt does not require any tools and is therefore a faster and simple process
- ▶ Stepless 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 available
- ▶ Circuit breaker with CEE industrial connector incl. phase inverter
- ▶ Motor brake (except BSM 150 A pol)
- ▶ Incl. grinding belt grain 60
- ▶ Dust bag (only for models 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**
- ▶ Grinding belt for steel and grey cast iron:

## 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 (m <sup>3</sup> /h)	–
Suction motor (kW)	–
Weight (kg)	90
<b>Order number</b>	<b>374.020</b>

### BSM 150 A

Belt speed (m/s)	30
Motor three-phase current, 400 V (kW)	3.75
Suction output (m <sup>3</sup> /h)	approx. 630
Suction motor (kW)	0.37
Weight (kg)	100
<b>Order number</b>	<b>374.021</b>

### BSM 150 A pol.

Belt speed (m/s)	15/30
Motor three-phase current, 400 V (kW)	3.0/3.75
Suction output (m <sup>3</sup> /h)	approx. 630
Suction motor (kW)	0.37
Weight (kg)	105
<b>Order number</b>	<b>374.022</b>

**Additional accessories from Page 100**

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 for brush readjustment to the workpiece support
- ▶ Combined workpiece support both for round material (prism), flat and rectangular profiles (movable)
- ▶ Movable cover plate to adapt opening to material size
- ▶ Ø 80 mm suction piece with lid (for connection to external suction system)
- ▶ Machine colour:
  - Machine body RAL 7035
  - Side cover: RAL 7005
- ▶ 1 set of machine feet (4 pieces) with levelling screw
- ▶ 1 round deburring brush 250 x 60 / 0.35 mm steel wire corrugated
- ▶ Connecting cable with CEE plug
- ▶ Incl. operating tool
- ▶ 12-months 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**

## 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
- ▶ Settable and fixable tool support height to fit the material
- ▶ Lockable and arrestable hand wheel for brush setting to the tool support
- ▶ Easy removable drawer for dust residues
- ▶ Robust sheet steel housing construction with preparation (opening) for connection to an external suction system
- ▶ Easy brush change through easy accessible foldable flaps
- ▶ Machine colour:
  - Machine body RAL 7035
  - Side cover: RAL 7005
- ▶ 1 set of machine feet (4 pieces) with levelling screw
- ▶ 3 round deburring brushes 250 x 60 / 0.35 mm steel wire corrugated
- ▶ Connecting cable with CEE plug
- ▶ Incl. operating tool
- ▶ 12-months 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 Pro\*

Brush diameter (mm)	250 (3 pieces)
Brush width normal (mm)	60
Socket bore (mm)	50.8
Working height (mm)	1,050
Speed, stepless (rpm)	600-2,700
Drive power, frequency-regulated (kW)	3
Electrical connection (V/Hz)	400/50
Weight (kg)	410
Machine 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 couldn't be easier  
Phone: +49 (162) 18 54 000



## Sawing contents

Metal band saws	Band saw band size mm	○* at 0° mm	□* at 0° mm	□* at 0° mm	Page
<b>HBS 225 A</b>	2,720 x 27 x 0.9	230	275 x 200	230 x 230	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

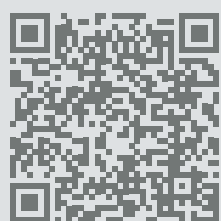
Metal circular saw	Saw blade Ø mm	○* at 0° mm	□* at 0° mm	□* at 0° mm	Page
<b>KS315M</b>	315 x 32	95	100 x 70	80	122

Portable metal band saws	Band saw band size mm	○* at 0° mm	□* at 0° mm	□* at 0° mm	Page
<b>PBS 120 Plus</b>	1,620 x 13 x 0.65	120	60 x 70	120 x 120	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 band is guided precisely using sanded carbide plates



**Saw band break monitoring**  
The saw band tension is fitted with a saw band tension and saw band 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 band 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 band guides, sanded (adjustable)
- ▶ Large, round supporting table, rotates along with mitre cuts, scaled mitre angle readout
- ▶ Easily removable chip collection container
- ▶ Material stop 500 mm with scale
- ▶ Incl. saw band combination tothing 4/6
- ▶ Machine colour:
  - Saw frame RAL 7035,
  - Machine body RAL 7005
- ▶ 12-months 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

- ▶ Band 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 band 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>

**Additional accessories** From Page 126

## Sawing area

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

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

Order number	Dimensions in mm	Combination tothing	VPE set = 2 pcs.
570.200	2,720 x 27 x 0.9	4/6	1
570.201	2,720 x 27 x 0.9	5/8	1
570.202	2,720 x 27 x 0.9	6/10	1
570.203	2,720 x 27 x 0.9	10/14	1

<sup>1</sup> 1 Additional saw band 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 band guides, adjustable
- ▶ Quick-change vice, sliding
- ▶ Large, heavy, round supporting table, rotates along with mitre cuts with the fixed cutting channel, scaled mitre readout
- ▶ Mitre settings and clamping are manual
- ▶ Removable chip collection trough
- ▶ Electric coolant pump
- ▶ Material stop 500 mm with scale
- ▶ Including one saw band with combination toothing 4/6
- ▶ Machine colour:
  - Saw frame RAL 7035,
  - Machine body RAL 7005
- ▶ 12-months 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

- ▶ Band 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 band 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
<b>Order number</b>	<b>570.005</b>
<b>Additional accessories</b>	<b>From Page 126</b>

## Sawing area

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

## HSS Bi-metal (M42) saw band <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> 1 Additional saw band 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
- ▶ Fixed vertical rollers  
Order number 570.188

# FLOTT

## Metal band saw

### HBS 250 HA



AVAILABLE  
IMMEDIATELY! **to go**



Mitre display



Saw band guide  
made from carbide



Laser line for cutting  
(optional)



LED light  
for the working area  
(optional)



Pistol for rinsing the chips  
(optional)

## Standard equipment

- ▶ Fully hydraulic lowering and lifting system for the saw frame
- ▶ 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 band guides, adjustable
- ▶ Electric coolant pump
- ▶ Manual band tensioning with display, including electrical saw band 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, scaled
- ▶ Material stop 500 mm with scale
- ▶ Incl. saw band combination tothing 4/6
- ▶ Machine colour:
  - Saw frame RAL 7035,
  - Machine body RAL 7005
- ▶ 12-months 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

- ▶ Band 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 band 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
<b>Order number</b>	<b>570.010</b>

**Additional accessories** From Page 126

## Sawing area

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

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

Order number	Dimensions in mm	Combination tothing	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> 1 Additional saw band 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
- ▶ Fixed 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 band 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 band 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
- ▶ Band tension and saw band break monitoring system
- ▶ Integrated coolant supply (30 l tank capacity)
- ▶ Easily removable chip collection trough
- ▶ Hydraulic Band tension display
- ▶ LED work light
- ▶ Digital mitre display
- ▶ Incl. saw band combination tothing 4/6
- ▶ Machine colour:
  - Saw frame RAL 7035,
  - Machine body RAL 7005
- ▶ 12-months 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 band 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
<b>Order number</b>	<b>570.525</b>
<b>Additional accessories</b>	<b>From Page 126</b>

## 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 band <sup>1</sup>

Order number	Dimensions in mm	Combination tothing	VPE set = 2 pcs.
570.213	4,780 x 34 x 1.1	2/3	1
570.214	4,780 x 34 x 1.1	3/4	1
570.215	4,780 x 34 x 1.1	4/6	1
570.216	4,780 x 34 x 1.1	5/8	1
570.217	4,780 x 34 x 1.1	8/12	1

<sup>1</sup> 1 Additional saw band 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 band 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 band 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
- ▶ Band tension and saw band break monitoring system
- ▶ Easily removable chip collection trough
- ▶ Hydraulic Band tension display
- ▶ Integrated coolant supply (30 l tank capacity)
- ▶ LED work light
- ▶ Digital mitre display
- ▶ Incl. saw band combination tothing 3/4
- ▶ Machine colour:
  - Saw frame RAL 7035,
  - Machine body RAL 7005
- ▶ 12-months warranty for single-shift operation

## Special equipment

- ▶ Laser line for cutting  
Order number 570.109
- ▶ Clamping power 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 band 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
<b>Order number</b>	<b>570.525</b>
<b>Additional accessories</b>	<b>From Page 126</b>

## Sawing area

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

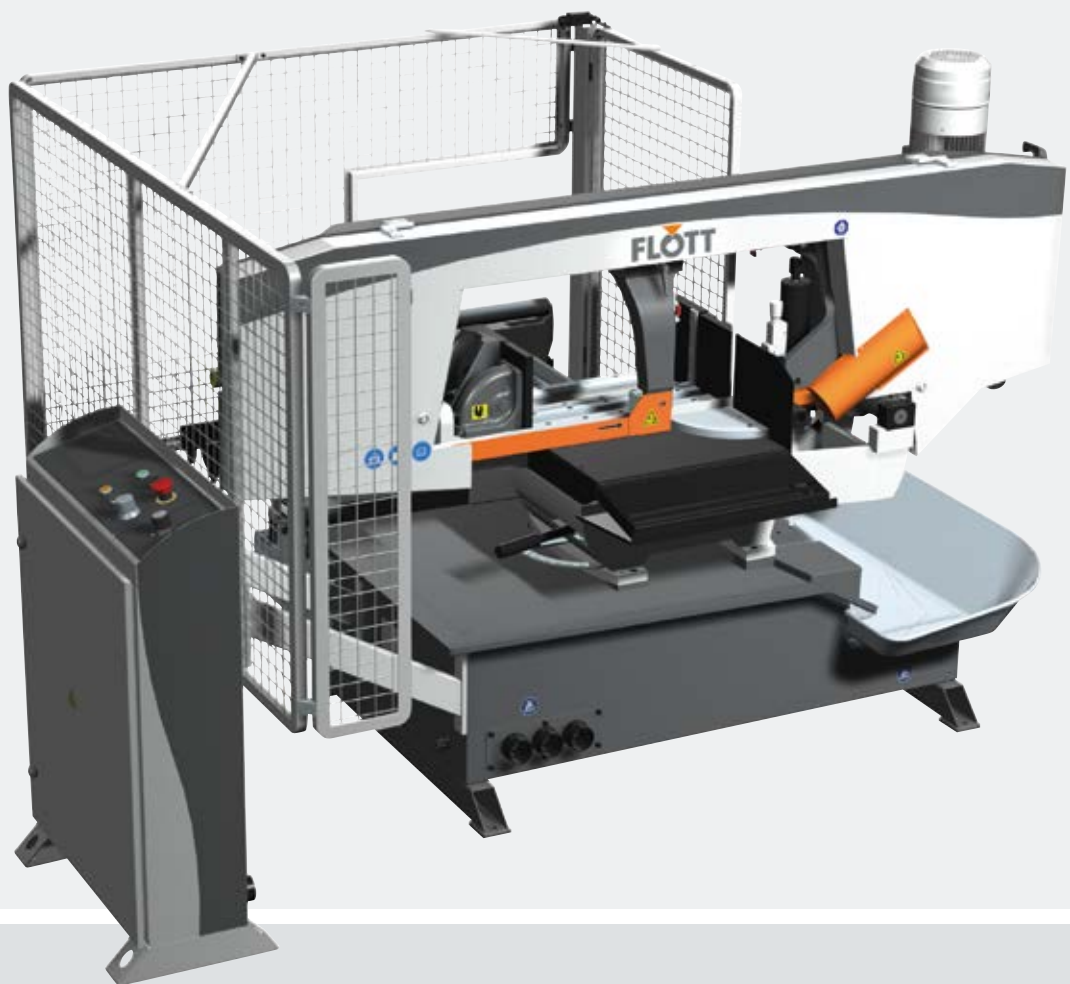
## HSS Bi-metal (M42) saw band <sup>1</sup>

Order number	Dimensions in mm	Combination tothing	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> 1 Additional saw band 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
- ▶ Fixed 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
- ▶ Residual material length: 60 mm
- ▶ The smallest cut piece (L x H): 15 x 5 mm
- ▶ Hydraulic Hydraulic full-lift cylinder for the vice (Pull-down design)
- ▶ Cut feed including automatic cutting pressure regulation
- ▶ Double-pump hydraulic unit
- ▶ Precisely sanded carbide saw band guides (adjustable)
- ▶ Clamping pressure regulation for vice
- ▶ Floating vice
- ▶ Band tension and saw band break monitoring system
- ▶ Easily removable chip collection trough
- ▶ Integrated coolant supply (30 l tank capacity)
- ▶ LED work light
- ▶ Incl. saw band combination tothing 4/6
- ▶ Machine colour:
  - Saw frame RAL 7035,
  - Machine body RAL 7005
- ▶ 12-months warranty for single-shift operation

## Special equipment




- ▶ Hydraulic bundle tensioning device  
Order number 570.064
- ▶ Hydraulic band 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 band 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
<b>Order number</b>	<b>570.025</b>
<b>Additional accessories</b>	<b>From Page 126</b>

## 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 band <sup>1</sup>

Order number	Dimensions in mm	Combination tothing	VPE set = 2 pcs.
570.213	4,780 x 34 x 1.1	2/3	1
570.214	4,780 x 34 x 1.1	3/4	1
570.215	4,780 x 34 x 1.1	4/6	1
570.216	4,780 x 34 x 1.1	5/8	1
570.217	4,780 x 34 x 1.1	8/12	1

<sup>1</sup> 1 Additional saw band 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 band guiding for optimum cutting results
- ▶ Band tension and saw band 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
- ▶ Residual material 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 band combination tothing 4/6
- ▶ Machine colour:
  - Saw frame RAL 7035,
  - Machine body RAL 7005
- ▶ 12-months warranty for single-shift operation

## Special equipment

- ▶ Saw feed speed display  
Order number 570.063
- ▶ Micro spraying system 24 V  
Order number 570.254
- ▶ Third coolant supply  
Order number 570.173
- ▶ Chip rinsing pistol  
Order number 570.110
- ▶ Hydraulic band tension display  
Order number 570.065




## Technical data

### HBS 350 SANC

Motor three-phase current, 400 V, frequency-regulated (kW)	3
Saw band 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
<b>Order number</b>	<b>570.030</b>

**Additional accessories** From Page 126

## Sawing area

	0°
	350
	420 x 350
	350 x 350

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

Order number	Dimensions in mm	Combination tothing	VPE set = 2 pcs.
570.213	4,780 x 34 x 1.1	2/3	1
570.214	4,780 x 34 x 1.1	3/4	1
570.215	4,780 x 34 x 1.1	4/6	1
570.216	4,780 x 34 x 1.1	5/8	1
570.217	4,780 x 34 x 1.1	8/12	1

<sup>1</sup> 1 Additional saw band 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 band guiding for optimum cutting results
- ▶ Synchronous powered chip removal brush
- ▶ Band tension and saw band 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
- ▶ Residual material 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 band combination tothing 3/4
- ▶ Machine colour:
  - Saw frame RAL 7035,
  - Machine body RAL 7005
- ▶ 12-months warranty for single-shift operation

## Special equipment




- ▶ Saw feed speed display  
Order number 570.063
- ▶ Micro spraying system 24 V  
Order number 570.254
- ▶ Third 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 band 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
<b>Order number</b>	<b>570.035</b>
<b>Additional accessories</b>	<b>From Page 126</b>

## Sawing area

	0°
	450
	520 x 450
	450 x 450

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

Order number	Dimensions in mm	Combination tothing	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

<sup>1</sup> 1 Additional saw band 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
- ▶ Hard rubber coated tread
- ▶ Hardened and sanded guiding jaws
- ▶ LED workspace light
- ▶ Height-adjustable guide arm
- ▶ Machine colour RAL 7005 / RAL 7035
- ▶ 12-months warranty for single-shift operation

## Special equipment

- ▶ Manually (with crank) movable table  
**Order number 410.032**
- ▶ Saw band 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 band: 3,600 x 13 x 0.9 mm, 5 pieces, Tothing 14 teeth  
**Order number 410.040**
- ▶ Band saw band: 3,600 x 13 x 0.9 mm, 5 pieces, Tothing 10/14 teeth  
**Order number 410.041**
- ▶ Band saw band: 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 band 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-months 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)	41/82
Machine dimension with underframe without VP (mm)	1,000 x 1,100 x 1,800
Machine dimensions with underframe with VP (mm)	630 x 1,030 x 880
<b>Not included in scope of delivery</b>	
Saw band (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
- ▶ Carbide saw band guide made from carbide
- ▶ Cast iron vice with quick-release lever
- ▶ Optional a longitudinal stop
- ▶ Saw band cooling at the processing location
- ▶ 12-months warranty for single-shift operation

## Accessories




- ▶ Underframe  
Order number 570.508
- ▶ Coolant trough  
Order number 570.509
- ▶ Material end stop 300 mm  
Order number 570.510
- ▶ Conveyor adaptor left side, left  
Order number 570.511
- ▶ Conveyor adaptor left side, right  
Order number 570.512
- ▶ Roller conveyor, 2 m (150 kg/m)  
Order number 570.507

## Technical data

### PBS 120 Plus

Band speed (m/min)	35/75
Band saw band 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
<b>Order number</b>	<b>570.505</b>

## Sawing area

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

## Metal band saw band <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> 1 Additional saw band on request

## Accessories

### Roller conveyor system L-SR/K330

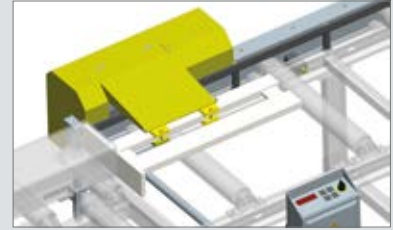
Highly flexible solution for handling tasks with medium-duty materials. Thanks to the unique profile system, the roller conveyors can be adapted to customer requirements very easily.



on request

### Digital measuring stop

Digital material stop with handwheel and pneumatic brake



on request

### Stop systems

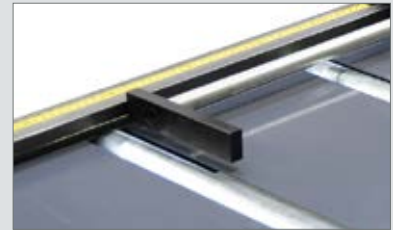
Stop systems – from simple, convenient, manual measurement units to NC-controlled modern measurement systems, including programme storage.



on request

### Manual measuring stop

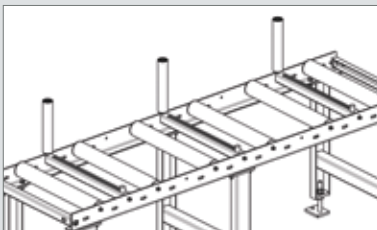
The contact surface for the stop ensures that the material can be fixed securely before cutting to the desired length.



on request

### Roll-off safety

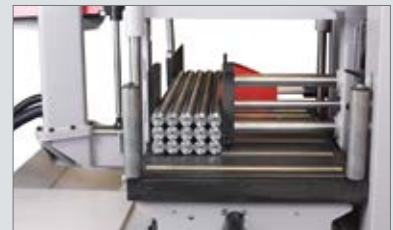
The roll-off safety system serves to prevent the pipes from rolling off in an uncontrolled manner and the associated danger that this creates for the operating personnel and persons in close proximity.



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 characteristics, the processed material 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 couldn't be easier

Phone: +49 (162) 18 54 000



## Information contents

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Education and further training	131
FLOTT demonstration and training facilities	132
Area representatives	133
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Extract from the Terms of Sale	135



## 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**



*J. J. J.*  
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 must be mandatorily 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

Winner of the **Industrial Safety Award 2019**

**FLOTT** [felix]



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

- ▶ Standard with emergency off push button and optional foot operated emergency off push button
- ▶ The grinding wheels come to a standstill within just a few seconds



Double grinding machine



Belt sander

### Belt grinder with brake

- ▶ The grinding comes to a standstill within just a few seconds
- ▶ Tool-free belt change

 Advice via WhatsApp  
It couldn't be easier  
Phone: +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 Poster

This poster 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 posters are delivered free of charge.

# Drilling with FLOTT

Werkzeugmaschinen

#### Designs

TB bench drill with drilling table  
TBZ bench drill without drilling table  
SB column drill press

#### Work process

Metal, plastic

#### Drive systems

Stepless mechanical drive without transmission  
Stepless mechanical drive with transmission  
Stepless electric drive without transmission  
Stepless electric drive with transmission

#### Clamping devices

For tools

#### Display and control panel

#### Drilling safety

When drilling, always take care to ensure that you do not get drawn in to the machine

#### Extract from the FLOTT Programme Drilling, grinding and sawing:

Arnz FLOTT GmbH  
Werkzeugmaschinen

Vieringhausen 131  
D-42857 Remscheid

www.flott.de · info@flott.de  
Phone +49 2191/979-0 · Fax +49 2191/979-222

## FLOTT demonstration and training facilities ●

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.

### 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)

## 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 issues via its support locations, offering fast and efficient solutions and guaranteeing convenient processing of all service work and repairs.



## 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 Bielefeld

Vogt Industrie-  
vertretungen GmbH  
Phone: +49 521 443932

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### 3 Individual support

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Mobile: +49 163 8334507  
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Mr Wolschon  
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hj.wolschon@flott.de

### 4 Seeheim-Jugenheim

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volker.waechter@flott.de

## Export

**FLOTT support:**

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Mr Schmidt  
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til.schmidt@flott.de

### 5 Nuremberg

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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:**

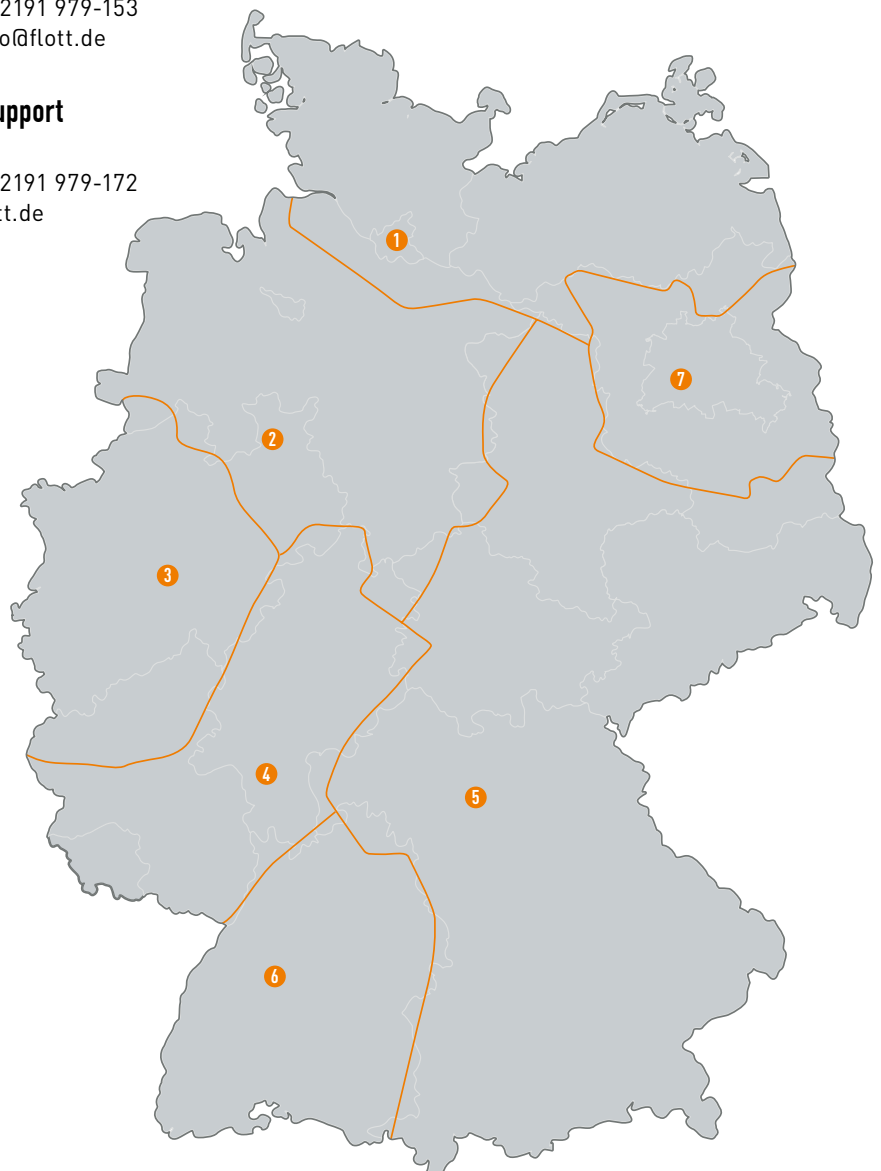
Mr Dragano  
Phone: +49 2191 979-153  
toni.dragano@flott.de

### 7 Individual support

Mr Arnz  
Phone: +49 2191 979-172  
jp.arnz@flott.de

## FLOTT area representatives

Support and advice is always accessible. With its six area representatives across the country and its in-house service in Remscheid, FLOTT ensures availability of an efficient service network and optimum customer proximity.



## FLOTT service

Our FLOTT team will be happy to help!



Advice via WhatsApp  
It couldn't be easier  
Phone: +49 (162) 18 54 000



### FLOTT technical service

#### Winfried Breidenbach

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#### Ulrich Brücher

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#### Holger Paucke

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

### FLOTT spare parts service

#### Mareike Goerzen

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

#### Lorena Tairi

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

The direct link  
to your  
service partner



### 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 as per RAL chart)
  - 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: GB 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
<b>*Export freight</b>	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

<b>Domestic</b>	25
<b>Foreign</b>	50

Subject to change without notice. Errors excepted.

High Quality –  
made in Germany  
since 1854.

**FLOTT**  
Werkzeugmaschinen

**Arnz FLOTT GmbH**  
**Machine Tools**

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**Advice via WhatsApp**  
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