

TWO THOUSAND AND NINETEEN & TWO THOUSAND AND TWENTY



We have been in drilling since 165 years







Contents

Drilling technology

| Overview of drilling machines | |
|---------------------------------------|-------|
| Drilling technology information | |
| Vice [felix] | 10-11 |
| Drilling technology product groups | 12-57 |
| Drilling lines / CNC drilling systems | 58-63 |
| Special equipment / | |
| Accessories for drilling machines | 64-77 |



Grinding technology

| Overview of grinding machines | 78-79 |
|-----------------------------------|---------|
| Grinding machines product groups | 80-99 |
| Accessories for grinding machines | 100-101 |

Sawing technology

| Overview of sawing machines | 102-103 |
|---------------------------------|---------|
| Sawing machine product group | 104-125 |
| Accessories for sawing machines | 126-127 |

FLOTT information

| Information overview | 128-129 |
|-----------------------------------|---------|
| Safety / training | 130-131 |
| Demonstration and Service centers | |
| Area representatives | |
| Service contacts | |
| Extract from our Terms of Sale | |

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 STG PV elec. | 25/30 | max. M20 | 125-4000 | 0.9/1.45 three-phase current, 400 V, pole-changeable | 36 |
| SB 40 Plus | R1 27/32 R2 25/30 R3 30/35 | R1 max. M30x3.5 R2 max. M24x3 R3 max. M36x4 | 0-1,000 R1 0-1,600 R2 0-4,000 R3 | 4.0 three-phase current, frequency-controlled, (400 V) | 38 |
| SB 40 MV Plus | R1 27/32 R2 25/30 R3 30/35 | R1 max. M30x3.5 R2 max. M24x3 R3 max. M36x4 | 0-1,000 R1 0-1,600 R2 0-4,000 R3 | 4.0 three-phase current, frequency-controlled, (400 V) | 38 |
| SB 40 NC Plus | R1 27/32 R2 25/30 R3 30/35 | R1 max. M30x3.5 R2 max. M24x3 R3 max. M36x4 | 0-1,000 R1 0-1,600 R2 0-4,000 R3 | 4.0 three-phase current, frequency-controlled, (400 V) | 40 |
| SB P40 STG PV elec. | 35/40 | max. M30 | 100-2,000 R1 70-1,400 R2 | 1.5/3.0 three-phase current, 400 V, pole-changeable | 42 |
| SB 20 FB Plus | | M12 | 40-4,000 | 1.5 three-phase current, frequency-controlled, (400 V) | 44 |
| SB 30 FB Plus | | M36x2 | 0-4,000 | 3.0 three-phase current, frequency-controlled, (400 V) | 46 |
| SB 30 FB NC PLUS | | | 0-4,000 | 3.0 three-phase current, frequency-controlled, (400 V) | 46 |
| GB 50 MV | 50 | max. M36 | Gear steps | 3.0 three-phase current, (400 V) | 48 |
| GB 50 MV Plus | 50 | max. M36 | Gear steps | 3.0 three-phase current, (400 V) | 50 |
| SB P50 STG MV | 50 | max. M42 | Gear steps | 4.0 three-phase current, (400 V) | 52 |
| GB 70 MV Plus | 70 | max. M50 | Gear steps | 5.5 three-phase current, (400 V) | 54 |
| BFM 40 | 35 | max. M35 | Gear steps | 0.9/1.5 three-phase current, 400 V, pole-changeable | 56 |
| BS15 | on request | | | | 58 |
| BA30CNC | on request | | | | 60 |
| Gang drilling machine | on request | | | | 62 |

*steel St60/E335

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

Colour description





Drilling technology





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.

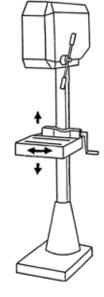
Safety has always been a top priority for FLOTT. All FLOTT machines do meet the latest CE labor safety requirements.

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

Models



TBZ TBZ bench drill without work table with toothed rack



SB

Column drill press with work table

Explanation of abbreviations

Flow drilling

Bench drill with

work table

ΤВ

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]







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.







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 |
| Order number | 281.105 |

Flott [felix] 100

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

Flott [felix] 125

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

Bench drill in single-phase design TB 10 Eco ^{▶ Plus}



- 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 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 |
| Order number | 217.200 |
| Additional accessories | from Page 64 |
| | |

Bench drill TB 10 Basic ^{▶ Plus}



- 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 |
| Order number (with drill head height adjustment) | 217.400 |
| Order number (with work table and table height adjustment via toothed rack) | 217.410 |
| Additional accessories | from Page 64 |

Bench drill TB 10 ► Plus



- 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 |
| Order number | 212.505 |
| 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



- 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 guardening
- 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 |
| Turbo Drill* | |
| 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 |
| Order number | 212.506 |
| Additional accessories | from Page 64 |

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

Bench drill and column drill press TB 13 ► Plus TBZ 13 ► Plus SB 13 ► Plus



- 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 Drilling depth (mm) Thread cutting performance max. (depends on gradient) Speed indicator Drilling depth indicator Drilling depth stop Feed Table height adjustment Motor three-phase current, frequency-regulated, mains connection 230 V (kW)

B16, optional MK II 60 max. M10 digital digital Thrust ring (positive-locking) by hand with toothed rack

TB 13 Plus*

Drilling capacity / normal drilling performance (mm) Distance column-spindle (mm) Column diameter (mm) 70 Useable table surface (W x L) (mm) Distance spindle - work surface (mm) spindle nose - table Spindle nose - table (below) T-slot size (arm), distance (mm), width measurement (mm) T-slot size (foot), width measurement (mm) Spindle speed, stepless, electronically controlled (1/min) Machine dimension (mm) without VP with VP Weight (kg) 62 Order number B16 Order number MK II

TBZ 13 Plus*

| Spindle nose - table (mm) | 125-490 |
|---|---|
| Distance column-spindle (mm) | 214 |
| Column diameter (mm) | 82 |
| Machine dimension (mm) with cabinet with cabinet with VP without cabinet | 370 x 495 x 940 x 570 x 355 x 485 x |
| without cabinet with VP | 940 x 570 x |
| Weight without cabinet (kg) | 70 |
| Order number B16 | 212.650 |
| Order number MK II | 212.655 |

SB 13 Plus*

| electronically controlled [1/min] Machine dimension (mm) | 40-4,000 |
|---|-------------------------|
| electronically controlled (1/min) | 40-4,000 |
| Spindle speed, stepless, | 10,20 |
| T-slot size, distance (mm), width measurement (mm) | Number 2, 125, 13/26 |
| Centre offset (mm) | 20 |
| working surface (mm) | |
| Distance spindle - | max. 750 |
| Useable table surface (W x L) (mm) | 300 x 250 |
| Column diameter (mm) | 70 |
| Distance column-spindle (mm) | 220 |
| performance (mm) | 13/15 (in E335/ST60) |
| Drilling capacity / normal drilling | |
| | |

* The drilling machine is fitted with a frequency converter 21 and complies with the standards DIN EN 55011:2016 & A1:2017.

13/15 (in E335/ST60) 220 300 x 250

0 54

85-370 420 Number 2, 125, 14/26 Cross grooves, number 2, 14/26

40-4,000

400 x 520 x 850 452 x 700 x 1,130 212.500 212.503

x 1,800 x 2,140 x 1,027 x 1,600

Bench drill and column drill press TB 15 ► Plus TBZ 15 ► Plus SB 15 ► Plus



- 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



er 2,

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 with toothed rack Table height adjustment 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 Spindle nose - table (below) | 85-370 420 |
| T-slot size (arm), distance (mm), width measurement (mm) | Number 2, 125, 14/26 |
| T-slot size (foot), width measurement (mm) | Cross grooves, numbe 14/26 |
| Spindle speed, stepless, electronically controlled (1/min) | 40-4,000 |
| Machine dimension (mm) without VP with VP | 400 x 520 x 850 452 x 700 x 1,130 |
| Weight (kg) | 65 |
| Order number | 212.755 |
| | |

TBZ 15 Plus*

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

SB 15 Plus*

| JD 131 (US | |
|---|--|
| 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 with VP | 420 x 540 x 1,780 572 x 936 x 2,142 |
| Weight (kg) | 88 |
| Order number | 212.750 |
| 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



- 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



18/20 (in E335/ST60)

M12

MK II 100

240 82

340 x 280

Digital Digital

by hand

30-3,000

0.75

Number 2, 125, 13/26

adjusted quickly

with toothed rack

Thrust ring that can be

Technical data

| Drilling capacity / normal drilling performance (mm) |
|---|
| Thread cutting performance max. (depends on gradient) |
| Spindle |
| Drilling depth (mm) |
| Distance column-spindle (mm) |
| Column diameter (mm) |
| Useable table surface (W x L) (mm) |
| T-slot size (arm), distance (mm), width measurement (mm) |
| Speed indicator |
| Drilling depth indicator |
| Drilling depth stop |
| |

Feed

Table height adjustment Motor three-phase voltage 230 V with frequency converter (kW) Spindle speed, stepless, electronically controlled (1/min)

TB 18 Plus*

| Distance spindle - working surface (mm) Table Base | 155-415 155-550 |
|---|--------------------|
| 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 |
| Order number | 218.303 |
| | |

TBZ 18 Plus*

| Additional accessories | from Page 64 |
|--|--|
| Order number | 218.308 |
| Weight (kg) | 195 |
| Machine dimensions with VP (mm) | 572 x 936 x 2,142 |
| Machine dimension without VP (mm) | 355 x 705 x 1,825 |
| Spindle/table (mm) | 160-880 |
| SB 18 Plus* | |
| Order number | 218.309 |
| Weight without cabinet (kg) | 155 |
| Machine dimension (mm) with cabinet with cabinet with VP without cabinet without cabinet with VP | 370 x 705 x 1,845 572 x 940 x 2,140 355 x 705 x 1,045 570 x 940 x 1,600 |
| Column diameter (mm) | 82 |
| Distance spindle - working surface (mm) Base | 155-550 |
| | |

* 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



- 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) Thread cutting performance max. (depends on gradient) Spindle Drilling depth (mm) Distance column-spindle (mm) Column diameter (mm) Useable table surface (W x L) (mm) T-slot size (arm), distance (mm), width measurement (mm) Speed indicator Drilling depth indicator Drilling depth stop

MK II 100

20/23 (in E335/ST60)

M14

1.5

40-4,000

240 82 340 x 280 Number 2, 125, 13/26 Digital Digital Thrust ring that can be adjusted quickly by hand with toothed rack

Feed

Table height adjustment Motor three-phase voltage 400 V with frequency converter (kW) Spindle speed, stepless, electronically controlled (1/min)

TB 20 Plus*

| 55-415 55-550 |
|-------------------|
| 355 x 705 x 1,065 |
| 570 x 940 x 1,612 |
| 70 |
| 220.105 |
| 3 |

TBZ 20 Plus*

| Additional accessories | from Page 64 |
|--|--|
| Order number | 220.100 |
| Weight (kg) | 195 |
| Machine dimensions with VP (mm) | 572 x 936 x 2,142 |
| Machine dimension without VP (mm) | 355 x 705 x 1,825 |
| Spindle/table (mm) | 160-880 |
| SB 20 Plus* | |
| Order number | 220.110 |
| Weight without cabinet (kg) | 155 |
| Machine dimension (mm) with cabinet with cabinet with VP without cabinet without cabinet with VP | 370 x 705 x 1,845 572 x 940 x 2,140 355 x 705 x 1,045 570 x 940 x 1,600 |
| Column diameter (mm) | 82 |
| Distance spindle - working surface (mm) Base | 155-550 |
| IDE EUT (US | |

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

Bench drill and column drill press TB 23 ► Plus TBZ 23 ► Plus SB 23 ► Plus AVAILABLE IMMEDIATELY! togo

- 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



23/25 (in E335/ST60)

20/23 (in E335/ST60)

M16x1

M12

MK II

100

260

110

13/26

Digital

Digital

by hand

20-2,000 30-3,000

1.5

420 x 340

Number 2, 125,

Thrust ring that can be adjusted quickly

with toothed rack

Technical data

Drilling capacity / normal drilling performance (mm) R1 R2 Thread cutting performance max. (depends on gradient) R1 R2 Spindle Drilling depth (mm) Distance column-spindle (mm) Column diameter (mm) Useable table surface (W x L) (mm) T-slot size (arm), distance (mm), width measurement (mm) Speed indicator Drilling depth indicator Drilling depth stop

Feed Table height adjustment Motor three-phase voltage 400 V with frequency converter (kW) Spindle speed, stepless (1/min) R1 with transmission R2

TB 23 Plus*

| Distance spindle - working surface (mm) Table Base | 230-590 230-670 |
|---|--------------------|
| 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 |
| Order number R1 | 223.021 |
| Order number R2 | 223.026 |

TBZ 23 Plus*

| Distance spindle - working surface (mm) Base | 230-730 |
|--|--|
| Machine dimension (mm) with cabinet with cabinet with VP without cabinet without cabinet with VP | 430 x 715 x 2,050 637 x 1,096 x 2,120 430 x 715 x 1,250 570 x 940 x 1,600 |
| Weight without cabinet (kg) | 235 |
| Order number R1 | 223.022 |
| Order number R2 | 223.027 |
| 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 |
| Order number R1 | 223.020 |
| Order number R2 | 223.025 |
| 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

- ▶ 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) | 000 500 |
| Table Base | 230-590 230-670 |
| Machine dimension | 230-870 |
| without VP (mm) | 430 x 715 x 1,250 |
| Machine dimensions | |
| with VP (mm) | 570 x 940 x 1,600 |
| Weight (kg) | 250 |
| Order number R1 | 225.011 |
| | |
| 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 1,250 570 x 960 x 1,600 |

| with cabinet with cabinet with VP without cabinet without cabinet with VP | 430 x 715 x 2,050 637 x 1,096 x 2,120 430 x 715 x 1,250 570 x 940 x 1,600 |
|--|--|
| Weight without cabinet (kg) | 235 |
| Order number R1 | 225.012 |
| SB 25 Plus* | |
| Spindle/table | 230-850 |
| Machine dimension without VP (mm) | 430 x 715 x 1,800 |
| NA 1.1 11 1 | |

| Additional accessories | from Page 64 |
|------------------------------------|---------------------|
| Order number R1 | 225.010 |
| Weight (kg) | 290 |
| Machine dimensions with VP (mm) | 670 x 1,100 x 2,140 |
| without VP (mm) | 430 X / 15 X 1,800 |

* 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



- 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) R2 (measured Torque Nm) R3 (measured Torque Nm) | 27/32 (in E335/ST60) (100) 25/30 (in E335/ST60) (70) 30/35 (in E335/ST60) (200) |
|--|---|
| Thread cutting performance max. (depends on gradient) R1 R2 R3 | M24x3 M20x2.5 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) R2 (1-stage) R3 (2-stage with transmission) | 0-1,000 0-1,600 0-4,000 |
| SB 30 Plus | |
| Feed | by hand |
| Weight (kg) | 370 |
| Order number R1 | 230.500 |
| Order number R2 | 230.501 |
| Order number R3 | 230.502 |
| SB 30 MV Plus | |
| Feed (mm/rotation) | 0.10/0.16/0.25 |
| Weight (kg) | 385 |
| Order number R1 | 230.505 |

| Weight (kg) | 385 |
|------------------------|--------------|
| Order number R1 | 230.505 |
| Order number R2 | 230.506 |
| Order number R3 | 230.507 |
| 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



- 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) R2 (measured Torque Nm) R3 (measured Torque Nm) | 27/32 (in E335/ST60) (100) 25/30 (in E335/ST60) (70) 30/35 (in E335/ST60) (200) |
| Thread cutting performance max. (depends on gradient) | |
| R1 R2 | M24x3 M20x2.5 |
| R3 | M30x3.5 |
| Spindle | MK III |
| Drilling depth (mm) | 125 |
| Distance column-spindle (mm) | 300 |
| Column diameter (mm) | 125 |
| Useable table surface (W x L) (mm) | 590 x 450 |
| Speed indicator | digital |
| Drilling depth indicator | digital |
| Drilling depth stop | With fine tuning |
| Table height adjustment | with toothed rack |
| Spindle/table (mm) | 150-700 |
| Machine dimension without VP (mm) | 610 x 900 x 1,980 |
| Machine dimensions with VP (mm) | 670 x 1,100 x 2,200 |
| Motor three-phase current 400 V with frequency converter (kW) | 3.0 |
| Spindle speed, stepless, electronically controlled (1/min) R1 (1-stage) R2 (1-stage) R3 (2-stage with transmission) | 0-1,000 0-1,600 0-4,000 |
| | |
| SB 30 NC Plus | |
| Feed/return stroke, infinitely variable (m/min) | 0 - 1.5 |
| Weight (kg) | 400 |
| Order number R1 | 230.510 |

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.

230.511

230 512

Warranty extension 4 years Order number 290.018

Order number R2

Order number R3

- 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



- 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) Stage I Stage II | 125-4,000 125-2,000 250-4,000 |
| The stage change takes place via the l | 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 |
| Order number transparent hood | 205.220 |
| Order number grey hood | 205.183 |
| Additional accessories | from Page 64 |

 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



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

SB 40 Plus

| Feed | by hand |
|-----------------|---------|
| Weight (kg) | 400 |
| Order number R1 | 230.530 |
| Order number R2 | 230.531 |
| Order number R3 | 230.532 |
| | |

SB 40 MV Plus

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



- 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) R2 (measured Torque Nm) R3 (measured Torque Nm) | 30/35 (in E335/ST60) (135) 27/32 (in E335/ST60) (90) 35/40 (in E335/ST60) (260) |
|--|---|
| Thread cutting performance max. (depends on gradient) R1 R2 R3 | M30x3.5 M24x3 M36x4 |
| Spindle | MK IV |
| Drilling depth (mm) | 160 |
| Distance column-spindle (mm) | 300 |
| Column diameter (mm) | 140 |
| Useable table surface (W x L) (mm) | 590 x 450 |
| Speed indicator | digital |
| Drilling depth indicator | digital |
| Drilling depth 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) R2 (1-stage) R3 (2-stage with transmission) | 0-1,000 0-1,600 0-4,000 |
| SB 40 NC Plus | |
| Feed/return stroke, | |

| Feed/return stroke, infinitely variable (m/min) | 0 - 1.5 |
|--|--------------|
| Weight (kg) | 440 kg |
| Order number R1 | 230.540 |
| Order number R2 | 230.541 |
| Order number R3 | 230.542 |
| 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 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



- 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

| 35/40 (in E335/ST60) |
|-------------------------|
| M30 |
| MKIV |
| 160 |
| 300 |
| 125 |
| 590 x 450 |
| Number 2, 160, 14/26 |
| digital |
| digital |
| With fine tuning |
| with toothed rack |
| 610 x 850 x 1,920 |
| 637 x 1,096 x 2,120 |
| 1.5 / 3.0 |
| 100-2,000 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



- 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

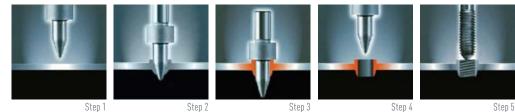
Vice [felix] 100 Order number 281.106



Technical data

| Elses dellis e | |
|---|---|
| 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 |
| | |

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



Step 1

Flow drilling machine SB 30 FB ▶Plus SB 30 FB NC ▶Plus



- 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) Order number

SB 30 FB NC Plus

| Spindle speed, stepless (1/min) | 0-4,000 |
|-----------------------------------|--------------|
| Feed, infinitely variable (m/min) | 0 - 1.5 |
| Weight (kg) | 400 |
| Order number | 230.513 |
| Additional accessories | from Page 64 |

370

230.503

 * 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



- 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 |
| GB 50 MV | |
| Weight (kg) | 795 |
| Order number | 287.040 |
| Packaging | VO |
| Special colours (RAL) for extra charge | on request |

Gear-driven drilling machine

GB 50 MV ► Plus



- 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 |
| | |

GB 50 MV Plus

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

Column drill press SB P50 STG MV



- 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 Stage II Stage III | 30-230 90-730 190-1,500 |
| Automatic and electromagnetic spindle feed (mm/U) | 0.1-0.2-0.3-0.4 |
| SB P50 STG MV* | |

SB P50 STG MV*

| Weight (kg) | 850 |
|-----------------------|------------|
| Order number | 287.060 |
| Packaging | V0 |
| Special colours (RAL) | |
| for extra charge | on request |

Gear-driven drilling machine

GB 70 MV ► Plus



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

GB 70 MV Plus

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

Milling/drilling machine BFM 40



- 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 (cm³/min) | 55 |
| Thread cutting performance max. (depends on gradient) | M35 |
| Spindle | MK IV |
| Drilling depth (mm) | 180 |
| Distance column-spindle (mm) | 390 |
| Useable table surface cross table (mm) | 1,200 x 360 |
| T-slot size (arm), distance (mm), width measurement (mm) | Number 3, 95, 16/28 |
| Longitudinal stroke table (X) (hand) (mm) | 700 |
| Cross stroke table (Y) (hand) (mm) | 360 |
| Speed indicator | Scale |
| Drilling depth indicator z-axis | Scale |
| Distance spindle/table (mm) | 190-650 |
| Drill head height adjustment motor (mm) | Travel 150 |
| Machine dimension without VP (mm) | 1,660 x 1,520 x 2,450 |
| Machine dimensions with VP (mm) | 1,680 x 1,680 x 2,520 |
| Motor three-phase, 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 |
| BFM 40 | |
| Weight (kg) | 1,400 |
| Order number | 287.080 |
| Packaging | VO |
| Special colours for extra charge | on request |
| | |

Drilling line BS 15 ^{▶ Plus}



- 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 |
| Order no.: 1 NC axis | 288.020 |
| Order no.: 2 NC axes | 288.021 |
| | |

Combination with TBZ 15 Plus*

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

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

Drilling system BA 30 CNC ► Plus and BA 40 CNC ► Plus



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

Combination with SB 40 NC Plus

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

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

Gang drilling machine



- 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



Technical data

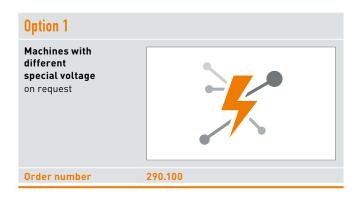
Depending on the quantity and choice of drill heads

Order no.:

on request

FLOTT gang drilling machines are designed individually as per your requirements. We would be happy to advise you!

FLOTT special equipment





Option 6Column extension
Ø 82
max. extension
150 mmDrder number296.287





Option 2

Machined base plate with T-slots. Available for machines with column diameter from 82mm and up.



Order number

290.378

Option 3





64





Option 9

Drill depth fixed stop for best repetition accuracy



Order number

Option 10

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



Order number

290.200







| Option 13 | |
|-------------------------------------|-----------------------|
| Extended warranty 5 years | Warranty extension |
| Order number | 290.019 |

Option 14



Option 15



Option 16

Commissioning of the machine and training of the operating personnel

Order number



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 cm³/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

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

Base plate with coolant system

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

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



Order number 290.340



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

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

Order number 250.208



Wide design

- 2 drawers with roller-bearing guideway
- 2 lockable doors
- ▶ 120 x 60 x 84 cm
 - Order number 250.180

Order number 250.180

Accessories



Order number 281.085

Order number 281.090

FO 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

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

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 281.095





Order number 281.105

Order number 281.106

Order number 281.109

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 | |



[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

125 mm

40 mm

11.2 kg

0-131 mm

Order number 281.108



Span width:Gripping jaw height:

Weight:

[felix] 125 Jaw width:

Order number 281.107

[felix] 125 with tensioning support

Weight: 11.7 kg Order number 281.109



Accessories

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 | |



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

No. 2: 100

| Jaw width: | 100 mm |
|----------------------|--------|
| Span width: | 90 mm |
| Gripping jaw height: | 40 mm |
| Weight: | 7.5 kg |
| Order number 281.209 | |



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

No. 3: 100

| Jaw width: | 100 mm |
|------------|--------|
| | |

- Span width: 85 mm
- Gripping jaw height: 30 mm
- Weight: 4.9 kg Order number 281.208

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

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



Order number 285.064



Accessories



Order number 285.133

Keyless chuck, self-tensioning
Span width: 1-13 mm

- Socket B16
- JUCKELDIU
- 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

- Span width. 1-10
- 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

Drift, semiautomatic Dimensions 1-3 Order number 285.334

Dimensions 4-6 Order number 285.335



Order number 285.334



Tapping chuck: with pressure increase, length compensation compression and tension Suitable for clockwise and counter-clockwise work

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 285.083



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

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 285.162



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



Order number 290.040

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

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



Order number 290.854

Retrofitting kit

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



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

| Belt sanders | Belt length | Belt width | Motor AC 230 V | Motor three-phase Voltage 400 V | Weight | Suction socket Ø | Page |
|---------------|-------------|------------|-------------------|------------------------------------|--------|---------------------|------|
| | mm | mm | kW | kW | kg | mm | |
| TBSM 100 | 1,220 | 100 | 0.75 (1 x 230 V) | - | 27 | 35 | 90 |
| BSM 75 | 2,000 | 75 | _ | 3.75 | 80 | 60 | 92 |
| BSM 75 A | 2,000 | 75 | _ | 3.75 | 90 | 60 | 92 |
| BSM 75 A/pol | 2,000 | 75 | _ | 3.0/3.75 | 105 | 60 | 92 |
| BSM 150 | 2,000 | 150 | - | 3.75 | 90 | 60 | 94 |
| BSM 150 A | 2,000 | 150 | - | 3.75 | 100 | 60 | 94 |
| BSM 150 A/pol | 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 kW | Weight kg | Page |
|-------------------------|----------------------|-----------------------------|----------------------|---|--------------|------|
| BEM 250 Plus | 250 | 60 | 2,800/1,400 | 1.8/2.1 | 85 | 96 |
| BEM 250 Pro | 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



- 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 |
| Order number | 317.760 |

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 |
| Order number | 317.766 |

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 |
| Order number | 317.765 |
| | |

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 |
| Order number | 317.761 |



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

- 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 | |
|-----------------------|----|--|

TS 200 SD P

S

| 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 |
| Order number | 317.762 |

TS 250 SD P

| 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 |
| Order number | 317.763 |
| | |

TS 300 SD P

| 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 |
| Order number | 317.764 |

- 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





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



- 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 (min) | 42 |
|--|--------------------------------|
| TS 175 Pro | |
| 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 |
| Order number | 317.840 |
| | |

1.2

TS 200 Pro

| 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 |
| Order number | 317.845 |

TS 250 Pro

| 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 |
| Order number | 317.850 |

- 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



- 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
- I 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 |
| Order number | 330.360 |
| Additional accessories | from Page 100 |

Belt sander **TBSM 100**



- 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

| 1,220 |
|-----------------|
| 100 |
| 310 x 100 |
| 19 |
| 27 |
| 0.75 |
| 650 x 380 x 260 |
| 700 x 400 x 300 |
| 371.760 |
| |

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



- 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 (m³/h) | - |
| Suction motor (kW) | - |
| Weight (kg) | 80 |
| Order number | 374.000 |
| BSM 75 A | |
| Belt speed (m/s) | 30 |
| Motor three-phase current, 400 V (kW) | 3.75 |
| Suction output (m ³ /h) | approx. 630 |
| Suction motor (kW) | 0.37 |
| Weight (kg) | 90 |
| Order number | 374.001 |
| BSM 75 A pol. | |
| Belt speed (m/s) | 15/30 |
| Motor three-phase current, 400 V (kW) | 3.0/3.75 |
| Suction output (m³/h) | approx. 630 |
| Suction motor (kW) | 0.37 |
| Weight (kg) | 105 |
| Order number | 374.002 |
| Additional accessories | from Page 100 |
| | |

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

▶ to go ... CAN BE SUPPLIED STRAIGHT AWAY! BSM 75 / BSM 75 A Belt sander BSM 150 BSM 150 A BSM 150 A pol.



- 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 (m³/h) | - |
| Suction motor (kW) | - |
| Weight (kg) | 90 |
| Order number | 374.020 |
| BSM 150 A | |
| Belt speed (m/s) | 30 |
| Motor three-phase current, 400 V (kW) | 3.75 |
| Suction output (m³/h) | approx. 630 |
| Suction motor (kW) | 0.37 |
| Weight (kg) | 100 |
| Order number | 374.021 |
| BSM 150 A pol. | |
| Belt speed (m/s) | 15/30 |
| Motor three-phase current, 400 V (kW) | 3.0/3.75 |
| Suction output (m³/h) | approx. 630 |
| Suction motor (kW) | 0.37 |
| Weight (kg) | 105 |
| Order number | 374.022 |
| Additional accessories | from Page 100 |

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



- 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
- I 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 |
| Order number | 373.150 |

Brush deburring machine BEM 250 Pro



- 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*

| DENIEGOTIO | |
|--|---------------------|
| 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 |
| Order number | 373.155 |
| | |

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

Accessories / spare parts



Complete spark arrest protective glass



Complete spark arrest protective glass



Complete spark arrest protective glass





Complete spark arrest protective glass





Order number 374.032

Complete contact wheel (from construction year 2014) for BSM 150

Order number 374.033

4.033





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!





Sawing contents

| | Band saw band size | ()* at 0° | * at 0° | * at 0° | |
|--------------------|--------------------|-----------|-----------|-----------|------|
| Metal band saws | mm | mm | mm | mm | Page |
| HBS 225 A | 2,720 x 27 x 0.9 | 230 | 275 x 200 | 230 x 230 | 104 |
| HBS 250 A | 2,910 x 27 x 0.9 | 250 | 320 x 190 | 240 x 240 | 106 |
| HBS 250 HA | 2,910 x 27 x 0.9 | 250 | 320 x 190 | 240 x 240 | 108 |
| HBS 350 HA | 4,780 x 34 x 1.1 | 350 | 510 x 350 | 350 x 350 | 110 |
| HBS 450 HA | 5,200 x 34 x 1.1 | 450 | 610 x 450 | 450 x 450 | 112 |
| HBS 350 ANC | 4,780 x 34 x 1.1 | 350 | 510 x 350 | 350 x 350 | 114 |
| HBS 350 SANC | 4,780 x 34 x 1.1 | 350 | 420 x 350 | 350 x 350 | 116 |
| HBS 450 SANC | 6,020 x 41 x 1.3 | 450 | 520 x 450 | 450 x 450 | 118 |
| VBS 400 Plus | 3,600 x 13 x 0.9 | Kar III | 400 x 390 | | 120 |
| Metal circular saw | Saw blade Ø | 🔿 * at O° | * at 0° | at 0° | Page |
| | mm | mm | mm | mm | |
| KS315M | 315 x 32 | 95 | 100 x 70 | 80 | 122 |

| Portable metal band saws | Band saw band size | ○* at 0° | * at 0° | at 0° | Page |
|-----------------------------|--------------------|----------|---------|-----------|------|
| | mm | mm | mm | mm | |
| PBS 120 Plus | 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.

VBS KS

PBS

Explanation of abbreviations

| Manual lowering (handle) | MA |
|-------------------------------|----|
| Lowering (Hydraulic cylinder) | Α |
| Semi-automatic | HA |

| Automatic NC | ANC | Vertical band saw | |
|------------------------|------------|-------------------|--|
| Column-guided automati | ic NC SANC | Circular saw | |
| High-performance band | saw HBS | Portable band saw | |





Sawing technology

FLOTT Metal band saw HBS 225 A





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

Powered

chip removal brush



Round supporting table The machine has a supporting table that rotates along with mitre cuts. This means that there are no recesses with a saw band tension and saw band monitoring device

The saw band tension is fitted



Precise guiding The saw band is guided precisely using sanded carbide plates

- 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 toothing 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 |
| Order number | 570.050 |
| Additional accessories | From Page 126 |

Sawing area

| v | | | | |
|------------|-----------|-----------|-----------|-----------|
| | 0° | 45° R | 45° L | 60° R |
| \bigcirc | 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 ¹

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

¹ 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







Roller conveyor with vertical rollers (accessory)

Pistol for rinsing the chips (optional)

- 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 tooting 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 |
| Order number | 570.005 |
| Additional accessories | From Page 126 |

Sawing area

| v | | | | |
|------------|-----------|-----------|-----------|-----------|
| | 0° | 45° R | 45° L | 60° R |
| \bigcirc | 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 ¹

| 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 |

¹ 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





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)

- 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 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 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 |
| Order number | 570.010 |
| Additional accessories | From Page 126 |

Sawing area

| v | | | | |
|------------|-----------|-----------|-----------|-----------|
| | 0° | 45° R | 45° L | 60° R |
| \bigcirc | 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 ¹

| 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 |

¹ 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



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)



- 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 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 570.109
- 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 |
| Order number | 570.525 |
| Additional accessories | From Page 126 |

Sawing area

| | 0° | 45° R | 45° L | 60° R | 60° L |
|------------|-----------|-----------|-----------|-----------|-----------|
| \bigcirc | 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 ¹

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

¹ 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 (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)

- 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 toothing 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 |
| Order number | 570.525 |
| Additional accessories | From Page 126 |

Sawing area

| | 0° | 45° R | 45° L | 60° R | 60° L |
|------------|-----------|-----------|-----------|-----------|-----------|
| \bigcirc | 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 |

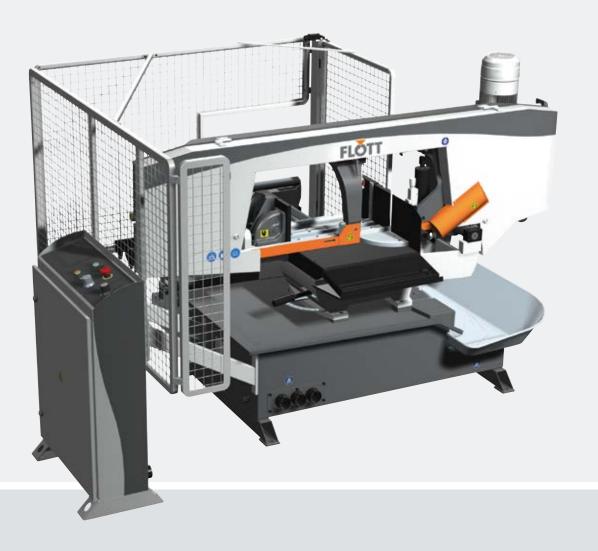
HSS Bi-metal (M42) saw band ¹

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

¹ 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



- 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 toothing 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 |
| Order number | 570.025 |
| Additional accessories | From Page 126 |

Sawing area

| | 0° | 45° R | 60° R |
|------------|-----------|-----------|-----------|
| \bigcirc | 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 ¹

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

¹ 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



- 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 toothing 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 |
| Order number | 570.030 |
| Additional accessories | From Page 126 |

Sawing area

| | 0° |
|------------|-----------|
| \bigcirc | 350 |
| | 420 x 350 |
| | 350 x 350 |

HSS Bi-metal (M42) saw band ¹

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

¹ 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



- 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 toothing 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 |
| Order number | 570.035 |
| Additional accessories | From Page 126 |

Sawing area

| | 0- |
|------------|-----------|
| \bigcirc | 450 |
| | 520 x 450 |
| | 450 x 450 |

HSS Bi-metal (M42) saw band ¹

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

¹ 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





Longitudinal stop Order number 410.030



Standard height-adjustable guide arm



Minimum quantity lubrication Order number 410.031

- 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 f
 ür 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, Toothing 14 teeth Order number 410.040
- Band saw band: 3,600 x 13 x 0.9 mm, 5 pieces, Toothing 10/14 teeth Order number 410.041
- Band saw band: 3,600 x 13 x 0.9 mm, 5 pieces, Toothing 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 |
| Order number | 410.010 |
| With minimum quantity lubrication and longitudinal stop Order number | 410.020 |
| Additional accessories | From Page 126 |

FLOTT Metal circular saw KS 315 M



- 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 |
| Not included in scope of delivery Saw band (mm) | Ø 315 x 32 |
| Order number | 560.835 |
| | |

Sawing area

| | 45° L | 0° | 45° R | |
|------------|---------|----------|---------|--|
| \bigcirc | 90 | 95 | 90 | |
| | 80 x 70 | 100 x 70 | 80 x 70 | |
| | 75 | 80 | 75 | |

Metal circular saw blades ¹

| Order number | Dimensions in mm | Number of teeth | VPE | |
|--------------|---------------------|--------------------|-----|--|
| 560.310 | 315 x 2.5 x 32 | 220 | 1 | |
| 560.311 | 315 x 2.5 x 32 | 160 | 1 | |

¹ different saw blades on request

FLOTT Metal band saw PBS 120 Plus







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

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

- 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 |
| Order number | 570.505 |

Sawing area

| | 0° | 45°R | 60°R |
|------------|-----------|----------|---------|
| \bigcirc | 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 ¹

| 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 |

¹ 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

Stop systems

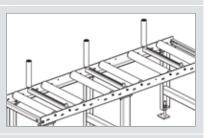
Stop systems – from simple, convenient, manual measurement units to NC-controlled modern measurement systems, including programme storage.



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

Digital measuring stop - display

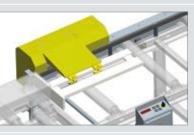
The stop carriage is manually adjusted, and the position is displayed on the digital display to 0.1 mm accuracy. The stop arm can be folded up to allow the material to pass through.



on request

Digital measuring stop

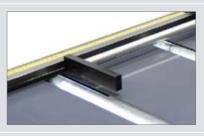
Digital material stop with handwheel and pneumatic brake



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

Hydraulic bundle tensioning

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



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





Information contents

| То | p | i | с |
|-----|---|---|---|
| ••• | r | - | - |

| ropic | raye |
|---|------|
| FLOTT safety | 130 |
| Education and further training | 131 |
| FLOTT demonstration and training facilities | 132 |
| Area representatives | 133 |
| Service contacts | 134 |
| Extract from the Terms of Sale | 135 |
| | |
| | |

Daup





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

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

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

Belt grinder with brake

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



Standard electrical drilling protection



Drilling protection for long tools







Double grinding machine

Belt sander

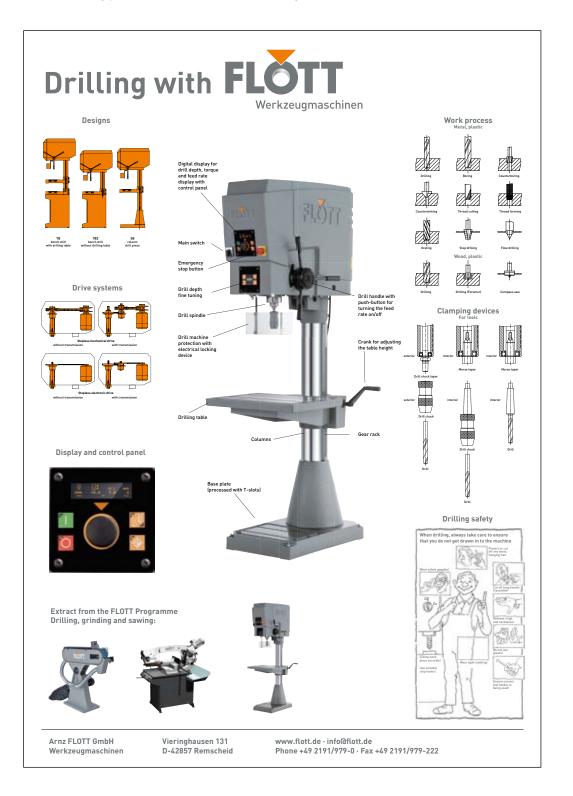




Education and further training

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.



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 applicationfocused solutions for almost all areas of application.

Current training dates at www.flott.de.

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

FLOTT service and support locations

A convenient and fast way of getting qualified service support. An obvious advantage of FLOTT machine tools.

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

Training centres

Remscheid

Arnz FLOTT GmbH Werkzeugmaschinen Administration Vieringhausen 131 42857 Remscheid

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

Heusweiler

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

Nuremberg

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





Area representatives

1 Hamburg

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

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

2 Bielefeld

Vogt Industrievertretungen GmbH Phone: +49 521 443932

FLOTT support:

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

3 Individual support

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

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

4 Seeheim-Jugenheim

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

FLOTT support:

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

Export

FLOTT support:

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

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

Mr Schmidt Phone: +49 2191 979-155 til.schmidt@flott.de

5 Nuremberg

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

FLOTT support:

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

6 Leinfelden-Echterdingen

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

FLOTT support:

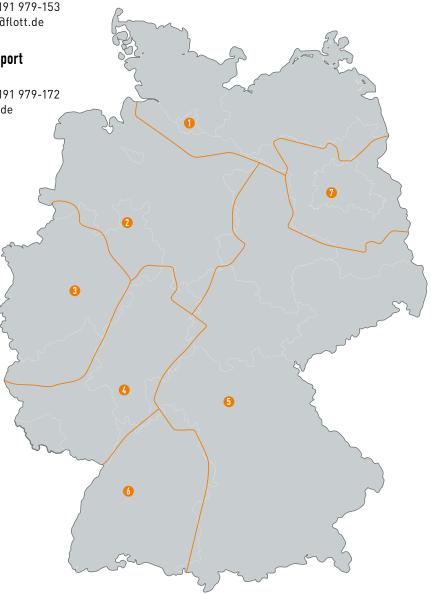
Mr Dragano Phone: +49 2191 979-153 toni.dragano@flott.de

7 Individual support

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!

FLOTT technical service

Winfried Breidenbach Phone: +49 2191 46408-175 winfried.breidenbach@flott.de

FLOTT spare parts service

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

Ulrich Brücher Phone: +49 2191 46408-178 ulrich.bruecher@flott.de

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

The direct link to your service partner

Holger Paucke

Phone: +49 2191 46408-177

holger.paucke@flott.de



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



Note:

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





Extract from our Terms of Sale

- Delivery ex works, excluding packaging. Shipping location: 42857 Remscheid
- Extra charges incurred for "seaworthy" packaging.
- Standard paint (One.component-paint 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



Freight charges*

Freight table for Germany *

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

Updated 2019

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

Shipment with parcel service:

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

Forwarding companies

| Administration fee in EUR plus VAT. | | Updated 2019 |
|-------------------------------------|----|--------------|
| Domestic | 25 | |
| Foreign | 50 | |

Subject to change without notice. Errors excepted.





Arnz FLOTT GmbH Machine Tools

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





0213221238

 \succ

- office@cobotec.ro
- www.cobotec.ro

CATTED Business Park Chitila -Hala 11 Soseaua Centura Bucuresti, Km 62 Chitila Jud Ilfov Cod Postal 077045

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