



# **2025** GENERAL CATALOG

# MADE IN GERMANY

#### High Quality. By Tradition.

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

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

#### Tradition demands - innovation.

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

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

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

#### Service determines - customer satisfaction.

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





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# FLOTT-FAN ARTICLES

# www.flott.shop





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







11025

TZA 18

# A bench drill BEER TAP Ever seen one of those before?

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

# Only here: www.flott.shop THE TZA18

FLO





#### Overview drilling machines

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

#### **Colour description**

Plus series

Classic machines

Gear drilling machines



# DRILLING TECHNOLOGY

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



#### FLOTT Drilling Technology / Explanations

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

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

The FLOTT machines are characterised by modern, ergonomic **design**, and the technical progress has been documented with numerous **industrial property rights**. **Modern electronics** such as **digital** depth and speed indicators and **electronic stepless** drives, have been part of FLOTT's standard equipment for years.

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

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

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

Models



**TB** Bench drill with intermediate table and optional base cabinet

#### **Explanation of abbreviations**

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



TBZ

Bench drill without intermediate table with optional base cabinet



**SB** Column drill press

FB MV PVelectronic

GB NC



#### FLOTT drilling technology / control panel

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

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

#### The menu functions

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

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

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

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

- Drilling
- Reaming
- Countersinking
- Flow forming
- Thread cutting
- In addition, there is the possibility of free programming

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

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





#### HONORED

German Labor Safety Award 2019

# Drilling machines-Vice [felix] 2.0



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

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



### PLUS POINTS +++

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



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



(felix) 80 2.0



(felix) 100 2.0



(felix) 120 2.0



(felix) 150 2.0



#### **Technical data**

Flott [felix] 80 2.0	
Jaw width (mm)	80
Span width (mm)	0 - 120
Jaw height (mm)	28
Travel (mm)	150
Weight (kg)	11.6
Dimensions WxLxH (mm)	95 x 280 x 78
Order no.	281.140
Flott [felix] 100 2.0	
Jaw width (mm)	100
Span width (mm)	0 -135
Jaw height (mm)	32
Travel (mm)	165
Weight (kg)	12.8
Dimensions WxLxH (mm)	122 x 343 x 85
Order no.	281.141
Flott [felix] 120 2.0	
Jaw width (mm)	120
Span width (mm)	0 -168
Jaw height (mm)	40
Travel (mm)	200
Weight (kg)	20.3
Dimensions WxLxH (mm)	140 x 395 x 105
Order no.	281.142
Flott [felix] 150 2.0	
Jaw width (mm)	150
Span width (mm)	0 -200
Jaw height (mm)	40
Travel (mm)	220
Weight (kg)	32.4
Dimensions WxLxH (mm)	170 x 451 x 103
Order no.	281.143

### For further explanation, check our YouTube video!





# PLUS POINTS +++ OUR SB P40 NC PLUS





# PLUS SERIES DRILLING MACHINES

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

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

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

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

The Plus Series is divided into three platforms:

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



<sup>\*</sup> Optionally with electromagnetic double clutch (speed series R3)



# Bench drill in AC design TB 10 Eco <sup>▶</sup> Plus





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

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

#### Special equipment

 Height adjustment via threaded spindle Order no. 290.302

#### Accessories

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

Drill package 1 (for B16)

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





#### Technical data

Drilling capacity/normal drilling performance (mm)	10/12 (in E335/ST60)
Spindle	B16
Drilling depth (mm)	50
Distance column-spindle (mm)	180
Column diameter (mm)	50
Useable table surface (W x L) (mm)	300 x 200
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 100, 12/20
Speed indicator	digital
Drilling depth indicator	scale
Drilling depth stop	Quick-adjust thrust ring
Feed	by hand
Head/height adjustment	by hand
Three-phase current motor 230 V with frequency converter (kW)	0.45
Spindle speed, stepless (1/min)	250-3,000
TB 10 Eco Plus	
Distance spindle/working surface (mm)	105-245
Machine dimensions without VP (mm)	400 x 248 x 460
Machine dimensions with VP (mm)	430 x 680 x 810
Weight (kg)	30
Order no.	217.200
Additional accessories	from page 62



# Bench drill TB 10 Basic <sup>▶</sup>Plus





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



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

#### **Special equipment**

 Drill depth fixed stop for optimum repetition accuracy Order no. 212.716

#### Accessories

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

Drill package 1 (for B16)

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





#### Technical data

Drilling capacity/normal drilling performance (mm)	12 (in E335/ST60)
Spindle	B16
Drilling depth (mm)	60
Distance column-spindle (mm)	220
Column diameter (mm)	70
Useable table surface (W x L) (mm)	300 x 250
T-slot size (arm), distance (mm), width measurement (mm)	Cross slots, quantity 2, 14/26
Speed indicator	digital
Drilling depth indicator	scale
Drilling depth stop	Quick-adjust thrust ring
Feed	by hand
Head/height adjustment	by hand
Three-phase current motor 230 V with (kW)	0.45
Spindle speed, stepless (1/min)	250-3,000
TB 10 Basic Plus	
Distance spindle/working surface (mm)	105-245
Machine dimensions without VP (mm)	320 x 520 x 820
Machine dimensions with VP (mm)	452 x 700 x 1,130
Weight (kg)	44
Order no. (with drill head height adjustment)	217.400
<b>Order no.</b> (with intermediate table and table height adjustment via toothed rack)	217.410
Additional accessories	from page 62



## Bench drill TB 10 <sup>▶</sup> Plus





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



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

#### **Special equipment**

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

#### Accessories

- Machine cabinet with door and drawer Height: 840 mm Weight: 28 kg Order no. 250.208
- Vice (felix) 80 2.0 Jaw width: 80 mm Span: 0-120 mm Order no. 281.140
- Quick-change drill chuck B16 Span range 1-13 mm Rotational accuracy: 0.17 mm Order no. 285.133
- Precision quick-change ground drill chuck self-tightening, for clockwise/anti-clockwise rotation max. 8,000 1/min.
   Span range 1-13 mm Socket B16 Rotational accuracy: 0.06 mm Order no. 285,064
- Tap holder M4-M12 DIN 371 Span: 1-10 mm Socket: B16 Total length: 80 mm Order no. 285.109



#### Technical data

Drilling capacity/normal drilling performance (mm)	10/12 (in E335/ST60)
Thread-cutting performance (depending on gradient) max.	M6
Spindle	B16
Drilling depth (mm)	60
Distance column-spindle (mm)	220
Column diameter (mm)	70
Useable table surface (W x L) (mm)	300 x 250
T-slot size (arm), distance (mm), width measurement (mm)	Cross slots, quantity 2, 14/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Stop ring (positive-locking)
Feed	by hand
Head/height adjustment	by hand
Three-phase current motor 230 V with frequency converter (kW)	0.54
Spindle speed, stepless (1/min)	60-6,000
TB 10 Plus*	
Distance spindle/working surface (mm)	140-315
Machine dimensions without VP (mm)	320 x 520 x 820
Machine dimensions with VP (mm)	452 x 700 x 1,130
Weight (kg)	44
Order no.	212.505
Additional accessories	from page 62

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

Drill package 1 (for B16)

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





# Bench drill Turbo drill





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



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

#### Special equipment

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

#### Accessories

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



#### Technical data

Drilling capacity/normal drilling performance (mm)	6/8 (in E335/ST60)
Thread-cutting performance (depending on gradient) max.	M5
Spindle	B12
Drilling depth (mm)	60
Distance column-spindle (mm)	220
Column diameter (mm)	70
Useable table surface (W x L) (mm)	300 x 250
T-slot size (arm), distance (mm), width measurement (mm)	Cross slots, quantity 2, 14/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Stop ring (positive-locking)
Feed	by hand
Head/height adjustment	by hand
Three-phase current motor 230 V with frequency converter (kW)	0.54
Spindle speed, stepless (1/min)	100 -10,000
Turbo drill*	
Distance spindle/working surface (mm)	140-315
Machine dimensions without VP (mm)	320 x 520 x 820
Machine dimensions with VP (mm)	452 x 700 x 1,130
Weight (kg)	44
Order no.	212.506
Additional accessories	from page 62
* The drilling	n machine is fitted with a frequency converter

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



# Bench drill and column drill TB 13 <sup>▶</sup>Plus TBZ 13 <sup>▶</sup>Plus SB 13 <sup>▶</sup>Plus





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

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

#### **Special equipment**

 Drill depth fixed stop for optimum repetition accuracy Order no. 212.716

#### Accessories

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

#### Drill package 1 (for B16)

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

Drill package 2 (for MK II)

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







#### **Technical data**

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

#### TB 13 Plus\*

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

#### TBZ 13 Plus\*

Additional accessories	from page 62
Order no. MKII	212.504
Order no. B16	212.502
Weight (kg)	85
T-slot size, distance (mm), width measurement (mm)	Quantity 2, 125, 13/26
Machine dimensions with VP (mm)	572 x 936 x 2,142
Machine dimensions without VP (mm)	420 x 540 x 1,780 w
Distance spindle/working surface (mm)	max. 750
SB 13 Plus*	
Order no. MKII	212.655
Order no. B16	212.650
Weight without cabinet (kg)	70
Machine dimensions (mm) with cabinet with cabinet with VP without cabinet without cabinet with VP	370 x 495 x 1,800 940 x 570 x 2,140 355 x 485 x 1,027 940 x 570 x 1,600
Column diameter (mm)	82
Distance column-spindle (mm)	214
Centre offset	20 mm
Distance spindle/working surface (mm)	125-490



# Bench drill and column drill TB 15 <sup>▶</sup>Plus TBZ 15 <sup>▶</sup>Plus SB 15 <sup>▶</sup>Plus





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

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

#### **Special equipment**

 Drill depth fixed stop for optimum repetition accuracy Order no. 212.716

#### Accessories

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

Drill package 2 (for MK II)

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





#### Technical data

Additional accessories

Drilling capacity/normal drilling performance (mm)15/18 (in E335/ST60) 17 NmThread-cutting performance (depending on gradient) maxMK12SpindleMK11Drilling depth (mm)70Distance column-spindle (mm)300 x 250Column diameter (mm)Quantity 2, 125, ti/Z6Speed indicatordigitalDrilling depth indicatordigitalDrilling depth stopStop ring (positive-locking)Feedby handTable height adjustmentwith toothed rackThree-phase current motor 230 V.75Spindle speed, steples (1/min)40-4,000Machine dimensions with to V (mm).05Spindle speed, steples (1/min)400 x 520 x 850Machine dimensions without V (mm).000 x 520 x 850Machine dimensions without V (mm).000 x 520 x 850Machine dimensions without VP (mm).212.755Distance spindle/working surface (mm)212.755Distance spindle/working surface fmm124-60Centre offset.20 mmDistance column-spindle (mm).212.755Machine dimensions (mn) with cabinet with VP.270 x 475 x 1,800with cabinet with VP.200 x 520 x 2,1,02With cabinet with VP.212.765Spindle speed, surface (mm).212.765Distance column-spindle (mm).212.765Machine dimensions (mm) with cabinet with VP.212.765Machine dimensions (mm) with cabinet with VP.212.765Machine dimensions (mm) with cabinet with VP.212.765 <th></th> <th></th>		
[depending on gradient] max.        Spinale      MK II        Drilling depth (mm)      70        Distance column-spinale (mm)      300 x 250        Column diameter (mm)      Quantity 2, 125, 14/26        Speed indicator      digital        Drilling depth indicator      digital        Drilling depth indicator      digital        Drilling depth indicator      by band        Table height adjustment      with toothed rack        Three-phase current motor 230 V      vith frequency converter (kW)        OrTs      0.75        Spinale speed, stepless (1/min)      40-4,000        Machine dimensions      with VP (mm)        Machine dimensions      400 x 520 x 850        Machine dimensions      with VP (mm)        Veight (kg)      65        Order no.      212.755        Distance spindle/working surface (mm)      124-400        Veight (kg)      65        Order no.      212.755        Distance column-spindle (mm)      214-60        Machine dimensions (mm)      vith vP (mm)        Vith cabinet with VP      940 x 570 x 2,140        With cabinet with		15/18 (in E335/ST60) 17 Nm
Drilling depth (mm)70Distance column-spindle (mm)220Column diameter (mm)300 x 250T-slot size farm), distance (mm), width measurement (mm)Quantity 2, 125, 14/26Speed indicatordigitalDrilling depth stopStop ring (positive-locking)Feedby handTable height adjustmentwith toothed rackThree_phase current motor 230 V with frequency converter (kW)0.75Spindle speed, steptess (1/min)40-4,000 <b>TB 15 Plus*</b> Stop 700 x 130Machine dimensions with 04 (Mg)65Order no.212.755 <b>TBZ 15 Plus*</b> 214Distance spindle/working surface (mm)214Quantity 2, 125, 120214Column diameter (mm)325 x 485.Machine dimensions with VP (mm)214Order no.212.755 <b>TBZ 15 Plus*</b> 370 x 495 x 1,800Distance column-spindle (mm)214Column diameter (mm)82Machine dimensions (mm) with cabinet with VP940 x 570 x 2,140without cabinet with VP940 x 570 x 2,140with cabinet with VP940 x 570 x 2,140with cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765State spindle/working surface (mm)300 x 240Machine dimensions (mm) with cabinet with VP940 x 570 x 1,600With cabinet with VP940 x 570 x 2,140With cabinet with VP940 x 570 x 2,140Useable table surface (W x L] (mm) <td></td> <td>MK12</td>		MK12
Distance column-spindle (mm)220Column diameter (mm)70Useable table surface (W x L) (mm)300 x 250T-slot size (arm), distance (mm), width measurement (mm)14/26Speed indicatordigitalDrilling depth indicatorStop ring (positive-locking)Feedby handTable height adjustmentwith toothed rackThree-phase current motor 230 V with frequency converter (kW)0.75Spindle speed, stepless (1/min)40-4,000Table height adjustment\$5.370Machine dimensions without VP (mm)452 x 700 x 1130Machine dimensions without VP (mm)452 x 700 x 1130Weight (kg)65Order no.212.755Distance spindle/working surface (mm) glistance spindle/working surface (mm)125-490Centre offset20 mmDistance spindle/working surface (mm)214Column diameter (mm)82Machine dimensions (mm) with cabinet with VP940 x 570 x 1,800without cabinet with VP940 x 570 x 1,800without cabinet with VP940 x 570 x 1,800with cabinet with VP940 x 570 x 1,800without cabinet with VP <td< td=""><td>Spindle</td><td>MK II</td></td<>	Spindle	MK II
Column diameter (mm)70Useable table surface (W x L) (mm)300 x 250T-slot size (arm), distance (mm),Quantity 2, 125,width measurement (mm)14/26Speed indicatordigitalDrilling depth indicatordigitalDrilling depth stopStop ring (positive-locking)Feedby handTable height adjustmentwith toothed rackThree-phase current motor 230 V0.75Spindle speed, stepless (1/min)40-4,000 <b>T B 15 Plus*</b> Stop x 850Machine dimensions400 x 520 x 850Machine dimensions400 x 520 x 850Machine dimensions52 x 700 x 1130With VP (mm)452 x 700 x 1130Weight (kg)65Order no.212.755Distance spindle/working surface (mm)125-490Centre offset20 mmDistance column-spindle (mm)214Column diameter (mm)82Machine dimensions (mm)y10 x 495 x 1,800with cabinet with VP940 x 570 x 2,140with cabinet with VP940 x 570 x 2,140with cabinet with VP940 x 570 x 1,600With cabinet with VP940 x 570 x 1,600With cabinet with VP940 x 570 x 1,800With cabinet with VP940 x 570 x 1,800With cabinet with VP940 x 570 x 1,600With cabinet with VP940 x 570 x 1,600With cabinet with VP940 x 570 x 1,600With cabinet with VP940 x 570 x 2,142Distance spindle/working surface fmm300 x 240	Drilling depth (mm)	70
Useable table surface (W x L) (mm)300 x 250T-slot size (arm), distance (mm), width measurement (mm)Quantity 2, 125, 14/26Speed indicatordigitalDrilling depth indicatordigitalDrilling depth stopStop ring (positive-locking)Feedby handTable height adjustmentwith toothed rackThree-phase current motor 230 V with frequency converter (kW)0.75Spindle speed, stepless (1/min)40-4,000 <b>TB 15 Plus*</b> Stop x 200 x 850Machine dimensions with 0V (mm)400 x 520 x 850Machine dimensions with VP (mm)452 x 700 x 1130Weight (kg)65Order no.212.755 <b>TBZ 15 Plus*</b> 20 mmDistance spindle/working surface (mm) with Agine214Column diameter (mm)82Machine dimensions (mm) with cabinet with VP370 x 495 x 1,800without cabinet with VP940 x 570 x 2,140without cabinet with VP940 x 570 x 1,400with cabinet with VP940 x 570 x 1,600With cabinet with VP940 x 570 x 1,600With cabinet with VP940 x 570 x 1,600With cabinet with VP940 x 570 x 1,600Without cabinet with VP940 x 570 x	Distance column-spindle (mm)	220
T-slot size (arm), distance (mm), width measurement (mm)Quantity 2, 125, 14/26Speed indicatordigitalDrilling depth indicatordigitalDrilling depth stopStop ring (positive-locking)Feedby handTable height adjustmentwith toothed rackThree-phase current motor 230 V with frequency converter (kW)0.75Spindle speed, stepless (1/min)40-4,000 <b>TB 15 Plus*</b> Stop ring (positive-locking)Machine dimensions with vP (mm)85-370Machine dimensions with VP (mm)400 x 520 x 850Machine dimensions with VP (mm)452 x 700 x 1130Weight (kg)65Order no.212.755 <b>TBZ 15 Plus*</b> 20 mmDistance spindle/working surface (mm)125-490Centre offset20 mmDistance olumn-spindle (mm)214Column diameter (mm)82Machine dimensions (mm) with cabinet with VP940 x 570 x 2,140without cabinet with VP940 x 570 x 1,600Without cabinet with VP940 x 570 x 1,600 <t< td=""><td>Column diameter (mm)</td><td>70</td></t<>	Column diameter (mm)	70
width measurement (mm)14/26Speed indicatordigitalDrilling depth indicatordigitalDrilling depth stopStop ring (positive-locking)Feedby handTable height adjustmentwith toothed rackThree-phase current motor 230 V0.75with frequency converter (kW)0.75Spindle speed, stepless (1/min)40-4.000TB 15 Plus*Distance spindle/working surface (mm)85-370Machine dimensions with vP (mm)400 x 520 x 850Machine dimensions with vP (mm)452 x 700 x 1130Weight (kg)65Order no.212.755TBZ 15 Plus*20 mmDistance spindle/working surface (mm)125-490Centre offset20 mmDistance column-spindle (mm)214Column diameter (mm)82Machine dimensions (mm) with cabinet with VP940 x 570 x 2,140with cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*55 x 485 x 1,027Distance spindle/working surface (mm)300 x 240Machine dimensions300 x 240Machine dimensions300 x 240Machine dimensions300 x 240Machine dimensions300 x 240 x 572 x 936 x 2,142T-slot size, distance (mm), without VP (mm)572 x 936 x 2,142 <td>Useable table surface (W x L) (mm)</td> <td>300 x 250</td>	Useable table surface (W x L) (mm)	300 x 250
Drilling depth indicatordigitalDrilling depth stopStop ring (positive-locking)Feedby handTable height adjustmentwith toothed rackThree-phase current motor 230 V0.75Spindle speed, stepless (1/min)40-4,000TB 15 Plus*Distance spindle/working surface (mm)85-370Machine dimensions400 x 520 x 850With VP (mm)452 x 700 x 1130Weight (kg)65Order no.212.755Distance spindle/working surface (mm)125-490Centre offset20 mmDistance spindle/working surface (mm)82Machine dimensions214Column diameter (mm)82Machine dimensions (mm)370 x 495 x 1,800with cabinet with VP940 x 570 x 2,140with cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*300 x 240With cabinet with VP940 x 570 x 1,600With cabinet with VP940 x 570 x 1,600With ucabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*300 x 240Distance spindle/working surface (mm)300 x 240Wachine dimensions572 x 936 x 2,142T-slot size, distance (mm), withou tVP (mm)572 x 936 x 2,142T-slot size, distance (mm), withou tip (1/26)88	,	· · · · · · · · · · · · · · · · · · ·
Drilling depth stopStop ring (positive-locking)Feedby handTable height adjustmentwith toothed rackThree-phase current motor 230 V0.75with frequency converter (kW)0.75Spindle speed, stepless (1/min)40-4,000TB 15 Plus*Distance spindle/working surface (mm)85-370Machine dimensions400 x 520 x 850Without VP (mm)452 x 700 x 1130Weight (kg)65Order no.212.755TBZ 15 Plus*Distance spindle/working surface (mm)125-490Centre offset20 mmDistance column-spindle (mm)214Column diameter (mm)82Machine dimensions (mm)y40 x 570 x 2,140with cabinet with VP940 x 570 x 2,140with cabinet with VP940 x 570 x 1,800with cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*Distance spindle/working surface (mm)with cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*Joing 2,20 x 540 x 1,780Distance spindle/working surface (mm)300 x 240Wachine dimensions200 x 540 x 1,780Without VP (mm)572 x 936 x 2,142T-slot size, distance (mm), without VP (mm)200 x 540 x 1,780Machine dimensions572 x 936 x 2,142T-slot size, distance (mm), with theasurement (mm)<	Speed indicator	digital
Feedby handTable height adjustmentwith toothed rackThree-phase current motor 230 V with frequency converter (kW)0.75Spindle speed, stepless (1/min)40-4,000TB 15 Plus*Distance spindle/working surface (mm)85-370Machine dimensions without VP (mm)400 x 520 x 850Machine dimensions with VP (mm)452 x 700 x 1130Weight (kg)65Order no.212.755TBZ 15 Plus*20 mmDistance spindle/working surface (mm)214Centre offset20 mmDistance column-spindle (mm)214Column diameter (mm)82Machine dimensions (mm) with cabinet with VP940 x 570 x 2,140without cabinet with VP940 x 570 x 1,800With cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*212.765Distance spindle/working surface (mm)300 x 240With cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*300 x 240Distance spindle/working surface (mm)300 x 240Machine dimensions420 x 540 x 1,780Machine dimensions572 x 936 x 2,142T-slot size, distance (mm), with VP (mm)620 x 540 x 1,780Machine dimensions572 x 936 x 2,142T-slot size, distance (mm), with With measurement (mm)88	Drilling depth indicator	digital
Table height adjustmentwith toothed rackThree-phase current motor 230 V with frequency converter (kW)0.75Spindle speed, stepless (1/min)40-4,000TB 15 Plus*Distance spindle/working surface (mm)85-370Machine dimensions without VP (mm)400 x 520 x 850Machine dimensions without VP (mm)400 x 520 x 850Machine dimensions without VP (mm)452 x 700 x 1130Weight (kg)65Order no.212.755TBZ 15 Plus*20 mmDistance spindle/working surface (mm)125-490Centre offset20 mmDistance column-spindle (mm)82Machine dimensions (mm) with cabinet with cabinet with VP940 x 570 x 2,140with out cabinet with VP940 x 570 x 2,140Without cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*212.765Distance spindle/working surface (mm)max. 750Useable table surface (W x L] (mm)300 x 240Machine dimensions without VP (mm)572 x 936 x 2,142T-slot size, distance (mm), withdt measurement (mm)420 x 540 x 1,780	Drilling depth stop	Stop ring (positive-locking)
Three-phase current motor 230 V with frequency converter (kW)0.75Spindle speed, stepless (1/min)40-4,000TB 15 Plus*Distance spindle/working surface (mm)85-370Machine dimensions without VP (mm)400 x 520 x 850Machine dimensions without VP (mm)400 x 520 x 850Machine dimensions with VP (mm)452 x 700 x 1130Weight (kg)65Order no.212.755TBZ 15 Plus*20 mmDistance spindle/working surface (mm)125-490Centre offset20 mmDistance column-spindle (mm)214Column diameter (mm)82Machine dimensions (mm) with cabinet with cabinet with VP70 x 495 x 1,800with cabinet with VP940 x 570 x 2,140without cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*300 x 240Distance spindle/working surface (mm)300 x 240Machine dimensionswithout vabinet without vabinet (kg)Distance spindle/working surface (mm)300 x 240Machine dimensionswithout v20 (mm)Useable table surface (W x L) (mm)300 x 240Machine dimensionswithout VP (mm)Sr2 x 936 x 2,142T-slot size, distance (mm), without VP (mm)600 x 2,00Machine dimensions572 x 936 x 2,142T-slot size, distance (mm), without VP (mm)600 x 2,00Wachine dimensions572 x 936 x 2,142T-slot size, distance (mm), wit	Feed	by hand
with frequency converter (kW)0.75Spindle speed, stepless (1/min)40-4,000TB 15 Plus*Distance spindle/working surface (mm)85-370Machine dimensions400 x 520 x 850Without VP (mm)452 x 700 x 1130Weight (kg)65Order no.212.755Distance spindle/working surface (mm)125-490Centre offset20 mmDistance column-spindle (mm)214Column diameter (mm)82Machine dimensions (mm)370 x 495 x 1,800with cabinet with VP940 x 570 x 2,140with cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*Sistance spindle/working surface (mm)Distance spindle/working surface (mm)300 x 240With cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*Sistance spindle/working surface (mm)Machine dimensions300 x 240Machine dimensions300 x 240Machine dimensions572 x 936 x 2,142T-slot size, distance (mm), with VP (mm)572 x 936 x 2,142T-slot size, distance (mm), withy (Might measurement (mm)88	Table height adjustment	with toothed rack
TB 15 Plus*Distance spindle/working surface (mm)85-370Machine dimensions without VP (mm)400 x 520 x 850Machine dimensions with VP (mm)452 x 700 x 1130Weight (kg)65Order no.212.755TBZ 15 Plus*Distance spindle/working surface (mm)125-490Centre offset20 mmDistance column-spindle (mm)214Column diameter (mm)82Machine dimensions (mm)70 x 495 x 1,800with cabinet with VP940 x 570 x 2,140with cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*212.765Distance spindle/working surface (mm)300 x 240Weight without cabinet (kg)73Order no.212.765Sb 15 Plus*300 x 240Machine dimensionsmax. 750Useable table surface (W x L) (mm)300 x 240Machine dimensionsx20 x 540 x 1,780Machine dimensionswith VP (mm)%ithout VP (mm)572 x 936 x 2,142T-slot size, distance (mm), witdit measurement (mm)420 x 540 x 1,780Weight (kg)88		0.75
Distance spindle/working surface (mm)85-370Machine dimensions without VP (mm)400 x 520 x 850Machine dimensions with VP (mm)452 x 700 x 1130Weight (kg)65Order no.212.755TBZ 15 Plus*Distance spindle/working surface (mm)125-490Centre offset20 mmDistance column-spindle (mm)214Column diameter (mm)82Machine dimensions (mm)710 x 495 x 1,800with cabinet with VP940 x 570 x 2,140with cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*300 x 240Distance spindle/working surface (mm)max. 750Useable table surface (W x L) (mm)300 x 240Machine dimensions420 x 540 x 1,780Machine dimensions572 x 936 x 2,142T-slot size, distance (mm), with VP (mg)60 antity 2, 125, 14/26Weight (kg)88	Spindle speed, stepless (1/min)	40-4,000
Machine dimensions without VP (mm)400 x 520 x 850Machine dimensions with VP (mm)452 x 700 x 1130Weight (kg)65Order no.212.755TBZ 15 Plus*Distance spindle/working surface (mm)125-490Centre offset20 mmDistance column-spindle (mm)214Column diameter (mm)82With cabinet370 x 495 x 1,800with cabinet370 x 495 x 1,800with cabinet370 x 495 x 1,800with cabinet355 x 485 x 1,027with out cabinet355 x 485 x 1,027without cabinet with VP940 x 570 x 2,140with out cabinet with VP940 x 570 x 2,140without cabinet with VP355 x 485 x 1,027without cabinet with VP350 x 20 x 2,140without cabinet with VP300 x 240Weight without cabinet (kg)73Order no.212.765Distance spindle/working surface (mm)300 x 240Machine dimensions without VP (mm)420 x 540 x 1,780Machine dimensions with VP (mm)572 x 936 x 2,142T-slot size, distance (mm), with WP (mm)621 x 2,125, 14/26Weight (kg)88	TB 15 Plus*	
without VP (mm)400 x 520 x 850Machine dimensions with VP (mm)452 x 700 x 1130Weight (kg)65Order no.212.755TBZ 15 Plus*Distance spindle/working surface (mm)125 - 490Centre offset20 mmDistance column-spindle (mm)214Column diameter (mm)82Machine dimensions (mm)370 x 495 x 1,800with cabinet370 x 495 x 1,800with cabinet with VP940 x 570 x 2,140with cabinet with VP940 x 570 x 2,140with cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*Son x 240Distance spindle/working surface (mm)300 x 240Wachine dimensions420 x 540 x 1,780Without VP (mm)572 x 936 x 2,142Nachine dimensions572 x 936 x 2,142With VP (mm)572 x 936 x 2,142T-slot size, distance (mm), width measurement (mm)88	Distance spindle/working surface (mm)	85-370
with VP (mm)      452 x 700 x 1130        Weight (kg)      65        Order no.      212.755        TBZ 15 Plus*      20 mm        Distance spindle/working surface (mm)      125-490        Centre offset      20 mm        Distance column-spindle (mm)      214        Column diameter (mm)      82        Machine dimensions (mm)      370 x 495 x 1,800        with cabinet      370 x 495 x 1,800        with cabinet with VP      940 x 570 x 2,140        with cabinet with VP      940 x 570 x 2,140        without cabinet with VP      940 x 570 x 1,600        Weight without cabinet (kg)      73        Order no.      212.765        SB 15 Plus*      Sistance spindle/working surface (mm)        Machine dimensions      max. 750        Useable table surface (W x L) (mm)      300 x 240        Machine dimensions      420 x 540 x 1,780        Machine dimensions      572 x 936 x 2,142        T-slot size, distance (mm), with VP (mm)      572 x 936 x 2,142        Y-slot size, distance (mm), with measurement (mm)      88		400 x 520 x 850
Order no.212.755TBZ 15 Plus*Distance spindle/working surface (mm)125-490Centre offset20 mmDistance column-spindle (mm)214Column diameter (mm)82Machine dimensions (mm)370 x 495 x 1,800with cabinet370 x 495 x 1,800with cabinet with VP940 x 570 x 2,140without cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*Distance spindle/working surface (mm)max. 750Useable table surface (W x L) (mm)300 x 240Machine dimensions420 x 540 x 1,780Wachine dimensionss72 x 936 x 2,142T-slot size, distance (mm), with measurement (mm)14/26Weight (kg)88		452 x 700 x 1130
TBZ 15 Plus*Distance spindle/working surface [mm]125-490Centre offset20 mmDistance column-spindle [mm]214Column diameter (mm)82Machine dimensions (mm)370 x 495 x 1,800with cabinet370 x 495 x 1,800with cabinet with VP940 x 570 x 2,140with cabinet with VP940 x 570 x 2,140without cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*Distance spindle/working surface (mm)300 x 240Machine dimensions without VP (mm)300 x 240Machine dimensions without VP (mm)572 x 936 x 2,142T-slot size, distance (mm), width measurement (mm)Quantity 2, 125, 14/26Weight (kg)88	Weight (kg)	65
Distance spindle/working surface (mm)125-490Centre offset20 mmDistance column-spindle (mm)214Column diameter (mm)82Machine dimensions (mm)with cabinetwith cabinet370 x 495 x 1,800with cabinet with VP940 x 570 x 2,140without cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*S00 x 240Useable table surface (W x L) (mm)300 x 240Machine dimensionswithout VP (mm)without VP (mm)572 x 936 x 2,142T-slot size, distance (mm), width measurement (mm)Quantity 2, 125, 14/26Weight (kg)88	Order no.	212.755
Centre offset20 mmDistance column-spindle (mm)214Column diameter (mm)82Machine dimensions (mm)370 x 495 x 1,800with cabinet370 x 495 x 1,800with cabinet with VP940 x 570 x 2,140without cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*300 x 240Useable table surface (W x L) (mm)300 x 240Machine dimensions420 x 540 x 1,780without VP (mm)572 x 936 x 2,142T-slot size, distance (mm), width measurement (mm)Quantity 2, 125, 14/26Weight (kg)88	TBZ 15 Plus*	
Distance column-spindle (mm)214Column diameter (mm)82Machine dimensions (mm)370 x 495 x 1,800with cabinet370 x 495 x 1,800with cabinet with VP940 x 570 x 2,140with cabinet with VP940 x 570 x 2,140without cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*300 x 240Useable table surface (W x L) (mm)300 x 240Machine dimensions without VP (mm)420 x 540 x 1,780Machine dimensions with VP (mm)572 x 936 x 2,142T-slot size, distance (mm), width measurement (mm)Quantity 2, 125, 14/26Weight (kg)88	Distance spindle/working surface (mm)	125-490
Column diameter (mm)82Machine dimensions (mm)370 x 495 x 1,800with cabinet370 x 495 x 1,800with cabinet with VP940 x 570 x 2,140without cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*300 x 240Useable table surface (W x L) (mm)300 x 240Machine dimensions without VP (mm)420 x 540 x 1,780Machine dimensions with VP (mm)572 x 936 x 2,142T-slot size, distance (mm), width measurement (mm)14/26Weight (kg)88	Centre offset	20 mm
Machine dimensions (mm)Image: Constraint of the second	Distance column-spindle (mm)	214
with cabinet370 x 495 x 1,800with cabinet with VP940 x 570 x 2,140without cabinet355 x 485 x 1,027without cabinet with VP940 x 570 x 1,600Weight without cabinet (kg)73Order no.212.765SB 15 Plus*Distance spindle/working surface (mm)max. 750Useable table surface (W x L) (mm)300 x 240Machine dimensions420 x 540 x 1,780With VP (mm)572 x 936 x 2,142T-slot size, distance (mm), width measurement (mm)Quantity 2, 125, 14/26Weight (kg)88	Column diameter (mm)	82
Order no.212.765SB 15 Plus*Distance spindle/working surface (mm)max. 750Useable table surface (W x L) (mm)300 x 240Machine dimensions without VP (mm)420 x 540 x 1,780Machine dimensions with VP (mm)572 x 936 x 2,142T-slot size, distance (mm), width measurement (mm)Quantity 2, 125, 14/26Weight (kg)88	with cabinet with cabinet with VP without cabinet	940 x 570 x 2,140 355 x 485 x 1,027
SB 15 Plus*Distance spindle/working surface (mm)max. 750Useable table surface (W x L) (mm)300 x 240Machine dimensions without VP (mm)420 x 540 x 1,780Machine dimensions with VP (mm)572 x 936 x 2,142T-slot size, distance (mm), width measurement (mm)Quantity 2, 125, 14/26Weight (kg)88	Weight without cabinet (kg)	73
Distance spindle/working surface (mm)max. 750Useable table surface (W x L) (mm)300 x 240Machine dimensions without VP (mm)420 x 540 x 1,780Machine dimensions with VP (mm)572 x 936 x 2,142T-slot size, distance (mm), width measurement (mm)Quantity 2, 125, 14/26Weight (kg)88	Order no.	212.765
Useable table surface (W x L) (mm)300 x 240Machine dimensions without VP (mm)420 x 540 x 1,780Machine dimensions with VP (mm)572 x 936 x 2,142T-slot size, distance (mm), width measurement (mm)Quantity 2, 125, 14/26Weight (kg)88	SB 15 Plus*	
Machine dimensions without VP (mm)420 x 540 x 1,780Machine dimensions with VP (mm)572 x 936 x 2,142T-slot size, distance (mm), width measurement (mm)Quantity 2, 125, 14/26Weight [kg]88	Distance spindle/working surface (mm)	max. 750
without VP (mm)420 x 540 x 1,780Machine dimensions with VP (mm)572 x 936 x 2,142T-slot size, distance (mm), width measurement (mm)Quantity 2, 125, 14/26Weight (kg)88	Useable table surface (W x L) (mm)	300 x 240
with VP (mm)      572 x 936 x 2,142        T-slot size, distance (mm), width measurement (mm)      Quantity 2, 125, 14/26        Weight (kg)      88		420 x 540 x 1,780
width measurement (mm)14/26Weight (kg)88		572 x 936 x 2,142
		-
Order no. 212.750	Weight (kg)	88
	Order no.	212.750

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

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# Bench drill and column drill TB 18 <sup>▶</sup>Plus TBZ 18 <sup>▶</sup>Plus SB 18 <sup>▶</sup>Plus





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

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

#### **Special equipment**

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

#### Accessories

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

#### Drill package 3

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





#### Technical data

Drilling capacity/normal drilling performance (mm)	18/20 (in E335/ST 60) 22 Nm
Thread cutting performance max. (depending on gradient)	M12
Spindle	MK II
	100
	240
	82
Useable table surface (W x L) (mm)	340 x 280
	Quantity 2, 125, 13/26
Speed indicator	digital
Drilling depth indicator	digital
5 1 1	Quick-adjust thrust ring
Feed	by hand
Table height adjustment	with toothed rack
Three-phase current motor 230 V with frequency converter (kW)	0.75
	30-3,000
TB 18 Plus*	
Distance spindle - working surface (mm) Table	155-415
	155-550
Machine dimensions	
without VP (mm)	355 x 705 x 1,065
Machine dimensions with VP (mm)	570 x 940 x 1,612
Weight (kg)	170
Order no.	218.303
TBZ 18 Plus*	
Distance spindle - working surface (mm)	
	155-550
Column diameter (mm)	82
Machine dimensions (mm)	
	370 x 705 x 1,845
	572 x 940 x 2,140 355 x 705 x 1,045
	570 x 940 x 1,600
Weight without cabinet (kg)	155
Order no.	218.309
SB 18 Plus*	
	160-880
Machine dimensions	
	355 x 705 x 1,825
	572 x 936 x 2,142
	195
	218.308
	from page 62

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



# Bench drill and column drill TB 20 <sup>▶</sup>Plus TBZ 20 <sup>▶</sup>Plus SB 20 <sup>▶</sup>Plus





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

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

#### **Special equipment**

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

#### Foot switch Drilling function: Spindle ON and OFF Thread cutting function: Clockwise/anti-clockwise rotation Order no. 225.029

#### Accessories

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

Drill package 3

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



Weight (kg)

Order no.

Additional accessories



20/23 (in E335/ST60)

#### Technical data

Drilling capacity/normal drilling

Drilling capacity/normal drilling performance (mm)	20/23 (in E335/ST60)
Thread cutting performance max. (depending on gradient)	M12
Spindle	MK II
Drilling depth (mm)	100
Distance column-spindle (mm)	240
Column diameter (mm)	82
Useable table surface (W x L) (mm)	340 x 280
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 125, 13/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Quick-adjust thrust ring
Feed	by hand
Table height adjustment	with toothed rack
Three-phase current motor 400 V with frequency converter (kW)	1.5
Spindle speed, stepless (1/min)	40-4,000
TB 20 Plus*	
Distance spindle - working surface (mm)	
Table Base	155-415 155-550
Machine dimensions without VP (mm)	355 x 705 x 1,065
Machine dimensions with VP (mm)	570 x 940 x 1,612
Weight (kg)	170
Order no.	220.105
TBZ 20 Plus*	
Distance spindle - working surface (mm) Base	155-550
Column diameter (mm)	82
Machine dimensions (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
Weight without cabinet (kg)	155
Order no.	220.110
SB 20 Plus*	
Spindle/table (mm)	160-880
Machine dimensions without VP (mm)	355 x 705 x 1,825
Machine dimensions	
with VP (mm)	572 x 936 x 2,142

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

from page 62

195

220,100



# Bench drill and column drill TB 23 <sup>▶</sup>Plus TBZ 23 <sup>▶</sup>Plus SB 23 <sup>▶</sup>Plus





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

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

#### **Special equipment**

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

#### Accessories

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

Drill package 3

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





#### **Technical data**

	lling capacity/normal drilling formance (mm)	R1 R2	23/25 (in E335/ST60) 20/23 (in E335/ST60)	
	read cutting capacity max. pending on gradient)	R1 R2	M16x1 M12	
Sp	indle		MK II	
Dri	illing depth (mm)		100	
Dis	stance column-spindle (mm)		260	
Co	lumn diameter (mm)		110	
Us	eable table surface (W x L) (r	nm)	420 x 340	
	slot size (arm), distance (mm Ith measurement (mm)	),	Quantity 2, 125, 13/26	
Sp	eed indicator		digital	
Dri	illing depth indicator		digital	
Dri	illing depth stop		Quick-adjust thrust ring	
Fe	ed		by hand	
Tal	ole height adjustment		with toothed rack	
	ree-phase current motor 400 h frequency converter (kW)	V	1.5	
•	indle speed, stepless (1/min) h gearing		R1 20-2,000 R2 30-3,000	
TB	23 Plus*			

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

#### TBZ 23 Plus\*

Distance spindle - working surface (mm) Base	230-730
Machine dimensions (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 no. R1	223.022
Order no. R2	223.027
SB 23 Plus*	
Spindle/table	230-850
Machine dimensions without VP (mm)	430 x 715 x 1,800
Machine dimensions with VP (mm)	670 x 1,100 x 2,140
Weight (kg)	290
Order no. R1	223.020
Order no. R2	223.025
Additional accessories	from page 62



# Bench drill and column drill TB 25 <sup>▶</sup>Plus TBZ 25 <sup>▶</sup>Plus SB 25 <sup>▶</sup>Plus





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

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

#### **Special equipment**

- LED lighting with articulated arm Order no. 290.240
- Machined base plate incl. integrated Coolant device (SB version only)
   Filling capacity: max. 15 l
   Delivery rate: max. 30 l/min
   Order no. 290.160B
- Coolant system (separate container) Filling quantity: max. 151
   Delivery rate: max. 30 l/min
   Order no. 290.340
- Foot switch Drilling function: Spindle ON and OFF Thread cutting function: Clockwise/anti-clockwise rotation Order no. 225.029

#### Accessories

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

Drill package 4

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





#### **Technical data**

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

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

#### TBZ 25 Plus\*

Distance spindle - working surface (mm) Base	230-730
Machine dimensions (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 no. R1	225.012
Order no. R2	225.017
SB 25 Plus*	
Spindle/table	230-850
Machine dimensions without VP (mm)	430 x 715 x 1,800
Machine dimensions with VP (mm)	670 x 1,100 x 2,140
Weight (kg)	290
Order no. R1	225.010
Order no. R2	225.015
Additional accessories	from page 62



# Column drill SB 30 <sup>▶</sup>Plus SB 30 MV <sup>▶</sup>Plus





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

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

#### **Special equipment**

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



#### **Technical data**

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

#### Accessories

- Drill package 5
- Vice [felix] 150 2.0
- Taper mandrel MK III/B18
- Reduction sleeve MK III/MK I
- Reduction sleeve MK III/MK II
- Quick-change drill chuck B18 3-16 mm (accuracy 0.17 mm) Order no. 296.594





# Column drill SB 30 NC <sup>►</sup> Plus





- 3-year warranty for single-shift operation
- Warranty extension to 4 or 5 years available! See page 72-73
- Thread cutting system
- Control panel with OLED display
- Robust, high-quality drill head hood with ergonomically tilted front
- LED lighting
- Quick-adjust ergonomic depth stop
- Stepless speed regulation via the central knob
- Emergency stop switch
- Thermal overload protection
- Spindle stop
- Drill protection with electrical fuse
- Connecting cable with CEE plug
- Switch lever for manual/automatic mode
- Easy-read control panel with central metal knob
- Easily understandable input menu
- Selectable mode of operation: drilling/thread cutting
- Counting function for drilling stroke
- Additional panel for automatic mode (activation by moving switch lever to automatic)
- 4.3" touchscreen display
- Comfort operator/machine interface for programming the spindle sleeve feed
- Selectable mode of operation: Drilling, reaming, countersinking, flow forming, thread cutting
- Free-programming function
- Choice of machine settings

#### **Special equipment**

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



## **Technical data**

Drilling capacity/normal drilling performance (mm) R1 (measured torque Nm) 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. (depending 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 dimensions without VP (mm)	610 x 900 x 1,980
Machine dimensions with VP (mm)	670 x 1,100 x 2,200
Three-phase current motor 400 V with frequency converter (kW)	3.0
Spindle speed, stepless (1/min) R1 (1-stage) R2 (1-stage) R3 (2-stage with gearing)	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 no. R1	230.510
Order no. R2	230.511
Order no. R3	230.512

from page 62

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

#### For AUTO: Programme start/stop Order no. 231.000

 Commissioning the machine and briefing the operating staff
 Order no. 229.931

#### Accessories

Drill package 5

Vice [felix] 150 2.0

Additional accessories

- Taper mandrel MK III/B18
- Reduction sleeve MK III/MK I
- Reduction sleeve MK III/MK II
- Quick-change drill chuck B18 3-16 mm (accuracy 0.17 mm) Order no. 296.594





## Column drill SB 40 <sup>▶</sup>Plus SB 40 MV <sup>▶</sup>Plus





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



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

### **Special equipment**

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



## **Technical data**

Drilling capacity/normal drilling performance (mm) R1 (measured torque Nm) 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.	00/40 (III 2000/0100) (200)
(depending on gradient)	
R1 R1	M30x3.5
R2	M24x3
R3	M36x4
Spindle	MK IV
Drilling depth (mm)	160
Distance column-spindle (mm)	300
Column diameter (mm)	140 590 x 450
Useable table surface (W x L) (mm)	
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	with fine tuning
Table height adjustment	with toothed rack 150-700
Spindle/table (mm) Machine dimensions	150-700
without VP (mm)	610 x 900 x 1,980
Machine dimensions	
with VP (mm)	670 x 1,100 x 2,200
Three-phase current motor 400 V	
with frequency converter (kW)	4.0
Spindle speed, stepless (1/min)	
R1 (1-stage) R2 (1-stage)	0-1,000 0-1,600
R3 (2-stage with gearing)	0-4,000
no (2 stage with gearing)	0 4,000
SB 40 Plus	
Feed	by hand
Weight (kg)	400
Order no. R1	230.530
Order no. R2	230.531
Order no. R3	230.532
SB 40 MV Plus	
Feed (mm/rotation)	0.10/0.16/0.25
Weight (kg)	420
Order no. R1	230.535
Order no. R2	230.536
Order no. R3	230.537
Additional accessories	from page 62

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

Accessories

Drill package 6

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





## Column drill SB 40 NC <sup>▶</sup> Plus





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

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

#### **Special equipment**

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



### **Technical data**

Drilling capacity/normal drilling performance (mm)	
R1 (measured torque Nm)	30/35 (in E335/ST60) (135)
R2 (measured torque Nm)	27/32 (in E335/ST60) (90)
R3 (measured torque Nm)	35/40 (in E335/ST60) (260)
Thread cutting performance max. (depending on gradient)	
R1	M30x3.5
R2	M24x3
R3	M36x4
Spindle	MKIV
Drilling depth (mm)	160
Distance column-spindle (mm)	300
Column diameter (mm)	140
Useable table surface (W x L) (mm)	590 x 450
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	with fine tuning
Table height adjustment	with toothed rack
Spindle/table (mm)	150-700
Machine dimensions	
without VP (mm)	610 x 900 x 1,980
Machine dimensions with VP (mm)	670 x 1,100 x 2,200
Three-phase current motor 400 V	
with frequency converter (kW)	4.0
Spindle speed, stepless (1/min)	
R1 (1-stage)	0-1,000
R2 (1-stage)	0-1,600
R3 (2-stage with gearing)	0-4,000
SB 40 NC Plus	
Feed/return stroke, infinitely variable (m/min)	0-1.5
Weight (kg)	440 kg
Order no. R1	230.540
Order no. R2	230.541

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

230.542

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#### For AUTO: Programme start/stop Order no. 231.000

 Commissioning the machine and briefing the operating staff
 Order no. 229.931

#### Accessories

Order no. R3

Additional accessories

Drill package 6

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





## Flow drilling machine SB 20 FB <sup>▶</sup>Plus





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

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

### Flow forming

Serves to produce extrusions in thin-walled metallic materials.

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

## The advantages of flow forming are

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

#### Accessories

Vice [felix] 100 2.0 Order no. 281.106





#### **Technical data**

Flow forming at 3 mm sheet thickness (mm)	8
Spindle	MK II
Drilling depth (mm)	100
Distance column-spindle (mm)	240
Column diameter (mm)	82
Useable table surface (W x L) (mm)	340 x 280
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 125, 13/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Quick-adjust thrust ring
Feed	by hand
Table height adjustment	with toothed rack
Three-phase current motor 400 V with frequency converter (kW)	1.5
Spindle speed, stepless (1/min)	40-4,000
SB 20 FB Plus	
Spindle/table (mm)	160-880
Machine dimensions without VP (mm)	355 x 705 x 1,825
Machine dimensions with VP (mm)	572 x 936 x 2,142
Weight (kg)	195
Order no.	220.115
Additional accessories	from page 62

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



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





# CLASSIC DRILLING MACHINES

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

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

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

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





## Column drill SB M3 ST





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

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

#### **Special equipment**

- LED lighting with articulated arm Order no. 290.240
- LED lighting in head Order no. 290.070
- Machined base plate incl. integrated coolant system
   Filling quantity: max. 15 l, Delivery rate: max. 30 l/min Order no. 290.160B
- Machined foot plate Order no. 290.175B
- Combi drilling table with vice and square table 360° rotatable with scale, jaw width 120 mm, span 105 mm, table surface 350 x 350 mm Order no. 290.125
- Coolant system (separate tank) Filling quantity: max. 15 l/min Delivery rate: max. 30 l/min Order no. 290.340
- Large base Column Ø 125 mm Usable table surface (WxL) 590 x450 mm Order no. 205.036

#### **Accessories**

Drill package 4

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





## Our classic

#### **Technical data**

Drilling capacity/normal drilling performance (mm)	25/30
Thread cutting performance max. (depending on gradient)	M20
Spindle	MK III
Drilling depth (mm)	125
Distance column-spindle (mm)	280
Column diameter (mm)	110
Useable table surface (W x L) (mm)	420 x 340 mm
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 125, 13/26
Speed indicator	scale
Drilling depth indicator	scale
Drilling depth stop	with fine tuning
Table height adjustment	with toothed rack
Machine dimensions without VP (mm)	520 x 820 x 1,900
Machine dimensions with VP (mm)	637 x 1,096 x 2,120
Three-phase current motor 400 V, pole-changeable (kW)	0.9/1.45
Spindle speeds with gearing, in- finitely variable	
Revolutions per minute	125-4000 1/min
In 2 stages/stage 1 stage 2 The step change takes place via belt-reversal	125 - 2000 1/min, 250 - 4000 1/min
SB M3 ST	
Spindla/tabla (mm)	2/0-790

Additional accordanies	from nono (2	
Order no.	205.180	
Weight (kg)	275	
Spindle/table (mm)	240-790	
JD 11J J I		



## Column drill SB M5 ST





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

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

### **Special equipment**

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

#### Accessories

Drill package 6

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





## • Our classic

### **Technical data**

Additional accessories	from page 62
Order no.	205.204
Weight (kg)	440
Spindle/table (mm)	150-700
SB M5 ST	
Spindle speed, stepless (1/min) with gearing Revolutions per minute	100-2,000 rpm
Three-phase current motor 400 V, pole-changeable (kW)	1.5/3.0
Machine dimensions with VP (mm)	672 x 1,096 x 2,142
Machine dimensions without VP (mm)	610 x 850 x 1,920
Table height adjustment	with toothed rack
Drilling depth stop	with fine tuning
Drilling depth indicator	scale
width measurement (mm) Speed indicator	14/26 scale
T-slot size (arm), distance (mm),	Quantity 2, 160,
Useable table surface (W x L) (mm)	590 x 450 mm
Column diameter (mm)	125
Distance column-spindle (mm)	300
Drilling depth (mm)	160
(depending on gradient) Spindle	M30 MK IV
Drilling capacity/normal drilling performance (mm) Thread cutting performance max.	35/40



## Column drill SB P30 ST





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

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

#### **Special equipment**

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

#### **Accessories**

Drill package 4

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





## Our classic

#### **Technical data**

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



## Column drill SB P30 STG PV electronic

Also with transparent hood





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

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

#### Special equipment

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

## Software options that can be supplied for PV electronic

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



## Our classic

#### **Technical data**

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

#### SB P30 STG PV electronic

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

#### Accessories

Drill package 5

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





## Column drill SB P40 ST





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

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

#### **Special equipment**

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

#### Accessories

Drill package 6

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





## Our classic

Te	ch	nic	al	d	ata
16	сII	IIIU	, CI L	u	ata

Drilling capacity/normal drilling performance (mm)	35/40
Thread cutting performance max. (depending on gradient)	M30
Spindle	MK IV
Drilling depth (mm)	160
Distance column-spindle (mm)	300
Column diameter (mm)	125
Useable table surface (W x L) (mm)	590 x 450
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 160, 14/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	with fine tuning
Table height adjustment	with toothed rack
Machine dimensions without VP (mm)	610 x 850 x 1,920
Machine dimensions with VP (mm)	637 x 1,096 x 2,120
Three-phase current motor 400 V, pole-changeable (kW)	1.5/3.0
Spindle speed, stepless (1/min) with gearing Speed series R1 Speed series R2	100-2,000 70-1,400
SB P40 ST	
Spindle/table (mm)	150-700
Weight (kg)	440
Order no. R1	205.205
Order no. R2	205.206
Additional accessories	from page 62



## Column drill SB P40 STG PV electronic

Also with transparent hood





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

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

### **Special equipment**

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

## Software options that can be supplied for PV electronic

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



## Our classic

#### **Technical data**

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

#### SB P40 STG PV electronic

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

## Accessories

Drill package 6

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



## Gear drilling machine GB 50 MV



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

### **Special equipment**

Thread cutting system Order no: 287.045

#### Accessories

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

Further special equipment on request!



## Technical data

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

## Multi-head drilling machines

Expandable at any tin flexible arrangement



Warranty extension

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

We can put together the FLOTT multi-head drilling machine for you individually . We would be happy to advise you!

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

## Special equipment / accessories

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

### **Features**

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

## More options

- Can be combined with machines from 18 Plus to 40 NC Plus (varying drill heads possible!)
- 18 Plus
   Order no. 218.304
- 20 Plus Order no. 220.101
- 23 Plus R1 Order no. 223.024
- 23 Plus R2 Order no. 223.028
- 25 Plus R1 Order no. 225.013
- 25 Plus R2 Order no. 225.018
- P30 STG PV
   Order no. 297.086
- 30 Plus R1
   Order no. 231.100
- 30 Plus R2
   Order no. 231.101
- 30 Plus R2 Order no. 231.102
- 30 MV Plus R1
   Order no. 231.105
- 30 MV Plus R2
   Order no. 231.106
- 30 MV Plus R3
   Order no. 231.107



## **Technical data**

#### Varying drill heads possible

#### Underframe

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

## 30 NC Plus R1 Order no. 231.110

- 30 NC Plus R2 Order no. 231.111
- 30 NC Plus R3
   Order no. 231.112
- 40 Plus R1 Order no. 231.115
- 40 Plus R2 Order no. 231.116
- 40 Plus R3 Order no. 231.117
- 40 MV Plus R1
   Order no. 231.120

- 40 MV Plus R2 Order no. 231.121
- 40 MV Plus R3 Order no. 231.122
- 40 NC Plus R1
   Order no. 231.125
- 40 NC Plus R2 Order no. 231.126
- 40 NC Plus R3 Order no. 231.127
- 40 PV electronic R1 Order no. 297.087
- 40 PV electronic R2 Order no. 297.088





## Special equipment

**Option 1** 

**Machines** with deviating special voltage on request



Order no.

290.100

#### **Option 2**

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

Order no. I Columns -Ø 82 mm



#### **Option 3**

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



Order no.

290.320

#### **Option 4**

Foot switch following technical advice and creation of a requirement profile



Order no.

on request

#### **Option 5 and 6**



296.288

296.289

#### **Option 7 and 8**

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

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

Order no. Ø 110 Order no. Ø 125

## **Option 9**

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



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

#### **Option 10**

Electric coolant system complete with pump, tank, hoses, cable and switch from Series 18 Plus onwards Filling capacity: max.151 Delivery rate: max. 30 l/min Order no.

290.340





#### **Option 11**

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



Order no.

212.716

#### **Option 12**

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



Order no.

290.200

#### **Option 13**

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



Order no.

290.201

#### Option 14 and 15

Commissioning the machine and instruction of the operating personnel Online trainings: www.flott.de Advice and briefing

Order no. Com. Order no. Online tr.



290.018 229.931

#### Option 16 and 17

#### Combination drill tables for 110/125/140 columns with vice and square table 360° rotatable with scale Jaw width 120 mm

span 105 mm Table surface 350 x 350 mm Order no. 110 Order no. 125 Order no. 140



#### **Option 18**

#### Minimum quantity lubrication

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

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

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

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



290.395 A	
290.395 B	
290.395 C	
290.395 D	

### **Accessories**

#### 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 type series 18/20/23/25 Plus
- Intermediate plate



#### F1 precision cross table

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



Order no.	281.085	Order no.	281.090

#### F2 Precision cross table

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



#### Machine cabinet I narrow version

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



Order no.

281.095

Order no.

250.208



#### thick, height-adjustable feet Spotlight 90° with flex shaft (up to 3 cm), bar-glued and 225 mm and on/off switch on finger-jointed, oil-treated to lamp head repel dirt and protect against 200 lm, approx. 5500 Kelvin warping (daylight white), IP65 Bearing capacity: 300 kg 2 drawers with roller guides 2 lockable doors ▶ 120 x 60 x 84 cm Order no. up to series 25 Plus 290.240 250.180 Order no. Order no. from P30 Plus R3 series 290.241 LED lighting with 90° articulated arm with straight magnetic base LED lighting with articulated arm with straight magnetic base With 90° magnetic base and With 90° magnetic base and separate power supply unit 24 separate power supply unit 24 V (2.5 W) V (2.5 W) Spotlight 90° with flexible Spotlight 90° with 450 mm shaft 225 or 450 mm and on/ and on/off switch on lamp off switch on lamp head head 200 lm, approx. 5500 Kelvin 200 lm, approx. 5500 Kelvin (daylight white), IP65 (daylight white), IP65 Magnetic holding force: 250 N Magnetic holding force: 250 N

290.242 Order no. with 450 flex shaft 290.244 290.243 Order no.

## Machine cabinet I wide version

Solid beech top, 30 mm



### LED lighting with 90° articulated arm

Fixed mounted

Order no. with 225 flex shaft

## Accessories

#### Vice [felix] 80 2.0

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



#### Vice [felix] 100 2.0

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



Order no.	281.140	Order no.	281.141	

#### Vice [felix] 120 2.0

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

#### Vice [felix] 150 2.0

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



Order no.

281.142

Order no.

281.143



#### Precision quick-change drill chuck

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



#### Gear rimmed drill chuck

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



Order no.

285.104

#### Precision ground quick-change drill chuck

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



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

▶ Span 1-13 mm

Order no.

- Socket B16
- Rotational accuracy: 0.17 mm



Order no.

285.064

Order no.

285.133

285.103

## Accessories

## Quick-change drill chuck, self-tensioning

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



Taper mandrel (insertion pin)

 Order no. for B16/MK I
 285.310

 Order no. for B16/MK II
 285.320

 Order no. for B18/MK II
 285.321

 Order no. for B18/MK III
 285.323

 Order no. for B18/MK IV
 290.323

 Order no. for B18/MK V
 287.097

Order no.

285.165

#### **Tap holder**

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



Drill drift (Semi-automatic)



Order no.

285.109

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







### Accessories









## 

## Warranty extensions

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



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


### Warranty extensions

Machine	for order no.	4 years warranty extension	5 years warranty extension	Page
SB 30 Plus R1	230500	290.018.230.500	290.019.230.500	34
SB 30 Plus R2	230501	290.018.230.501	290.019.230.501	34
SB 30 Plus R3	230502	290.018.230.502	290.019.230.502	34
SB 30 MV Plus R1	230505	290.018.230.505	290.019.230.505	34
SB 30 MV Plus R2	230506	290.018.230.506	290.019.230.506	34
SB 30 MV Plus R3	230507	290.018.230.507	290.019.230.507	34
SB 30 NC Plus R1	230510	290.018.230.510	290.019.230.510	36
SB 30 NC Plus R2	230511	290.018.230.511	290.019.230.511	36
SB 30 NC Plus R3	230512	290.018.230.512	290.019.230.512	36
SB 40 Plus R1	230530	290.018.230.530	290.019.230.530	38
SB 40 Plus R2	230531	290.018.230.531	290.019.230.531	38
SB 40 Plus R3	230532	290.018.230.532	290.019.230.532	38
SB 40 MV Plus R1	230535	290.018.230.535	290.019.230.535	38
SB 40 MV PlusR2	230536	290.018.230.536	290.019.230.536	38
SB 40 MV Plus R3	230537	290.018.230.537	290.019.230.537	38
SB 40 NC Plus R1	230540	290.018.230.540	290.019.230.540	40
SB 40 NC Plus R2	230541	290.018.230.541	290.019.230.541	40
SB 40 NC Plus R3	230542	290.018.230.542	290.019.230.542	40
SB 20 Plus FB	220115	290.018.220.115	290.019.220.115	42
SB M3 ST	205180	290.018.205.180	290.019.205.180	46
SB M5 ST	205204	290.018.205.204	290.019.205.204	48
SB P30 ST	205181	290.018.205.181	290.019.205.181	50
SB P30 STG PV electronic transparent	207220	290.018.207.220	290.019.207.220	52
SB P30 STG PV electronic grey	207183	290.018.207.183	290.019.207.183	54
SB P40 ST/R1	205205	290.018.205.205	290.019.205.205	56
SB P40 ST/R2	205206	290.018.205.206	290.019.205.206	56
SB P40 STG PV electronic/ R1 transparent	207226	290.018.207.226	290.019.207.226	58
SB P40 STG PV electronic/ R2 transparent	207227	290.018.207.227	290.019.207.227	58
SB P40 STG PV electronic/R1 grey	207208	290.018.207.208	290.019.207.208	58
SB P40 STG PV electronic/R2 grey	207209	290.018.207.209	290.019.207.209	58

### Overview grinding machines

Double grinding machine	Grinding disc size mm	Revolutions per minute 1/min	Motor AC 230 V kW	Three-phase cur- rent motor 400 V kW	Weight kg	Suction socket Ø mm	Page
TS 175 SW	175 x 25 x 32	2,800	0.52	-	15	42	76
TS 175 SD P	175 x 25 x 32	2,740	-	0.7	15	42	76
TS 175 Pro	175x25x32	2,750	-	0.7	15	42	76
TS 200 SD P/Pro	200 x 32 x 32	2,550	_	1.0/0.75	20	42	78
TS 250 SD P/Pro	250 x 40 x 51	1,400	_	1.4 / 0.8	32	42	78
TS 300 SD P	300 x 40 x 51	1,250	_	2.2	40	42	82
TSB 250 P	250 x 40 x 51	1,400	-	1.4	35	42	84
Belt grinders	Belt length	Belt width	Motor AC 230 V	Three-phase cur- rent motor 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	86
BSM 75	2,000	75	-	3.75	80	60	88
BSM75A	2,000	75	_	3.75	90	60	88
BSM75A/pol	2,000	75	-	3.0/3.75	105	60	88
BSM 150	2,000	150	-	3.75	90	60	90
BSM 150 A	2,000	150	-	3.75	100	60	90
BSM 150 A/pol	2,000	150	-	3.0/3.75	105	60	90
Brush deburring machine	Brush diameter	Brush width normal	Speed/ pole-changeable	Drive power (Three-phase current motor)	Weight		Page
	mm	mm	RPM	kW	kg		
BEM 250 Plus	250	60	2,800/1,400	1.8/2.1	85		92
BEM 250 Pro	250 (3 pieces)	60	600-2,700	3	410		94

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

# **GRINDING TECHNOLOGY**

RON

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



## Double grinding machine TS 175 SW TS 175 SD P TS 175 Pro



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

### **Accessories**

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

## Werkzeugmaschinen

### **Technical data**

Machine dimensions without VP (mm)	230 x 440 x 210
Machine dimensions with VP (mm)	260 x 450 x 250
Suction piece Ø (mm)	42

### TS 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 no.	317.766

### **TS 175 SD P**

Dimensions of the grinding wheel (mm)	175 x 25 x 32
Speed (1/min)	2,740
Three-phase current motor 400 V (kW)	0.7, S2-30 min (short time operation)
Weight (kg)	15
Order no.	317.761
TS 175 Pro	
Dimensions of the grinding wheel (mm)	175 x 25 x 32
Speed (1/min)	2,750
Motor AC 230 V (kW)	0.7, S1 (continuous operation)
Weight (kg)	15
Order no.	317.840

Double grinding machine TS 200 SD P/Pro TS 250 SD P/Pro



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

### **Special equipment**

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

### Accessories

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



Technical data	
Suction piece Ø (mm)	42
TS 200 SD P/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
Weight (kg)	20
TS 200 SD P	
Three-phase current motor 400 V (kW) 1.0, S2-30 min (short-time operation)	
Order no.	317.762
TS 200 SD Pro	
Three-phase current motor 400 V (kW) 0.75, S1 (continuous operation)	
Order no.	317.845
TS 250 SD P/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
Weight (kg)	32
TS 250 SD P	
Three-phase current motor 400 V (kW) 1.4, S2-30 min (short-time operation)	
Order no.	317.763
TS 250 SD Pro	
Three-phase current motor 400 V (kW) 0.8, S1 (continuous operation)	
Order no.	317.850

## Double grinding machine TS 200 SD P/Pro TS 250 SD P/Pro

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



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

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

### **Special equipment**

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

### Accessories

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



### Technical data

Speed (1/min)

machine stand

TS 250 SD P with brake and

TS 250 SD P with brake and machine stand with extraction

TS 250 SD Pro with brake and

Three-phase current motor 400 V(kW)

Weight (kg)

Order no.

system

Order no.

Order no.

machine stand

Suction piece Ø (mm)	42
TS 200 SD P/Pro with brake	
and machine stand	
Dimensions of	000 00 00
the grinding wheel (mm)	200 x 32 x 32
Machine dimensions without VP (mm)	270 x 470 x 1,050
Machine dimensions with VP (mm)	600 x 800 x 1,350
Speed (1/min)	2,550
Weight (kg)	60
TS 200 SD P with brake and machine stand	
Three-phase current motor 400 V(kW)	1.0, S2-30 min (short-time operation)
Order no.	317.774
TS 200 SD P with brake and ma- chine stand with extraction system	
Three-phase current motor 400 V(kW)	1.0, S2-30 min (short-time operation)
Order no.	317.777
TS 200 Pro with brake and machine stand	
Three-phase current motor 400 V(kW)	0.75, S1 (continuous operation)
Order no.	317.846
TS 200 Pro with brake and machine stand with extraction system	
Three-phase current motor 400 V(kW)	0.75, S1 (continuous operation)
Order no.	317.847
TS 250 SD P/ Pro with brake	
and machine stand	
Dimensions of	
the grinding wheel (mm)	250 x 40 x 51
Machine dimensions without VP (mm)	520 x 530 x 1,110
Machine dimensions with VP (mm)	600 x 800 x 1,400

1,400

317.775

317.778

317.851

0.8, S1 (continuous operation)

85

Three-phase current motor 400 V(kW) 1.4, S2-30 min (short-time operation)

Three-phase current motor 400 V(kW) 1.4, S2-30 min (short-time operation)

## Double grinding machine TS 300 SD P

Optionally combined with brake, machine stand and extraction system



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

### Special equipment

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

### **Accessories**

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



### Technical data

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

## Combined belt grinder / grinding machine TSB 250 P



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

### Accessories

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



### **Technical data**

### **TSB 250 P**

100 200 1	
Dimensions of the grinding wheel (60 grain) (mm)	250 x 40 x 51
Machine dimensions without VP (mm)	600 x 320 x 700
Machine dimensions with VP (mm)	800 x 800 x 800
Speed (1/min)	1,400
Weight (kg)	35
Belt speed (m/s)	15
Band dimensions (mm)	1,300 x 75
Grain size	80
Sound level (dB (A))	78
Three-phase current motor 400 V (kW)	1.4
Measurement with grinding arm position (vertical) (mm)	560 x 320 x 680
Order no.	330.360
TSB 250 P with machine stand, EMERGENCY STOP push button and brake	
Machine dimensions without VP (mm)	600 x 540 x 1,190
Machine dimensions with VP (mm)	1,200 x 800 x 1,000
Weight (kg)	65
Order no.	330.365
TSB 250 P with machine stand, EMERGENCY STOP push button, brake and extraction system	
•	
Machine dimensions without VP (mm)	600 x 540 x 1,190
Machine dimensions	600 x 540 x 1,190 1,200 x 800 x 1,000
Machine dimensions without VP (mm) Machine dimensions	

## Belt grinder 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-month warranty for single-shift operation

### Accessories

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



### **Technical data**

### TBSM 100

IR2W IND	
Belt length (mm)	1,220
Belt width (mm)	100
Surface grinding area (mm)	310 x 100
Belt speed (m/sec)	19
Weight (kg)	27
Single phase motor 1 x 230 V (kW)	0.75
Machine dimensions without VP (mm)	650 x 380 x 260
Machine dimensions with VP (mm)	800 x 600 x 4,500
Order no.	371.760

Belt grinder BSM 75 BSM 75 A BSM 75 A pol.



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

### Accessories

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



Technical data	
Belt length (mm)	2,000
Belt width (mm)	75
Surface grinding area (mm)	600
Colour (RAL)	9007
Machine dimensions without VP (mm)	1,100 x 550 x 1,035
Machine dimensions with VP (mm)	800 x 700 x 1,400
BSM 75	
Belt speed (m/s)	30
Three-phase current motor 400 V (kW)	3.75
Extraction capacity (m <sup>3</sup> /h)	-
Suction motor (kW)	-
Weight (kg)	80
Order no.	374.000
BSM 75 A	
Belt speed (m/s)	30
Three-phase current motor 400 V (kW)	3.75
Extraction capacity (m <sup>3</sup> /h)	approx. 630
Suction motor (kW)	0.37
Weight (kg)	90
Order no.	374.001
BSM 75 A pol.	
Belt speed (m/s)	15/30
Three-phase current motor 400 V (kW)	3.0/3.75
Extraction capacity (m <sup>3</sup> /h)	approx. 630
Suction motor (kW)	0.37
Weight (kg)	105
Order no.	374.002

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

Belt grinder BSM 150 BSM 150 A BSM 150 A pol.





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

### **Accessories**

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



Technical data	
Belt length (mm)	2,000
Belt width (mm)	150
Surface grinding area (mm)	600
Colour (RAL)	9007
Machine dimensions without VP (mm)	1,100 x 550 x 1,035
Machine dimensions with VP (mm)	800 x 700 x 1,400
BSM 150	
Belt speed (m/s)	30
Three-phase current motor 400 V(kW)	3.75
Extraction capacity (m <sup>3</sup> /h)	-
Suction motor (kW)	-
Weight (kg)	90
Order no.	374.020
BSM 150 A	
Belt speed (m/s)	30
Three-phase current motor 400 V (kW)	3.75
Extraction capacity (m <sup>3</sup> /h)	approx. 630
Suction motor (kW)	0.37
Weight (kg)	100
Order no.	374.021
BSM 150 A pol.	
Belt speed (m/s)	15/30
Three-phase current motor 400 V (kW)	3.0/3.75
Extraction capacity (m <sup>3</sup> /h)	approx. 630
Suction motor (kW)	0.37
Weight (kg)	105
Order no.	374.022

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

## Brush deburring machine BEM 250 Plus



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

### Accessories

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

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



### **Technical data**

### BEM 250 Plus

Brush diameter (mm)	250
Brush width normal (mm)	60
Socket bore (mm)	50.8
Max. material size (mm)	70 x 140
Working height (mm)	930
Speed/ pole-changeable (rpm)	2,800/1,400
Drive power (kW)	2.1/1.8
Electrical connection (V/Hz)	400/50
Weight (kg)	85
Machine dimensions (mm)	500 x 560 x 1,250
Machine dimensions with VP (mm)	1,400 x 750 x 1,350
Order no.	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 setting of the required speed (600-2,700 1/min) stepless
- For deburring pipes and profiles (max. material size horizontal/vertical) 120 mm
- Easily adjustable work table height (can be set and locked) for the material size in question
- Adjustable, lockable feed (sledges) on the deburring brushes for the work bench using a large handwheel (with locking function)
- Easily removable dust residue drawer
- Robust sheet steel housing construction with preparation (opening) for connection to an external extraction system
- Easily accessible housing hoods (folding) for changing the brushes
- Machine colour:
  - Machine body RAL 7035
  - Side cover: RAL 7005
- ▶ 1 set of machine feet (4 pieces) with adjustment screw
- 3 round deburring brushes 250 x 60/0.35 mm steel wire corrugated
- Connecting cable with CEE plug
- Incl. operating tools
- > 12-month warranty for single-shift operation

### Accessories

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

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



### Technical data

BEM 250 Pro*	
Brush diameter (mm)	250 (3 pieces)
Brush width normal (mm)	60
Socket bore (mm)	50.8
Working height (mm)	1,050
Speed, stepless (rpm)	600-2,700
Drive power, frequency-regulated (kW)	3
Electrical connection (V/Hz)	400/50
Weight (kg)	410
Machine dimensions (mm)	680 x 1,200 x 1,380
Machine dimensions with VP (mm)	1.150 x 680 x 1.440
Order no.	373.155

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

### **Overview** saws

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

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

#### Explanation of abbreviations

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

# SAWING TÉCHNOLOGY

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



## FLOTT Metal band saw HBS 225 A





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



Powered chip removal brush



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

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



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

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

### Special equipment

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

### Accessories

- Blade tension measurement device with dial indicator (Flottomat-BS) Order no. 570.175
- Connection L-SR (steel coil), left, 330 mm wide (incl. fastening set) Order no. 570.176
- Connection L-SR (steel coil), right, 330 mm wide (incl. fastening set) Order no. 570.177
- Roller conveyor L-SR (steel coil), 330 mm wide, basic version 2,000 mm, 150 kg/m Order no. 570.178
- Roller conveyor L-SR (steel coil), 330 mm wide, basic version 3,000 mm, 150 kg/m Order no. 570,179
- Extension roller conveyor L-SR (steel coil), 2,000 mm, 150 kg/m
   Order no. 570.180
- Extension roller conveyor L-SR (steel coil), 3,000 mm, 150 kg/m
   Order no. 570.181



### Technical data

### HBS 225 A

Three-phase current motor 400 V, pole-changeable (kW)	0.7/1.1
Saw blade dimensions (mm)	2,720 x 27 x 0.9
Flywheels Ø (mm)	300
Cutting speed (m/min)	40/80
Vice span (mm)	275
Working height (mm)	978
Machine dimensions (mm)	1,150 x 1,588 x 1,477
Weight (kg)	370
Order no.	570.050
Additional accessories	from page 122

### Sawing area

	9			
	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) Band Saw Blades <sup>1</sup>

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

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

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

## FLOTT Metal band saw HBS 230 ANC





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

### **Special equipment**

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

### Accessories

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



### **Technical data**

### HBS 230 ANC

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

### Sawing area

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

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

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

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

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

## FLOTT Metal band saw HBS 250 A







Roller conveyor with vertical rollers (accessory)

Pistol for rinsing away the chips (optional)

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

### Special equipment

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

### Accessories

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



### Technical data

### HBS 250 A

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

### Sawing area

	<b>v</b>			
	0 °	45° R	45° L	60° R
$\bigcirc$	250	220	180	130
	300 x 240	240 x190	240 x 100	130 x 100
	240 x 240	210 x 210	160 x 160	100 x 100

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

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

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

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

## FLOTT Metal band saw HBS 250 HA





Mitre reading display

Saw blade guide made from carbide



Laser line for cutting (optional)



LED lighting for the working area (optional)



Pistol for rinsing away the chips (optional)

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

### Special equipment

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

### Accessories

- Blade tension measurement device with dial indicator (Flottomat-BS) Order no. 570.175
- Flashing L-SR (steel coil), left, 330 mm wide (incl. fastening set) Order no. 570.282
- Flashing L-SR (steel coil), right, 330 mm wide (incl. fastening set) Order no. 570.281
- Roller conveyor L-SR (steel coil), 330 mm wide, basic version 2,000 mm, 150 kg/m Order no, 570,178
- Roller conveyor L-SR (steel coil), 330 mm wide, basic version 3,000 mm, 150 kg/m Order no. 570,179
- Extension roller conveyor L-SR (steel coil), 2,000 mm, 150 kg/m
   Order no. 570.180
- Extension roller conveyor L-SR (steel coil), 3,000 mm, 150 kg/m
   Order no. 570.181



### Technical data

### HBS 250 HA

Three-phase current motor 400 V, frequency-regulated (kW)	1.5
Saw blade dimensions (mm)	2,910 x 27 x 0.9
Flywheels Ø (mm)	325
Cutting speed (m/min)	20-120
Vice span (mm)	320
Working height (mm)	760
Machine dimensions (mm)	1,480 x 1,700 x 2,000
Weight (kg)	390
Order no.	570.010
Additional accessories	from page 122

### Sawing area

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

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

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

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

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

## FLOTT Metal band saw **HBS 350 HA**





Pistol for rinsing away the chips (optional)

Full-lift cylinder for the vice







Pressure regulation for the vice

(optional)

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



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

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

### **Special equipment**

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

### Accessories

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



### **Technical data**

### **HBS 350 HA**

Three-phase current motor 400 V, frequency-regulated (kW)	3
Saw blade dimensions (mm)	4,780 x 34 x 1.1
Flywheels Ø (mm)	450
Cutting speed (m/min)	20-120
Vice span, full-lift cylinder (mm)	510
Working height (mm)	761
Machine dimensions (mm)	2,568 x 1,070 x 1,500
Weight (kg)	710
Order no.	570.520
Additional accessories	from page 122

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

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

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

- Adjustable vertical rollers Order no. 570.119
- Fixed vertical rollers Order no. 570,120
- Starter band saw blade package 4,780 x 34 x 1.1 mm each consisting of 1 pc. combi-toothing 2/3, 3/4, 4/6, 5/8, 8/12 Order no. 570.235
- Manual measuring stop 2 m with digital Order no. 570.127
- Manual measuring stop 3 m with measuring tape Order no. 570.123
- Manual measuring stop 2 m with measuring tape Order no. 570.122
- Manual measuring stop 3 m with digital Order no. 570.128
- Manual material stop 3 m with digital display Order no. 570.240
- further measuring stops on request

## FLOTT Metal band saw HBS 350 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 welded frame construction
- Freely positionable console with an easy to read LCD control panel
- Integrated material feed (plain bearing) in automatic operation
- ▶ Feed length (single stroke) 600 mm
- Feed via hydraulic cylinder
- Max. stroke repetition: 999
- Smallest diameter for sawing: 10 mm
- Rest length: 60 mm
- ▶ The smallest cut piece (L x H): 15 x 5 mm
- Hydraulic Hydraulic full-lift cylinder for the vice (Pull-down design)
- Cut feed including automatic cutting pressure regulation
- Double-pump hydraulic unit
- Precisely ground carbide saw blade guides (adjustable)
- Clamping pressure regulation for vice
- Floating vice
- Blade tension and saw blade break monitoring system
- Easily removable chip collection containers
- Integrated coolant supply (30 l tank capacity)
- LED work light
- Incl. saw blade combination toothing 4/6
- Machine colour:
   Saw frame RAL 7035 /- Machine body RAL 7005
- 12-month warranty for single-shift operation

#### **Special equipment**

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

#### Accessories

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



# **Technical data**

#### HBS 350 ANC

Three-phase current motor 400 V, frequency-regulated (kW)	3
Saw blade dimensions (mm)	4,780 x 34 x 1.1
Flywheels Ø (mm)	450
Cutting speed (m/min)	20-120
Vice span (mm)	510
Working height (mm)	761
Machine dimensions (mm)	2,440 x 2,880 x 1,540
Weight (kg)	950
Order no.	570.025
Additional accessories	from page 122

#### Sawing area

0			
	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) Band saw blades <sup>1</sup>

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

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

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

# FLOTT Metal band saw HBS 350 SANC



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

#### Special equipment

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

#### Accessories

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



# **Technical data**

#### HBS 350 SANC

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

#### Sawing area

	0 °
$\bigcirc$	350
	420 x 350
	350 x 350

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

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

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

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

# FLOTT Metal band saw **HBS 450 HA**





Pistol for rinsing away the chips (optional)





Pressure regulation for the vice (optional)



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



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

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

# **Special equipment**

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

#### Accessories

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



# **Technical data**

#### **HBS 450 HA**

Additional accessories	from page 122
Order no.	570.525
Weight (kg)	800
Machine dimensions (mm)	2,780 x 1,440 x 1,560
Working height (mm)	781
Vice span, full-lift cylinder (mm)	610
Cutting speed (m/min)	20-120
Flywheels Ø (mm)	480
Saw blade dimensions (mm)	5,200 x 34 x 1.1
Three-phase current motor 400 V, frequency-regulated (kW)	3

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

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

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

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

# FLOTT Metal band saw HBS 450 SANC



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

## **Special equipment**

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

#### Accessories

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



## **Technical data**

#### HBS 450 SANC

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

# Sawing area

	0 °
$\bigcirc$	450
	520 x 450
	450 x 450

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

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

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

#### Order no. 570.139

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

# FLOTT Vertical band saw VBS 400 Plus





Minimum quantity lubrication Order no. 410.031



Longitudinal stop Order no. 410.030



Standard height-adjustable guide arm

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

# **Special equipment**

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

#### Accessories

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



# **Technical data**

#### VBS 400 Plus Table model Fixed Table dimensions (mm) 600 x 600 400 Cutting width (mm) Cutting height (mm) 390 50-1,000 Cutting speed (m/min) Saw blade dimensions (mm) 3,600 x 13 x 0.9 Three-phase current motor, Drive type electronically regulated Connected value (kW/A) 4.0/7.5 Machine dimensions (mm) 2,225 x 1,120 x 770 Weight (kg) 465 410.010 Order no. With minimum quantity lubrication and longitudinal stop 410 020 Order no. Additional accessories from page 122



FLOTT Metal circular saw KS 315 M

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

## Accessories

 Steel underframe (with VP - 250 x 720 x 840 mm)
 Order no. 560.830



# **Technical data**

#### KS 315 M

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

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

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

# FLOTT Metal band saw PBS 120 Plus







3D object - Separation from the base plate (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
- Saw blade guide made from carbide
- Cast iron vice with quick-release lever
- Option to connect a longitudinal stop
- Saw blade cooling at the point of machining
- incl. saw blade combi toothing 8/12
- 12-month warranty for single-shift operation

## Accessories

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



# **Technical data**

#### PBS 120 Plus

35/75
1,620 x 13 x 0.65
0.25/0.37
810 x 530 x 450
38
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 blades <sup>1</sup>

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

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

# Accessories

#### Roller conveyor system L-SR/K330

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



#### on request

#### Stop systems

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



#### on request

#### Roll-off safety system

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



on request

#### Digital measuring stop - display

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



on request

# Digital measuring stop

Digital material stop with handwheel and pneumatic brake



#### on request

#### Manual measuring stop

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



#### on request

#### Hydraulic bundle tensioning

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



#### on request

#### **Controlled material feed**



on request



#### **Vertical rollers**

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



Security systems for individual solutions on request!

#### on request

#### Adjustable vertical rollers

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



#### on request

#### **Plastic rollers series L-K**

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



#### on request

#### **Connecting parts**

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





on request

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# INFORMATION

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# FLOTT drilling technology safety

#### Efficient LED illumination

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



#### Standard electrical drilling protection

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

#### Safe drilling

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



Standard electrical drilling protection

#### Vice [felix] 2.0

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

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

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

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

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

# FLOTT [felix] 2.0







Double grinding machine

Belt grinder





see. understand. learn.



# **FLOTT AKADEMIE**

The FLOTT ACADEMY with Felix Röwekämper. He will show you how it's done. Learn the basics of drilling technology. Here you will find more videos on drilling, sawing and grinding.

www.flott.de 💽 YouTube

# FLOTT demonstration centres and training centres 🔴

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

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

# FLOTT service points

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

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





# **FLOTT** area support

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

#### Area: 1, 2

Field sales: Perry Gantzkow -Phone: +49 172 8334445 perry.gantzkow@flott.de

Back office: Toni Dragano Phone: +49 2191 979-153 toni.dragano@flott.de

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

Field sales: Mike Paßlack Phone: +49 152 08612538 mike.passlack@flott.de

Back office: Mandy Saxer Phone: +49 2191 979-100 mandy.saxer@flott.de

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

Field sales: Humberto Picarra Phone: +49 163 8334507 humberto.picarra@flott.de

Back office: Holger Hausmann Phone: +49 2191 979-158 holger.hausmann@flott.de



#### Area: 13, 16

Field sales: Dieter Liemen Phone: +49 152 04207585 dieter.liemen@mmaschinen.de

Back office: Mandy Saxer Phone: +49 2191 979-100 mandy.saxer@flott.de Export

Field sales: Alexander Reul Phone: +49 152 03918123 alexander.reul@flott.de

Dr Karl Peter Becker Phone: +49 172 9800737 peter.becker@flott.de

Back office: Volker Wächter Phone: +49 2191 979-159 volker.waechter@flott.de

# **FLOTT service**

Our FLOTT team will be happy to serve!

**FLOTT technical service** 

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

FLOTT spare parts service

Mareike Goerzen Phone: +49 2191 46408-121 mareike.goerzen@flott.de The direct link to your service partner



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

#### Note:

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





# Extract from our Terms of Sale

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

plus statutory VAT.

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



# F D S in www.flott.shop



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