





2023
GENERAL CATALOG



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 turn-over 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





CONTENTS

DRILLING TECHNOLOGY

Overview drilling machines	6-7
Drilling technology explanations	8-9
Vices [felix] 2.0	10-11
Plus Series drilling machines	12-43
Classic drilling machines	44-57
Gear drilling machine	58-59
Multi-head drilling machines	60-61
Special equipment/accessories	62-71
Warranty extensions	72-73
GRINDING TECHNOLOGY	
Overview grinding machines	74-75
Double grinding machines	76-83
Combi belt grinder/grinder	84-85
Belt grinders	86-91
Brush deburring machines	92-95

SAWING TECHNOLOGY

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

FLOTT INFORMATION

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

FLOTT-FAN ARTICLES

www.flott.shop





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







A bench drill

BEER TAP

Ever seen one of those before?

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

Only here: www.flott.shop

THE TZA18







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		<u>_</u>		60

Colour description

Plus series

Classic machines

Gear drilling machines









- 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



ΤВ

Bench drill with intermediate table and optional base cabinet



TBZ

Bench drill without intermediate table with optional base cabinet



SB

Column drill press

Explanation of abbreviations

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

FΒ

М۷

PV-

electronic

GB

NC



FLOTT drilling technology / control panel

The control panel with display (only for Plus Series)

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

The menu functions

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



The additional panel with touch operation (only for NC)

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

It allows the selection of the following operating modes

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

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

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



HONORED

Cerman Labor Safety Award

Drilling machines-Vice [felix] 2.0



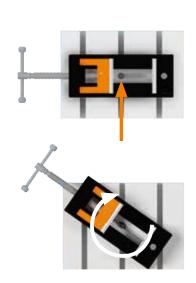
The drilling machine vice for free adjustable clamping of the workpiece.

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



4

(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





Optional machined base plate with integrated coolant system

PLUS SERIES DRILLING MACHINES

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

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

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

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

The Plus Series is divided into three platforms:

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



^{*} Optionally with electromagnetic double clutch (speed series R3)



Bench drill in AC design TB 10 Eco ▶ Plus





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

- 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





Drilling capacity/normal drilling	10/12 (in E335/ST60)
performance (mm)	
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



Bench drill TB 10 Basic ▶ Plus





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



- 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





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
Order no. (with intermediate table and table height adjustment via toothed rack)	217.410



Bench drill TB 10 ▶ 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



140-315
0.54 60-6,000
by hand
by hand
Stop ring (positive-locking)
digital digital
Cross slots, quantity 2, 14/26
300 x 250
70
220
60
M6 B16
10/12 (in E335/ST60)

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



Bench drill and column drill TB 13 → Plus TBZ 13 → Plus SB 13 → Plus





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

- ► 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	0.54
with frequency converter (kW) Spindle speed, stepless (1/min)	
Spindle speed, stepless (1/min)	40-4,000
TB 13 Plus*	
Distance spindle/working surface (mm)	85-370
Machine dimensions without VP (mm)	400 x 520 x 850
Machine dimensions with VP (mm)	452 x 700 x 1130
Weight (kg)	62
Order no. B16	212.500
Order no. MKII	212.503
TBZ 13 Plus*	
Distance spindle/working surface (mm)	125-490
Centre offset	20 mm
Distance column-spindle (mm)	214
Column diameter (mm)	82
Machine dimensions (mm)	
with cabinet with VP	370 x 495 x 1,800
without cabinet	940 x 570 x 2,140 355 x 485 x 1,027
without cabinet with VP	940 x 570 x 1,600
Weight without cabinet (kg)	70
Order no. B16	212.650
Order no. MKII	212.655
SB 13 Plus*	
Distance spindle/working surface (mm)	max. 750
Machine dimensions without VP (mm)	420 x 540 x 1,780 w
Machine dimensions	
with VP (mm) T-slot size, distance (mm),	572 x 936 x 2,142 Quantity 2, 125,
width measurement (mm)	13/26
Weight (kg)	85
Order no. B16	212.502
Order no. MKII	212.504
Additional accessories	from page 62



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





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

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

Special equipment

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

Accessories

 Machine cabinet with door and drawer (only for TB 15 Plus)
 Height: 840 mm
 Weight: 28 kg
 Order no. 250.208

► Machine cabinet with door for TB/TBZ and intermediate plate Height: 800 mm, Weight: 36 kg Order no. 212.860 (TB) Order no. 201.160 (TBZ)

► Foot switch for clockwise and anti-clockwise rotation Order no.212.780

Drill package 2 (for MK II)

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





Technical data	
Drilling capacity/normal drilling performance (mm)	15/18 (in E335/ST60) 17 Nm
Thread-cutting performance (depending on gradient) max.	MK12
Spindle	MK II
Drilling depth (mm)	70
Distance column-spindle (mm)	220
Column diameter (mm)	70
Useable table surface (W x L) (mm)	300 x 250
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 125, 14/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Stop ring (positive-locking)
Feed	by hand
Table height adjustment	with toothed rack
Three-phase current motor 230 V with frequency converter (kW)	0.75
Spindle speed, stepless (1/min)	40-4,000
TB 15 Plus*	
Distance spindle/working surface (mm)	85-370
Machine dimensions without VP (mm)	400 x 520 x 850
Machine dimensions	
with VP (mm)	452 x 700 x 1130
Weight (kg)	65
Order no.	212.755
TBZ 15 Plus*	
Distance spindle/working surface (mm)	125-490
Centre offset	20 mm
Distance column-spindle (mm)	214
Column diameter (mm)	82
Machine dimensions (mm)	
with cabinet with cabinet with VP	370 x 495 x 1,800 940 x 570 x 2,140
without cabinet	355 x 485 x 1,027
without cabinet with VP	940 x 570 x 1,600
Weight without cabinet (kg)	73
Order no.	212.765
SB 15 Plus*	
Distance spindle/working surface (mm)	max. 750
Useable table surface (W x L) (mm)	300 x 240
Machine dimensions without VP (mm)	420 x 540 x 1,780
Machine dimensions with VP (mm)	572 x 936 x 2,142
T-slot size, distance (mm), width measurement (mm)	Quantity 2, 125, 14/26
Weight (kg)	88
Order no.	212.750
Additional accessories	from page 62

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



Bench drill and column drill TB 18 → Plus TBZ 18 → Plus SB 18 → Plus







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

- ► 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.	M12
(depending on gradient)	MK II
Spindle	100
Drilling depth (mm)	240
Distance column-spindle (mm)	2.0
Column diameter (mm) Useable table surface (W x L) (mm)	82
	340 x 280
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 125, 13/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Quick-adjust thrust ring
Feed	by hand
Table height adjustment	with toothed rack
Three-phase current motor 230 V with frequency converter (kW)	0.75
Spindle speed, stepless (1/min)	30-3,000
opata opeda, eteptess (.,,	
TB 18 Plus*	
Distance spindle - working surface (mm)	
Table Base	155-415 155-550
Machine dimensions	100-000
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)	455 550
Base	155-550
Column diameter (mm)	82
Machine dimensions (mm) with cabinet	370 x 705 x 1,845
with cabinet with VP	572 x 940 x 2,140
without cabinet	355 x 705 x 1,045
without cabinet with VP	570 x 940 x 1,600
Weight without cabinet (kg)	155
Order no.	218.309
SB 18 Plus*	
Spindle/table (mm)	160-880
Machine dimensions without VP (mm)	355 x 705 x 1,825
Machine dimensions	
with VP (mm)	572 x 936 x 2,142
Weight (kg)	195
Order no. Additional accessories	218.308
AND MINIMAL ACCESSORIES	from page 62



Bench drill and column drill TB 20 ► Plus TBZ 20 ► Plus SB 20 ► Plus







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

- ► 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

Accessories

Order no. 225.029

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

Drill package 3

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





Technical data	
Drilling capacity/normal drilling performance (mm)	20/23 (in E335/ST60)
Thread cutting performance max.	
(depending on gradient)	M12
Spindle	MK II
Drilling depth (mm)	100
Distance column-spindle (mm)	240
Column diameter (mm) Useable table surface (W x L) (mm)	82 340 x 280
T-slot size (arm), distance (mm),	Quantity 2, 125,
width measurement (mm)	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
Weight (kg)	195
Order no.	220.100



Bench drill and column drill

TB 23 ▶ Plus

TBZ 23 ► Plus

SB 23 ► Plus







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

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

Special equipment

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

Accessories

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

Drill package 3

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





Technical data	
Drilling capacity/normal drilling R performance (mm)	
Thread cutting capacity max. (depending on gradient)	.1 M16x1
, , ,	2 M12
Spindle	MK II
Drilling depth (mm)	100
Distance column-spindle (mm)	260
Column diameter (mm) Useable table surface (W x L) (mn)	110
T-slot size (arm), distance (mm),	Quantity 2, 125,
width measurement (mm)	13/26
Speed indicator	digital
Drilling depth indicator	digital
Drilling depth stop	Quick-adjust thrust ring
Feed	by hand
Table height adjustment	with toothed rack
Three-phase current motor 400 V with frequency converter (kW)	1.5
Spindle speed, stepless (1/min) with gearing	R1 20-2,000 R2 30-3,000
TB 23 Plus*	
Distance spindle - working surface	(mm)
Table 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 Base	(mm) 230-730
Machine dimensions (mm)	400 545 0.050
with cabinet with cabinet with VP	430 x 715 x 2,050 637 x 1,096 x 2,120
without cabinet	430 x 715 x 1,250
without cabinet with VP	570 x 940 x 1,600
Weight without cabinet (kg)	235
Order no. R1 Order no. R2	223.022 223.027
Order no. KZ	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

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



Bench drill and column drill

TB 25 ► Plus

TBZ 25 ► Plus

SB 25 ► Plus







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

- ► 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. 15l
 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	112	MK III
Drilling depth (mm)		115
Distance column-spindle (mm)		260
Column diameter (mm)		110
Useable table surface (W x L) (m	ım)	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	e (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 Base	e (mm)	230-730
Machine dimensions (mm)		
with cabinet with cabinet with VP		430 x 715 x 2,050 637 x 1,096 x 2,120
without cabinet		430 x 715 x 1,250
without cabinet with VP		570 x 940 x 1,600
Weight without cabinet (kg)		235
Order no. R1 Order no. R2		225.012 225.017
SB 25 Plus*		220.017
		220.050
Spindle/table Machine dimensions		230-850
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

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



Column
drill
SB 30 ►Plus
SB 30 MV ►Plus







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

- ► 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



oruer no. No	from page 62
order no. kz Order no. R3	230.506
order no. Ki Order no. R2	230.505 230.506
Weight (kg) Order no. R1	385
Feed (mm/rotation)	0.10/0.16/0.25
SB 30 MV Plus	0.40/0.4//0.05
Order no. R3	230.502
Order no. R2	230.501
Order no. R1	230.500
Weight (kg)	370
Feed	by hand
SB 30 Plus	
R3 (2-stage with gearing)	0-4,000
Spindle speed, stepless (1/min) R1 (1-stage) R2 (1-stage)	0-1,000 0-1,600
Three-phase current motor 400 V with frequency converter (kW)	3.0
Machine dimensions with VP (mm)	670 x 1,100 x 2,140
Machine dimensions without VP (mm)	610 x 900 x 1,980
Spindle/table (mm)	150-700
Table height adjustment	with toothed rack
Drilling depth stop	with fine tuning
Drilling depth indicator	digital
Speed indicator	digital
Useable table surface (W x L) (mm)	590 x 450
Distance column-spindle (mm) Column diameter (mm)	125
Drilling depth (mm)	300
Spindle	125
R1 R2 R3	M24x3 M20x2.5 M30x3.5
Thread cutting performance max. (depending on gradient)	N0/ 0
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)

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 ▶ 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



Order no. R3 Additional accessories	230.512 from page 62
Order no. R2	230.511
Order no. R1	230.510
Weight (kg)	400
Feed/return stroke, infinitely variable (m/min)	0-1.5
SB 30 NC Plus	
R3 (2-stage with gearing)	0-4,000
R2 (1-stage)	0-1,600
Spindle speed, stepless (1/min) R1 (1-stage)	0-1,000
Three-phase current motor 400 V with frequency converter (kW)	3.0
with VP (mm)	670 x 1,100 x 2,200
without VP (mm) Machine dimensions	610 x 900 x 1,980
Machine dimensions	
Spindle/table (mm)	150-700
Table height adjustment	with toothed rack
Drilling depth stop	with fine tuning
Drilling depth indicator	digital
Speed indicator	digital
Useable table surface (W x L) (mm)	590 x 450
Column diameter (mm)	125
Distance column-spindle (mm)	300
Drilling depth (mm)	125
R3 Spindle	M30x3.5 MK III
(depending on gradient) R1 R2	M24x3 M20x2.5
R3 (measured torque Nm) Thread cutting performance max.	30/35 (in E335/ST60) (200)
Drilling capacity/normal drilling performance (mm) R1 (measured torque Nm) R2 (measured torque Nm)	27/32 (in E335/ST60) (100) 25/30 (in E335/ST60) (70)

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

For AUTO: Programme start/stop Order no. 231.000

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

Accessories

Drill package 5

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





Column
drill
SB 40 ► Plus
SB 40 MV ► Plus





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



- ► 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



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

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

Accessories

Drill package 6

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





Column drill SB 40 NC ▶ Plus





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

- ► 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



Additional accessories	from page 62
Order no. R3	230.542
Order no. R2	230.541
Order no. R1	230.540
Weight (kg)	440 kg
Feed/return stroke, infinitely variable (m/min)	0-1.5
SB 40 NC Plus	0.15
CD / 0 NC DI	
R3 (2-stage with gearing)	0-4,000
R2 (1-stage)	0-1,600
R1 (1-stage)	0-1,000
Spindle speed, stepless (1/min)	
with frequency converter (kW)	4.0
with VP (mm) Three-phase current motor 400 V	670 x 1,100 x 2,200
Machine dimensions	/70 1 100 2 200
without VP (mm)	610 x 900 x 1,980
Machine dimensions	
Spindle/table (mm)	150-700
Table height adjustment	with toothed rack
Drilling depth stop	with fine tuning
Drilling depth indicator	digital
Speed indicator	digital
Useable table surface (W x L) (mm)	590 x 450
Column diameter (mm)	140
Distance column-spindle (mm)	300
Drilling depth (mm)	160
Spindle	MK IV
R3	M36x4
R2	M24x3
R1	M30x3.5
(depending on gradient)	
Thread cutting performance max.	50,40 (III 2000, 5100, (200)
R2 (measured torque Nm) R3 (measured torque Nm)	27/32 (in E335/ST60) (90) 35/40 (in E335/ST60) (260)
R1 (measured torque Nm)	30/35 (in E335/ST60) (135)
performance (mm)	
Drilling capacity/normal drilling	
rechnical data	
Technical data	

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

For AUTO: Programme start/stop Order no. 231.000

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

Accessories

Drill package 6

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





Flow drilling machine SB 20 FB ▶ Plus





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

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

Flow forming

Serves to produce extrusions in thin-walled metallic materials.

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

The advantages of flow forming are

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

Accessories

▶ Vice [felix] 100 2.0 Order no. 281.106



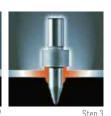


Technical data	
Flow forming at 3 mm sheet thickness (mm)	8
Spindle	MK II
Drilling depth (mm)	100
Distance column-spindle (mm)	240
Column diameter (mm)	82
Useable table surface (W x L) (mm)	340 x 280
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 125, 13/26
Speed indicator	digital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

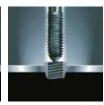
 * The drilling machine is fitted with a frequency converter and complies with the standards DIN EN 55011:2016 & A1:2017.











Step 5

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



Touch display

New revised touch display.

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

Thread cutting device as standard

Adjustable via programmable depth indicator.

Main switch

Large table surface working area

Transparent hood

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

Stepless feed

With electromagnetic clutch.

LED illumination

LED lighting as standard, behind the drill spindle.

Optional machined base plate with integrated coolant system



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	
recunical data	
Drilling capacity/normal drilling performance (mm)	25/30
Thread cutting performance max. (depending on gradient)	M20
Spindle	MK III
Drilling depth (mm)	125
Distance column-spindle (mm)	280
Column diameter (mm)	110
Useable table surface (W x L) (mm)	420 x 340 mm
T-slot size (arm), distance (mm), width measurement (mm)	Quantity 2, 125, 13/26
Speed indicator	scale
Drilling depth indicator	scale
Drilling depth stop	with fine tuning
Table height adjustment	with toothed rack
Machine dimensions without VP (mm)	520 x 820 x 1,900
Machine dimensions with VP (mm)	637 x 1,096 x 2,120
Three-phase current motor 400 V, pole-changeable (kW)	0.9/1.45
Spindle speeds with gearing, infinitely variable	
Revolutions per minute	125 - 4000 1/min
In 2 stages/stage 1 stage 2 The step change takes place via belt-reversal	125 - 2000 1/min, 250 - 4000 1/min
SB M3 ST	
Spindle/table (mm)	240-790
Weight (kg)	275
Order no.	205.180
Additional accessories	from page 62



Column drill SB M5 ST





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

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

Special equipment

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

Accessories

Drill package 6

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





Our classic

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



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

25/30
23/30
M20
MK III
125
280
110
420 x 340 mm
Quantity 2, 125, 13/26
scale
scale
with fine tuning
with toothed rack
610 x 850 x 1,920
637 x 1,096 x 2,120
1.5/3.0
240-790
275
205.181



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-	reversal
SB P30 STG PV electronic	
Feed, stepless (mm/min) incl. electromagnetic clutch; digital display	0-300
Spindle/table (mm)	240-790
Machine dimensions without VP (mm)	520 x 820 x 1,900
Machine dimensions with VP (mm)	670 x 1,100 x 2,200
Weight (kg)	320
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

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

Drilling capacity/normal drilling	35/40 (in E335/ST60)
performance (mm)	50, 40 (III 2000, 5100)
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

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!



344-507-

Multi-head drilling machines

Expandable at any tin flexible arrangement





- 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

	echnical data	
Vá	arying drill heads possible	
Uı	nderframe	
Us	sable table surface	590 x 450 mm (transverse slots 2 x 14 mm)
Fi	xed working height	900 mm
Di	stance spindle to column	300 mm
Co	olumn diameter	125 mm
Di	stance drill chuck to table	50 - 400 mm
	rder no. Underframe with door nd drawer	280.600
	rder no. with cover and open corage compartment	280.610

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

▶ 30 NC Plus R1 Order no. 231.110

T. . I. I. . I

- ▶ 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 5 and 6

Column extension Ø 70

max. extension 200 mm

Column extension Ø 82

max. extension 150 m

Order no. Ø 70 Order no. Ø 82



296.286 296.287

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 Order no. I Columns -Ø 110 mm

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

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



296.288 296.289

Option 3

Foot switch as "EMERGENCY STOP"

(must be unlocked manually)



Order no.

290.320

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 Order no. I Columns -Ø 110 mm

Order no. I Columns -Ø 125 mm Order no. I Columns -Ø 140 mm

290.160A 290.160B 290.160C 290.160D

Option 4

Foot switch

following technical advice and creation of a requirement profile



Order no.

on request

Option 10

Electric coolant system

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

Order no.



Option 11

Drill depth fixed stop

for optimum repetition accuracy up to 25 Plus



Order no.

212.716

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



290.138

Option 12

Special colour

Base (RAL one-component paint)



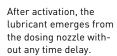
Order no.

290.200

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.



Large, stepless adjustment range of the dosing pump. From barely perceptible volume to the maximum delivery rate of 3 cm³/ min. The compact dosing unit for minimum quantity lubrication: As little as possible, but as much as necessary i.e. optimally dosed!



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 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.



Machine cabinet I wide version

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



LED lighting with 90° articulated arm

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



Order no.

250.180

Order no. up to series 25 Plus Order no. from P30 Plus R3 series 290.240 290.241

LED lighting with 90° articulated arm with straight magnetic base

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



LED lighting with articulated arm with straight magnetic base

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



Order no. with 225 flex shaft Order no. with 450 flex shaft 290.242 290.244

Order no.

Accessories

Vice [felix] 80 2.0

▶ Jaw width: 80 mm▶ Span: 0-120 mm

▶ Jaw height: 28 mm

► Travel: 150 mm

▶ Weight:

► W x L x H: 95 x 280 x 78 mm

11.6 kg



Vice [felix] 100 2.0

▶ Jaw width: 100 mm

▶ Span: 0-135 mm

▶ Jaw height: 32 mm

► Travel: 165 mm

► Weight: 12.8 kg

► W x L x H: 122 x 343 x 85 mm



Order no.

281.140

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

► W x L x H: 140 x 395 x 105 mm



Vice [felix] 150 2.0

▶ Jaw width: 150 mm

► Span: 0-200 mm

▶ Jaw height: 40 mm

► Travel: 220 mm

► Weight: 32.4 kg

► W x L x H: 170 x 451 x 103 mm



Order no.

281.142

Order no.



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

Order no.

285.103

Precision ground quick-change drill chuck

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



Quick-change drill chuck, self-tensioning

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



Order no.

285.064

Order no.

Accessories

Quick-change drill chuck, self-tensioning

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



Order no. 285.165

Taper mandrel (insertion pin)



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

Tap holder

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



Drill drift (Semi-automatic)



Order no. 285.109

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



Reduction sleeves



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

Multi-purpose collet for GBF 12

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



 Order no. for 3.5-6.5 mm
 285.084

 Order no. for 6,5-10 mm
 285.085

GBF 12/MK 2 (tapping chuck)

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



Multi-purpose collet for GBF 18

- ▶ Span 2.8-7 mm
- ▶ Span 7-13 mm



 Order no.
 285.083
 Order no. for 7-13 mm



285.087

Accessories

GBF 18/MK 3

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



Multi-purpose collet for GBF 30

- ▶ Span 10-16 mm
- ▶ Span 16-23 mm



Order no. for M5-M18

285.086

Order no. for 10 - 16 mm Order no. for 16 - 23 mm 285.090 285.091

GBF 30/MK 4

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



HSS-G twist drill set in ABS box

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



Order no.

285.089

Order no.



HSS-G twist drill set in ABS box

► DIN 338 N, 25-pcs 1-13 mm x 0.5 mm



HSS-E machine tap in ABS box

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



Order no.

285.124

Order no.

285.163

HSS-G taper and deburring countersink set in ABS box

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



HSS-E machine tap in ABS box

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



Order no.

285.162

Order no.



Warranty extensions

Machine	for order no.	4 years warranty extension	5 years warranty extension	Page
TB 10 Eco Plus	217200	290.018.217.200	290.019.217.200	14
TB 10 Basic Plus with head height adjustment	217400	290.018.217.400	290.019.217.400	16
TB 10 Basic Plus with table adjustment	217410	290.018.217.410	290.019.217.410	16
TB 10 Plus	212505	290.018.212.505	290.019.212.505	18
Turbo drill	212506	290.018.212.506	290.019.212.506	20
TB 13 Plus	212500	290.018.212.500	290.019.212.500	22
TB 13 Plus MK2	212503	290.018.212.503	290.019.212.503	22
TBZ 13 Plus	212650	290.018.212.650	290.019.212.650	22
TBZ 13 Plus MK2	212655	290.018.212.655	290.019.212.655	22
SB 13 Plus	212502	290.018.212.502	290.019.212.502	22
SB 13 Plus MK2	212504	290.018.212.504	290.019.212.504	22
FB 15 Plus MK2	212755	290.018.212.755	290.019.212.755	24
BB 15 Plus MK2	212750	290.018.212.750	290.019.212.750	24
FB 18 Plus	218303	290.018.218.303	290.019.218.303	26
FBZ 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
FBZ 20 Plus	220110	290.018.220.110	290.019.220.110	28
6B 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
FBZ 23 Plus R1	223022	290.018.223.022	290.019.223.022	30
FBZ 23 Plus R2	223027	290.018.223.027	290.019.223.027	30
5B 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
B 25 Plus R1	225011	290.018.225.011	290.019.225.011	32
BZ 25 Plus R1	225012	290.018.225.012	290.019.225.012	32
6B 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
FBZ 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	Revolutions per minute	Motor AC 230 V	Three-phase cur- rent motor 400 V	Weight	Suction socket Ø	Page
	mm	1/min	kW	kW	kg	mm	
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
BSM 75 A	2,000	75	-	3.75	90	60	88
BSM 75 A/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

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



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)
- ▶ 1x coarse and fine grinding wheel
- ▶ 12-month warranty for single-shift operation

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



Technical data	
Machine dimensions without VP (mm)	230 x 440 x 210
Machine dimensions with VP (mm)	260 x 450 x 250
Suction piece Ø (mm)	42
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	200 x 32 x 32
the grinding wheel (mm) Machine dimensions	200 X 32 X 32
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

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



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

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
- ▶ 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

- 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 m³/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 m³/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
- ▶ 1 grinding wheel 250 x 40 x 51 mm, grain 80
- ► Spark arrestor
- ► Connecting cable with CEE plug
- ▶ 12-month warranty for single-shift operation

Accessories

► Grinding wheel 250 x 40 x 51 mm Grain 36 coarse Order no. 317.542

► Grinding wheel 250 x 40 x 51 mm Grain 80 fine Order no. 317.543

Standard grinding belt (brown) 1,300 x 75 mm, 5 pieces, grain 40

Order no. 316.042

Standard grinding belt (brown) 1,300 x 75 mm, 5 pieces, grain 80

Order no. 316.041

► Graphite coating 80 x 350 mm Order no. 316.045

► Machine stand with dip tank (only for 330.360)

Order no. 350.436

► Machine stand with integrated dust extraction system (MA 600) (only for 330.360) Order no. 330.080



Technical data	
TSB 250 P	
Dimensions of the grinding wheel (60 grain) (mm)	250 x 40 x 51
Machine dimensions without VP (mm)	600 x 320 x 700
Machine dimensions with VP (mm)	800 x 800 x 800
Speed (1/min)	1,400
Weight (kg)	35
Belt speed (m/s)	15
Band dimensions (mm)	1,300 x 75
Grain size	80
Sound level (dB (A))	78
Three-phase current motor 400 V (kW)	1.4
Measurement with grinding arm position (vertical) (mm)	560 x 320 x 680
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 with VP (mm)	1,200 x 800 x 1,000
Weight (kg)	70
Order no.	330.370

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

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



Technical data		
TBSM 100		
Belt length (mm)	1,220	
Belt width (mm)	100	
Surface grinding area (mm)	310 x 100	
Belt speed (m/sec)	19	
Weight (kg)	27	
Single phase motor 1 x 230 V (kW)	0.75	
Machine dimensions without VP (mm)	650 x 380 x 260	
Machine dimensions with VP (mm)	800 x 600 x 4,500	
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

- 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 (m³/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 (m³/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 (m³/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

- ► 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 (m³/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 (m³/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 (m³/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
- ▶ 1 round deburring brush 250 x 60/0.35 mm steel wire corrugated
- ► Connecting cable with CEE plug
- ► Incl. operating tools
- ▶ 12-month warranty for single-shift operation

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

- ▶ 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



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	o* 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 mm	* at 0°	* at 0°	at 0°	Page
VBS 400 Plus	3,600 x 13 x 0.9		400 x 390		116
Metal circular saw	Saw blade Ø mm	at 0°	at 0°	===* at 0°	Page
KS 315 M	315 x 32	95	100 x 70	80	118
Portable metal band saws	Band saw blade size mm	at 0°	mm at 0°	□* at 0°	Page
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	НА	Column-guided automatic NC	SANC	Circular saw	KS
		Horizontal bandsaw	HBS	Portable band saw	PBS



FLOTT Metal band saw HBS 225 A





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



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



Round supporting table the machine has a supporting table that rotates with the mitre cuts.

This means no slits



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



Powered chip removal brush

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

HSS Bi-Metal (M42) Band Saw Blades ¹				
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	

¹ Other bandsaw blades on request

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

 Order no. 570.233
- Manual material stop 3 m with measuring tape Order no. 570.195
- Manual material stop 3 m with digital display Order no. 570.240
- Manual material stop 2 m with measuring tape Order no. 570.194
- Manual material stop 2 m with digital display Order no. 570.199
- ▶ further measuring stops on request

FLOTT Metal band saw HBS 230 ANC





Fig.:Option roller conveyor

- ► 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/mOrder no. 570.181



Machine unherisions (min)	2,440 X 1,030 X 1,770
Machine dimensions (mm)	2,440 x 1,650 x 1,970
Working height (mm)	768
Vice span (mm)	275
Cutting speed (m/min)	40/80
Flywheels Ø (mm)	300
Saw blade dimensions (mm)	2,720 x 27 x 0.9
Three-phase current motor 400 V, pole-changeable (kW)	0.7/1.1
HBS 230 ANC	
Technical data	

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

HSS Bi-Metal (M42) Band Saw Blades ¹				
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	

¹ Other bandsaw blades on request

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

 Order no. 570.233

FLOTT Metal band saw HBS 250 A





Pistol for rinsing away the chips (optional)



Roller conveyor with vertical rollers (accessory)

- ▶ 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



Saw blade dimensions (mm) Flywheels Ø (mm) Cutting speed (m/min)	2,910 x 27 x 0.9 325 20-120
Vice span (mm)	320
Working height (mm) Machine dimensions (mm)	760 1,480 x 1,700 x 2,000
Weight (kg)	390
Weight (kg) Order no.	390 570.005
3 3	

Sawing area				
	0°	45° R	45° L	60° R
	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

n55 bi-metat (M42) band 5aw blades				
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	

UCC Di Motol (M/2) Pand Cow Pladoo 1

¹ 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
	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 1				
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	

¹ 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
	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

H55 BI-Metal (M42) Band saw dlades				
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	

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¹ 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 °	45° R	60° R	
	350	350	250	
	510 x 350	400 x 100	260 x 100	
	350 x 350	340 x 340	240 x 240	

HSS Bi-Metal (M42) Band saw blades ¹

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

¹ 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



Additional accessories	from page 122
Order no.	570.030
Weight (kg)	1,200
Machine dimensions (mm)	2,300 x 2,050 x 2,000
Working height (mm)	780
Vice span (mm)	420
Cutting speed (m/min)	20-120
Flywheels Ø (mm)	450
Saw blade dimensions (mm)	4,780 x 34 x 1.1
Three-phase current motor 400 V, frequency-regulated (kW)	3
HBS 350 SANC	
Technical data	

Sawing	area
	0 °
	350
	420 x 350
	350 x 350

HSS BI-Metal (M42) Band saw blades '				
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	

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¹ 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)



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
- ► Easily removable chip collection containers
- ► Hydraulic Blade tension display
- ► Integrated coolant supply (30 l tank capacity)
- ► LED work light
- ► Digital mitre display
- ▶ Incl. saw blade combination toothing 3/4
- ► Machine colour:
 - Saw frame RAL 7035 /- Machine body RAL 7005
- ▶ 12-month warranty for single-shift operation

Special equipment

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

Accessories

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



Technical data	
HBS 450 HA	
Three-phase current motor 400 V, frequency-regulated (kW)	3
Saw blade dimensions (mm)	5,200 x 34 x 1.1
Flywheels Ø (mm)	480
Cutting speed (m/min)	20-120
Vice span, full-lift cylinder (mm)	610
Working height (mm)	781
Machine dimensions (mm)	2,780 x 1,440 x 1,560
Weight (kg)	800
Order no.	570.525
Additional accessories	from page 122

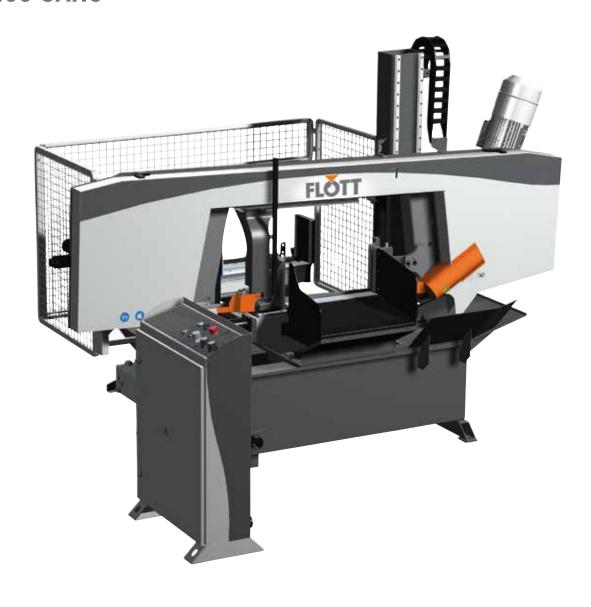
Sawing	Sawing area					
	0°	45° R	45° L	60° R	60° L	
	450	450	450	300	300	
	610 x 450	450 x 250	450 x 400	300 x 290	300 x 290	
	450 x 450	370 x 370	450 x 450	300 x 300	300 x 300	

HSS Bi-Metal (M42) Band saw blades ¹					
Dimensions Combination VPE Order no. in mm toothing set = 2 pcs.					
570.220	5,200 x 34 x 1.1	2/3	1		
570.221	5,200 x 34 x 1.1	3/4	1		
570.222	5,200 x 34 x 1.1	4/6	1		
570.223	5,200 x 34 x 1.1	5/8	1		

¹ 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 °
	450
	520 x 450
	450 x 450

HSS Bi-Metal (M42) Band saw blades ¹				
Dimensions Combination VPE order no. in mm toothing set = 2 pcs.				
570.227	6,020 x 41 x 1.3	2/3	1	
570.228	6,020 x 41 x 1.3	3/4	1	
570.229	6,020 x 41 x 1.3	4/6	1	
570.230	6,020 x 41 x 1.3	5/8	1	

¹ 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 für 90° cuts Order no. 410.030
- Minimal lubrication Order no. 410.031

Accessories

- ► Band saw blade: 3,600 x 13 x 0.9 mm, 5 pieces, 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
Cutting width (mm)	400
Cutting height (mm)	390
Cutting speed (m/min)	50-1,000
Saw blade dimensions (mm)	3,600 x 13 x 0.9
Drive type	Three-phase current motor, electronically regulated
Connected value (kW/A)	4.0/7.5
Machine dimensions (mm)	2,225 x 1,120 x 770
Weight (kg)	465
Order no.	410.010
With minimum quantity lubrication and longitudinal stop Order no.	410.020
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
Not included in scope of delivery Saw blade (mm)	Ø 315 x 32
Order no.	560.835

Sawing area			
	45° L	0°	45° R
	90	95	90
	80 x 70	100 x 70	80 x 70
	75	80	75

Metal circular saw blades ¹				
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	

¹ different saw blades on request

FLOTT Metal band saw PBS 120 Plus





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



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

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

Accessories

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

 Order no. 570.519



Technical data		
PBS 120 Plus		
Belt speed (m/min)	35/75	
Band saw blade size (mm)	1,620 x 13 x 0.65	
Motor 230V (kW)	0.25/0.37	
Machine dimensions (mm)	810 x 530 x 450	
Weight (kg)	38	
Order no.	570.505	

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

Metal band saw blades ¹			
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

¹ 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

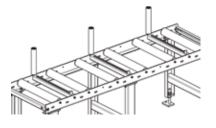
Stop systems -from simple, convenient manual length measuring unitsto NC controlled modern measuring devices, incl. programme memory.



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

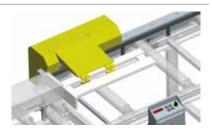
The stop carriage is adjusted manually and the position is shown on the digital display with an accuracy of 0.1 mm. The stop arm can be folded upwards for the material to pass through.



on request

Digital measuring stop

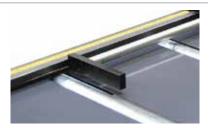
Digital material stop with handwheel and pneumatic brake



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



Information contents

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





FLOTT drilling technology safety

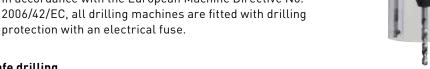
Efficient LED illumination

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



Standard electrical drilling protection

▶ In accordance with the European Machine Directive No.



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

FLOTT [felix] 2.0



Double grinding machine with optional brake and extraction system

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



Double grinding machine



Belt grinder

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





see. understand. learn.



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



FLOTT demonstration centres and training centres

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

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

FLOTT service points

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

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

Training and demonstration centre

Remscheid

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

Demonstration centres

Heusweiler

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

Nuremberg

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





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 The direct link to your service partner



FLOTT spare parts service

Mareike Goerzen Phone: +49 2191 46408-121 mareike.goerzen@flott.de Anna Miller Phone: +49 2191 46408-120 anna.miller@flott.de

Note:

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





Extract from our Terms of Sale

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

- plus statutory VAT.
- ► Machine prices excluding packaging.

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







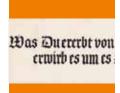


































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