

**PL  
US  
SE  
RIES**

# 10 years of development work – we are

Our new Plus Series drilling machines offer simple, intuitive operation thanks to sophisticated technology and lots of new functions.

This modular system is the result of 10 years of development work and many years of experience in drilling technology.

In close cooperation with our suppliers, in particular:

**Carlton Clemente GmbH**

[www.carlon.de](http://www.carlon.de)

**habemus! electronic + transfer GmbH**

[www.habemus.com](http://www.habemus.com)

customer requests and specifications from day-to-day manufacturing work are implemented in the new machines.

**The Plus Series is divided into three platforms:**

1. Small bench drills and column drill presses 10 - 15 Plus
2. Medium bench drills and column drill presses 18 - 25 Plus
3. Large bench drills and column drill presses 30 - 40 Plus

The control system with display and rotary knob is consistent across all the Plus drilling machines.

Once an operator has received training, they can work with any of the machines straight away.

The A-parts of the mechanics, such as spindles, tail spindles, drill bit processing, are manufactured in Remscheid in Bökerbau and seamlessly transferred to the assembly line. This guarantees short distances and the highest quality and precision.

This is the basis for the 3-year manufacturer's guarantee for single-shift operation (on request, this can be extended up to 5 years, subject to an additional charge).

The belt drive\* with German quality motors, frequency converters and innovative electronics creates high-performance drilling machines with high torque values and a variable range of speeds.



\*Optionally with electromagnetic double coupling. (Series of speeds R3)

# Proud of the new Plus Series



## Our Plus Series with clear benefits:

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



# Spotlight on our best features!



## Control panel with display

Consistent throughout all the Plus machines

### The menu functions

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

## Main switch



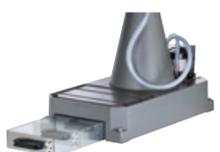
## Additional panel with touchscreen operation

- ▶ Plus technology
- ▶ Programmable z-axis NC Plus
- ▶ The 4.3" touchscreen display is a convenient operator-machine interface for programming the z-axis (feed/return).
- ▶ You can select between the following operating modes:
  - Drilling
  - Grating
  - Countersinking
  - Flow drilling
  - Thread cutting possible from M1.5 to M30
- Free programming option



## Large table working area

## Machined base plate with integrated coolant system (optional)





### Cover with hinges to the side

- ▶ Serviceability
- ▶ Easy access to electronics and belt drive

### Automatic feed drive with motor

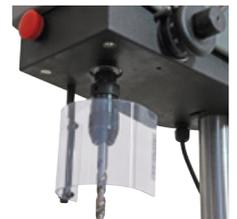
This precise drive facilitates the cutting of M1.5 threads without compensation chuck thanks to the synchronisation with the spindle speed.

### Switch lever for automatic / manual



### Efficient LED illumination as standard

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.



### Patented drilling machine vice (optional)



### Column diameter 140 mm

Figure SB 40 NC Plus  
with option

**FLOTT** [felix]



## TB 10 Eco ▶Plus

## TB 10 Basic ▶Plus

## Turbodrill

## TB 10 ▶Plus



### 3-year warranty for single-shift operation

(on request, this can be extended up to 5 years, subject to an additional charge)

Figure with  
option

Figure with  
option

Figure with  
option

Figure with  
option

Technical data	TB 10 Eco Plus	TB 10 Basic Plus	Turbodrill	TB 10 Plus
Drilling capacity / normal drilling performance (mm) in E335/ ST60	10/12	10/12	6/8	10/12
Max. thread cutting performance *(depends on gradient)	--	--	M5 *	M6 *
Spindle holder	B16	B16	B12	B16
Drilling depth (mm)	50	60	60	60
Distance column-spindle (mm)	180	220	220	220
Column diameter (mm)	50	70	70	70
Speed/drilling depth display	Digital/scale	Digital/scale	Digital/digital	Digital/digital
Drilling depth stop	Thrust ring (positive-locking)	Thrust ring (positive-locking)	Thrust ring (positive-locking)	Thrust ring (positive-locking)
Feed (mm/rotation)	By hand	By hand	By hand	By hand
Drill bit/table height adjustment	Drill head height adjustment manual	Drill head height adjustment manual	Drill head height adjustment manual	Drill head height adjustment manual
Useable working area W x L (mm)	300 x 200	300 x 250	300 x 250	300 x 250
Spindle speed, stepless (1/min)	250-3,000	250-3,000	100-10,000	60-6,000
Mains voltage (V/Hz)	230/50-60	230/50-60	230/50-60	230/50-60
Drive (kW)	Single-phase motor 0.45	Single-phase motor 0.45	Three-phase motor 0.54 Frequency-regulated	Three-phase motor 0.54 Frequency-regulated
Dimensions (mm)	400 x 248 x 460	320 x 520 x 820	320 x 520 x 820	320 x 520 x 820
Weight without VP (kg)	30	44	44	44
<b>Order number</b>	<b>217.200</b>	<b>217.400</b>	<b>212.506</b>	<b>212.505</b>

## TB 13 ▶ Plus

## TB 15 ▶ Plus

## TB 18 ▶ Plus

## TB 20 ▶ Plus



### 3-year warranty for single-shift operation

(on request, this can be extended up to 5 years, subject to an additional charge)



Figure with option



Figure with option



Figure with option



Figure with option

Technical data	TB 13 Plus	TB 15 Plus	TB 18 Plus	TB 20 Plus
Drilling capacity / normal drilling performance (mm) in E335/ ST60	13/15	15/18	18/20	20/23
Max. thread cutting performance *(depends on gradient)	M10*	M12*	M12*	M14*
Spindle holder	B16, optional MK II	MK II	MK II	MK II
Drilling depth (mm)	60	70	100	100
Distance column-spindle (mm)	220	220	240	240
Column diameter (mm)	70	70	82	82
Speed/drilling depth display	Digital/digital	Digital/digital	Digital/digital	Digital/digital
Drilling depth stop	Thrust ring (positive-locking)	Thrust ring (positive-locking)	Thrust ring (positive-locking)	Thrust ring (positive-locking)
Feed (mm/rotation)	By hand	By hand	By hand	By hand
Drill bit/table height adjustment	Table height adjustment Via toothed rack	Table height adjustment Via toothed rack	Table height adjustment Via toothed rack	Table height adjustment Via toothed rack
Useable working area W x L (mm)	300 x 250	300 x 250	340 x 280	340 x 280
Spindle speed, stepless (1/min)	40-4,000	40-4,000	30-3,000	40-4,000
Mains voltage (V/Hz)	230/50-60	230/50-60	230/50-60	400/50-60
Drive (kW)	Three-phase motor 0.54 Frequency-regulated	Three-phase motor 0.75 Frequency-regulated	Three-phase motor 0.75 Frequency-regulated	Three-phase motor 1.5 Frequency-regulated
Dimensions (mm)	400 x 520 x 850	400 x 520 x 850	355 x 705 x 1,620	355 x 705 x 1,620
Weight without VP (kg)	62	62	170	170
<b>Order number</b>	<b>B16 212.500</b> <b>MK II 212.503</b>	<b>212.755</b>	<b>218.303</b>	<b>220.105</b>
	<b>also available as TBZ and SB</b>	<b>also available as TBZ and SB</b>	<b>also available as TBZ and SB</b>	<b>also available as TBZ and SB</b>

## SB 23 ►Plus

## SB 25 ►Plus

## SB 30 ►Plus

## SB 30 MV ►Plus



Figure with option



Figure with option



Figure with option



Figure with option

### 3-year warranty for single-shift operation

(on request, this can be  
extended up to 5 years,  
subject to an additional  
charge)

Technical data	SB 23 Plus	SB 25 Plus	SB 30 Plus	SB 30 MV Plus
Drilling capacity / normal drilling performance (mm) in E335/ ST60	R1 23/25 R2 20/23	23/25	R1 27/32 R2 25/30 R3 30/35	R1 27/32 R2 25/30 R3 30/35
Max. thread cutting performance *(depends on gradient)	R1 M16 x 1* R2 M12*	M16 x 1*	R1 M24 x 3* R2 M20 x 2.5* R3 M30 x 3.5*	R1 M24 x 3* R2 M20 x 2.5* R3 M30 x 3.5*
Spindle holder	MK II	MK III	MK III	MK III
Drilling depth (mm)	100	115	125	125
Distance column-spindle (mm)	260	260	300	300
Column diameter (mm)	110	110	125	125
Speed/drilling depth display	Digital/digital	Digital/digital	Digital/digital	Digital/digital
Drilling depth stop	Thrust ring (positive-locking)	Thrust ring (positive-locking)	Drilling depth stop with fine adjustment	Drilling depth stop with fine adjustment
Feed (mm/rotation)	By hand	By hand	By hand	0.10/0.16/0.25
Drill bit/table height adjustment	Table height adjustment Via toothed rack	Table height adjustment Via toothed rack	Table height adjustment Via toothed rack	Table height adjustment Via toothed rack
Useable working area W x L (mm)	420 x 340	420 x 340	590 x 450	590 x 450
Spindle speed, stepless (1/min)	R1 20-2,000 R2 30-3,000	20-2,000	R1 0-1,000 R2 0-1,600 R3 0-4,000	R1 0-1,000 R2 0-1,600 R3 0-4,000
Mains voltage (V/Hz)	400/50-60	400/50-60	400/50-60	400/50-60
Drive (kW)	Three-phase motor 1.5 Frequency-regulated	Three-phase motor 1.5 Frequency-regulated	Three-phase motor 3.0 Frequency-regulated	Three-phase motor 3.0 Frequency-regulated
Dimensions (mm)	430 x 715 x 1,800	430 x 715 x 1,800	610 x 900 x 1,980	610 x 900 x 1,980
Weight without VP (kg)	290	290	370	385
Order number	R1 223.020 R2 223.025	225.010	R1 230.500 R2 230.501 R3 230.502	R1 230.505 R2 230.506 R3 230.507
	also available as TB and TBZ	also available as TB and TBZ		

## SB 30 NC ►Plus

## SB 40 ►Plus

## SB 40 MV ►Plus

## SB 40 NC ►Plus



Figure with option



Figure with option



Figure with option



Figure with option

### 3-year warranty for single-shift operation

(on request, this can be extended up to 5 years, subject to an additional charge)

Technical data	SB 30 NC Plus	SB 40 Plus	SB 40 MV Plus	SB 40 NC Plus
Drilling capacity / normal drilling performance (mm) in E335/ ST60	R1 27/32 R2 25/30 R3 30/35	R1 30/35 R2 27/32 R3 35/40	R1 30/35 R2 27/32 R3 35/40	R1 30/35 R2 27/32 R3 35/40
Max. thread cutting performance *(depends on gradient)	R1 M24 x 3* R2 M20 x 2.5* R3 M30 x 3.5*	R1 M30 x 3.5* R2 M24 x 3* R3 M36 x 4*	R1 M30 x 3.5* R2 M24 x 3* R3 M36 x 4*	R1 M30 x 3.5* R2 M24 x 3* R3 M36 x 4*
Spindle holder	MK III	MK IV	MK IV	MK IV
Drilling depth (mm)	125	160	160	160
Distance column-spindle (mm)	300	300	300	300
Column diameter (mm)	125	140	140	140
Speed/drilling depth display	Digital/digital	Digital/digital	Digital/digital	Digital/digital
Drilling depth stop	Drilling depth stop with fine adjustment	Drilling depth stop with fine adjustment	Drilling depth stop with fine adjustment	Drilling depth stop with fine adjustment
Feed (mm/rotation)	Freely programmable (0-1.5 m/min) Feed/return stroke, infinitely variable	By hand	0.10/0.16/0.25	Freely programmable (0-1.5 m/min) Feed/return stroke, infinitely variable
Drill bit/table height adjustment	Table height adjustment Via toothed rack	Table height adjustment Via toothed rack	Table height adjustment Via toothed rack	Table height adjustment Via toothed rack
Useable working area W x L (mm)	590 x 450	590 x 450	590 x 450	590 x 450
Spindle speed, stepless (1/min)	R1 0-1,000 R2 0-1,600 R3 0-4,000	R1 0-1,000 R2 0-1,600 R3 0-4,000	R1 0-1,000 R2 0-1,600 R3 0-4,000	R1 0-1,000 R2 0-1,600 R3 0-4,000
Mains voltage (V/Hz)	400/50-60	400/50-60	400/50-60	400/50-60
Drive (kW)	Three-phase motor 3.0 Frequency-regulated	Three-phase motor 4.0 Frequency-regulated	Three-phase motor 4.0 Frequency-regulated	Three-phase motor 4.0 Frequency-regulated
Dimensions (mm)	610 x 900 x 1,980	610 x 900 x 1,980	610 x 900 x 1,980	610 x 900 x 1,980
Weight without VP (kg)	400	400	420	440
<b>Order number</b>	<b>R1 230.510</b> <b>R2 230.511</b> <b>R3 230.512</b>	<b>R1 230.530</b> <b>R2 230.531</b> <b>R3 230.532</b>	<b>R1 230.535</b> <b>R2 230.536</b> <b>R3 230.537</b>	<b>R1 230.540</b> <b>R2 230.541</b> <b>R3 230.542</b>
	<b>includes additional panel for automatic mode</b>			<b>includes additional panel for automatic mode</b>

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