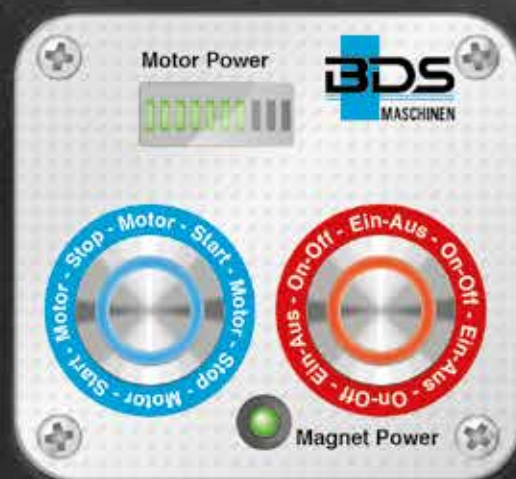


## DRILLING MACHINES

## FOR SPECIAL APPLICATIONS

2017



# Drilling technology for the most demanding professional uses

TOP QUALITY

MADE IN

GERMANY



**M**achines and drills from BDS are among the best tools manufactured worldwide for the core drilling technology sector. BDS offers four machine segments to meet different requirements in terms of performance and equipment. The ProfiSPEZIAL line targets the needs of professional users who require high-performance equipment for work in special fields. BDS machines have proven themselves over decades of use and have therefore earned an excellent reputation amongst industry professionals.



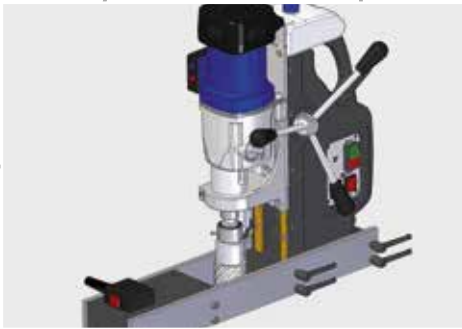
# BDS tailor-made custom drilling machines

WE BUILD

WHAT'S NEEDED

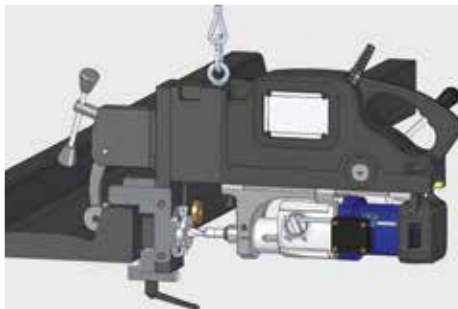
**F**or most applications BDS already has the right machine in its product range. But there are always jobs that cannot be performed with existing tools. For these special cases, we develop tailor-made custom machines for our customers, in small batches or as individual orders.

We will be happy to create an individual solution for you. Here are just some examples of the hundreds of products that we have already developed.



MAB 825 DM

Custom-made magnetic core drilling machine with 100 mm drilling capacity. The thickness of the material to be drilled was just 5 mm. A second magnet in front of the drilling spindle absorbs the increased drilling forces here.



MAB 825 PS

Specially modified MAB 825 magnetic core drilling machine with rail-mounted clamp for exact precision holes in special profiles.

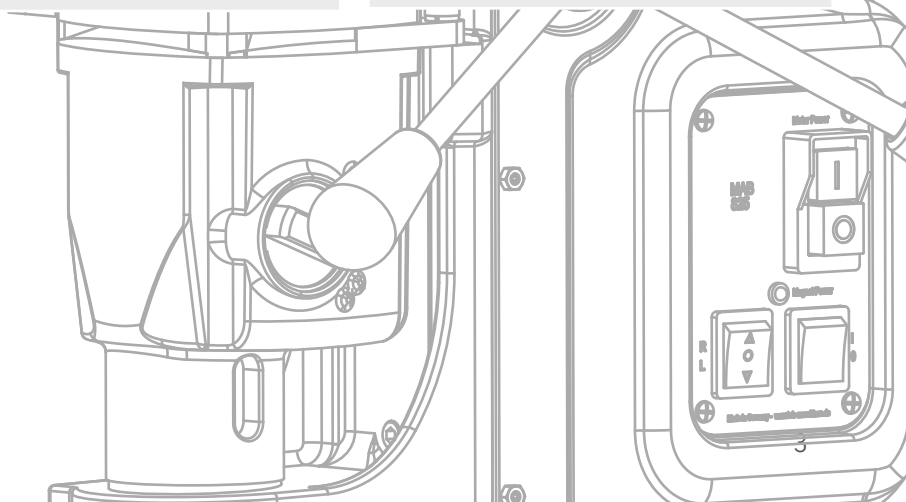


MAB 825 W90

Small angle drilling machines can do a lot. But, in this particular case the requirement was in the higher location. With a 90° clamping angle, BDS solved the problem.

**D**o you have special requirements that cannot be perfectly met using existing tools? Do not hesitate to ask us what we can do for you.

We will be happy to provide no-obligation advice. You need it? We will build it!





# BDS special machines

FAR BEYOND

STANDARD

**S**pecial jobs need special machines. BDS develops the right technology even for special areas of application. The BDS special machine range is designed for users with demands that go beyond normal requirements.

► **MAB 825 KTS**

High performance, with cross table base

► **AutoMAB 350 / AutoMAB 450**

Fully automatic forward and reverse feed

► **MAB 825 V / MAB 845 V**

All-round machine with automatic feed.  
MAB 845 with swivel-base technology for easy positioning

► **MAB 1300 V**

The most powerful automatic magnetic drilling tapping machine with 2,300 W high-performance motor

► **MAB 155**

Compact magnetic drilling machine ideal for drilling in extremely tight spaces

► **AirMAB 5000**

Pneumatic magnetic drilling machine with motor approved under EX II 2G T4 IIC D110°C

► **RailMAB 915**

Electric rail drilling machine with special clamp

► **RailMAB 965**

Petrol rail drilling machine with special clamp

**W**hat makes BDS core drilling machines unmistakable? BDS is in constant contact with customers and users and knows all too well the demands of tough, day-to-day operation. BDS technology is constantly being developed and perfected to meet – and even surpass – the highest professional requirements.



# MAB 825 KTS

Cross table base magnetic drilling & tapping machine.

## HEAVY DUTY

## VERSATILE



- The stable cross table allows for offset bores and hole patterns
- Light milling to create slotted holes or depressions is possible using the optionally available collet chuck

### MAB 825 KTS

Motor output	1800 Watt
Voltage	230 V / 50-60 Hz or 110-125 / 50-60 Hz
Stroke	255 mm
Magnet dimensions	220 × 220 × 54 mm
Weight	57.5 kg
Industrial arbor	MT 3, 19 mm (3/4")
Industrial arbor	MT 3, 32 mm (1 1/4")
Spindle taper	MT 3
Gear 1 range	40–110 rpm
Gear 2 range	65–175 rpm
Gear 3 range	140–360 rpm
Gear 4 range	220–600 rpm
Torque control	✓
Full wave control electronics	✓
Overheating protection	✓
Clockwise/anticlockwise rotation	✓
Safety clutch	✓
Carbon brush wear indicator	✓
Magnet indicator	✓
Order No.	MAB 825 KTS 230 V
Order No.	MAB 825 KTS 110/125 V

Collet chuck set  
ZSF 316, MT 3, including  
15 collets Ø 3–16 mm



### Included in delivery

MAB 825 KTS magnetic core drilling machine  
Ejector pin ZAK 075 + 090 + 100 + 120  
Ejector drift MT 3  
Industrial arbor MT 3, 19 mm Weldon (3/4")  
Industrial arbor MT 3, 32 mm Weldon (1 1/4")  
Allen key SW 5 + SW 6  
Transport case  
Safety lashing strap  
Operating instructions

Feed	Manual
Core drill	Ø 80 mm L 30/55 mm
Twist drill	Ø 31.75 mm
Countersink	Ø 50 mm
Reamer	Ø 31.75 mm
Thread	Ø max. M30



# AutoMAB 350

# AutoMAB 450

Magnetic core drilling machine with fully automatic forward and reverse operation.

Integrated coolant tank

AUTOMATIC  
OR MANUAL  
DRILLING:  
YOUR CHOICE!

AutoMAB 350  
1,050 W motor output  
AutoMAB 450  
1,150 W motor output

Load indicator

Permanent internal lubrication

LED switch

Magnet indicator

AutoMAB 350	
Motor output	1050 Watt
Voltage	230 V / 50-60 Hz or 110-125 / 50-60 Hz
Stroke	160 mm
Magnet dimensions	168 × 84 × 41.5 mm
Weight	15 kg
Direct arbor	19 mm Weldon (3/4")
Gear 1 range	460 rpm
Permanent internal lubrication	✓
LED power indicator	✓
Magnetic indicator with safety shutdown	✓
Feed	automatic forward/reverse
Order No.	AutoMAB 350 230 V
Order No.	AutoMAB 350 110/125 V

Included in delivery	
AutoMAB 350 magnetic core drilling machine	
Ejector pin ZAK 075 + 100	
Allen key SW 4	
Hard-top case	
Safety lashing strap	
Operating instructions	

Feed	Automatic	Manual
Core drill	Ø 35 mm	Ø 35 mm
	L 30 mm	L 30 mm
	L 55 mm	L 55 mm





Fully automatic forward and reverse operation



Pushing the handle towards the machine activates the automatic drill feed

- The controls reliably monitor the drilling process while the power consumption is indicated by LED
- A safety shutdown mechanism protects the drill motor from overload
- The high degree of evenness in the drilling process protects the tool and machine and significantly reduces the risk of breaking the core drill
- Safety control shutdown: if the magnet loses its grip the drill and feed motors automatically cut off



#### AutoMAB 450

Motor output	1150 Watt
Voltage	230 V / 50-60 Hz or 110-125 / 50-60 Hz
Stroke	150 mm
Magnet dimensions	168 × 84 × 41.5 mm
Weight	16 kg
Spindle taper	MT 2
Gear 1 range	250 rpm
Gear 2 range	450 rpm
Permanent internal lubrication	✓
LED power indicator	✓
Magnetic indicator with safety shutdown	✓
Feed	automatic forward/reverse
Order No.	AutoMAB 450 230 V
Order No.	AutoMAB 450 110/125 V

#### Included in delivery

AutoMAB 450 magnetic core drilling machine  
 Ejector pin ZAK 075 + 100  
 Industrial arbor ZIA 219-KN 19 mm  
 Allen key SW 5  
 Transport case  
 Safety lashing strap  
 Operating instructions

Feed	Automatic	Manual
Core drill	Ø 45 mm L 30 mm L 55 mm	Ø 45 mm L 30 mm L 55 mm



# MAB 825 V / MAB 845 V

Variable Automatic feed  
and reverse magnetic  
drilling and tapping machine.

## THE POWERFUL ALL-ROUNDER

Full wave  
control electronics

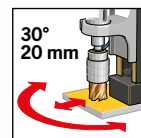
Internal motor cable

4-gear  
oil bath gearbox

Clockwise/  
anticlockwise  
rotation

Automatic feed

MAB 845 V  
with swivel base  
for easy  
positioning  
of the drilling  
centre



- The automatic feed is connected and disconnected at the cross handle and can be switched on in any position
- The smoothly adjustable feed speed ensures optimal use of the individual tool inserted

- The feed is automatically deactivated when the top or bottom end position is reached
- Additional work is possible at any time by switching to manual operation
- Safety control shutdown: if the magnet loses its grip the drill and feed motors automatically cut off
- The machine can also be used with manual feed – and achieve the same performance

### MAB 825 V / MAB 845 V

Motor output	1800 Watt
Voltage	230 V / 50-60 Hz or 110-125 / 50-60 Hz
Stroke	255 mm
Magnet dimensions	110 × 220 mm
Weight	34 kg
Spindle taper	MT 3
Gear 1 range	40–100 rpm
Gear 2 range	65–175 rpm
Gear 3 range	140–360 rpm
Gear 4 range	220–600 rpm
Torque control	✓
Full wave control electronics	✓
Overheating protection	✓
Clockwise/anticlockwise rotation	✓
Safety clutch	✓
Permanent internal lubrication	✓
Carbon brush wear indicator	✓
Magnetic indicator	✓
Feed	Automatic variable speed
Order No.	MAB 825 V 230 V
Order No.	MAB 825 V 110–125 V
Order No.	MAB 845 V 230 V
Order No.	MAB 845 V 110–125 V

### Included in delivery

MAB 825 V / MAB 845 V core drilling machine  
Ejector drift MT 3  
Industrial arbor with automatic internal lubrication:  
MT 3/19 Weldon (ZIA 319-KN) and MT 3/32 Weldon (ZIA 332-KN)  
Ejector pin ZAK 075 + 090 + 100 + 120  
Allen key SW 6 + SW 8  
Transport case (not shown)  
Safety lashing strap  
Operating instructions

Feed	Automatic	Manual
Core drill	L 30 / L 55 Ø 12–60 mm	L 30 / L 55 Ø 12–100 mm
Twist drill	Ø 26 mm	Ø 31.75 mm
Countersink		Ø 50 mm
Reamer	Ø 31.75 mm	
Thread		Ø max. M30





# MAB 1300 V

Top performance thanks to superior power delivery.  
The MAB 1300 V is currently the most powerful magnetic core drilling machine with adjustable automatic feed.

## THE STRONGEST OF THE STRONG!



Manual drilling



Automatic drilling

► MAB 1300 V features and equipment identical to MAB 825 V / MAB 845 V (see left page)



### MAB 1300 V

Motor output	2300 Watt
Voltage	230 V / 50-60 Hz or 110-125 / 50-60 Hz
Stroke	310 mm
Magnet dimensions	120 × 360 × 65 mm
Weight	51 kg
Spindle taper	MT 4
Gear 1 range	30–80 rpm
Gear 2 range	50–120 rpm
Gear 3 range	130–350 rpm
Gear 4 range	210–550 rpm
Torque control	✓
Full wave control electronics	✓
Overheating protection	✓
Clockwise/anticlockwise rotation	✓
Safety clutch	✓
Permanent internal lubrication	✓
Carbon brush wear indicator	✓
Magnetic indicator	✓
Feed	Automatic variable speed
Order No.	MAB 1300 V 230 V
Order No.	MAB 1300 V 110/125 V

### Included in delivery

MAB 1300 V magnetic core drilling machine without counter support  
Ejector drift MT 4  
Industrial arbor with automatic internal lubrication: MT 4/19 mm Weldon (ZIA 419-KN) and MT 4/32 mm Weldon (ZIA 432-KN)  
Ejector pin ZAK 075 + 090 + 100 + 120  
Allen key SW 6 + SW 8  
Transport case  
Safety lashing strap  
Operating instructions

Feed	Automatic	Manual
Core drill	L 30 / L 55 Ø 12–60 mm L 110 Ø 20–60 mm	L 30 Ø 12–130 mm L 55 Ø 12–100 mm L 110 Ø 20–100 mm
Twist drill	Ø 32 mm	Ø 45 mm
Countersink		Ø 80 mm
Reamer	Ø 50 mm	
Thread		Ø max. M42



# MAB 155

Horizontal magnetic core drilling machine with angular gear, ideal for extremely tight drilling spaces.



## THE COMPACT MACHINE

## WITH GIGANTIC POWER

180 mm



1080 Watt motor output

Safety switch

Just 11 kg in weight

Super compact, just 180 mm tall

- ▶ Compact machine for working in tight drilling spaces
- ▶ New powerful motor
- ▶ With ratchet for optimal handling

MAB 155	
Motor output	1050 Watt
Voltage	230 V / 50-60 Hz or 110-125 / 50-60 Hz
Stroke	39 mm
Magnet dimensions	80 × 160 × 36.5 mm
Weight	11 kg
Direct arbor	19 mm Weldon (3/4")
Gear 1 range	320 rpm
Order No.	MAB 155 230 V
Order No.	MAB 155 110/125 V

### Included in delivery

MAB 155 magnetic core drilling machine  
 Ejector pin ZAK 075  
 Allen key SW 4  
 Hard-top case  
 Safety lashing strap  
 Operating instructions  
 Reversible ratchet

Feed	Manual
Core drill	Ø 35 mm L 30 mm





# AirMAB 5000

Drilling with pneumatic drive  
and a permanent magnet.

**POWERFUL**

**PNEUMATIC**

**DRILLING**

830 Watt  
powerful Atlas  
Copco vane-motor



- High-performance Atlas Copco pneumatic motor with MK 2 spindle taper
- Motor approved under EX class Ex II 2G T4 IIC D110°C

KEYLESS  
Drill Chuck



Cutting depth  
up to 55 mm  
and Ø 35 mm

Powerful  
permanent magnet

AirMAB 5000	
Motor output	830 Watt
Nominal torque	27 Nm
Air consumption	1000 l/min
Stroke	160 mm
Magnet dimensions	90 × 160 × 60 mm
Weight	17.5 kg
Quick-change drilling system	KEYLESS, 19 mm (3/4")
Spindle taper	MT 2
Gear 1 range	min. 290 rpm max. 575 rpm
Permanent internal lubrication	✓
Order No.	AirMAB 5000

## Included in delivery

AirMAB 5000 magnetic core drilling machine  
Ejector pin ZAK 075 + 100  
Ejector drift MT 2  
KEYLESS quick-change drilling system, 19 mm Weldon (3/4")  
Hard-top case  
Safety lashing strap  
Operating instructions  
Pump bottle for cutting oil/drilling emulsion

Feed	Manual
Core drill	Ø 35 mm L 30 mm L 55 mm
Twist drill	Ø 23 mm



# RailMAB 915

Developed for rail core drilling in the field of signal technology and track construction.

## THE RAIL SPECIALIST



Just 17 kg in weight

Powerful  
1600 Watt motor

Low-wear oil bath  
gearbox

The right adapter for any rail profile

- ▶ High-performance 1600 Watt electric motor
- ▶ 2-gear oil bath gearbox
- ▶ Full wave control electronics
- ▶ Powerful quick-clamp system
- ▶ Special Clamp for clamping and de-clamping in few seconds
- ▶ Self centering of holes thanks to special adapter

RailMAB 915	
Motor output	1600 Watt
Voltage	230 V / 50-60 Hz or 110-125 / 50-60 Hz
Stroke	160 mm
Weight	17 kg
Industrial arbour	19 mm (3/4")
Spindle taper	MT 3
Gear 1 range	70–280 rpm
Gear 2 range	180–580 rpm
Torque control	✓
Full wave control electronics	✓
Overheating protection	✓
Permanent internal lubrication	✓
Coolant	Drilling emulsion
Carbon brush wear indicator	✓
Order No.	RailMAB 915 230 V
Order No.	RailMAB 915 110/125 V

Included in delivery	
RailMAB 915 rail-mounted core drilling machine	
Ejector pin ZAK 075 + 100	
Ejector drift MT 3	
Industrial arbor MT 3, 19 mm Weldon (3/4")	
High-pressure tank, 5 litres	
Reversible ratchet	
Rail adapters of your choice (no custom manufacture)	
Allen key SW 5+6	
Transport case	
Operating instructions	

Feed	Manual
Core drill	Ø 36 mm
	L 30 mm
	L 55 mm





# RailMAB 965

Rail core drilling machine with petrol motor for work that does not depend on having an electrical power supply.

**FULL POWER,  
NO ELECTRICITY  
NEEDED**

Petrol motor  
1.5 kW

- ▶ Does not rely on electrical power supply
- ▶ Powerful 1.5 kW petrol motor
- ▶ Compact design

Quick-clamp system

RailMAB 965	
Motor output	1.5 kW
Motor	Petrol Driven
Displacement	49.4 cm³
Torque	3.04 Nm
Stroke	40 mm
Weight	21.5 kg
Direct arbor	19 mm Weldon (3/4")
Gear 1 range	min. 110 rpm max. 280 rpm
Permanent internal lubrication	✓
Coolant	Drilling emulsion
Order No.	RailMAB 965

Included in delivery	
RailMAB 965 rail core drilling machine	
Ejector pin ZAK 075	
High-pressure tank, 5 litres	
Rail adapters of your choice (no custom manufacture)	
Allen key SW 4 + 5 + 6	
Transport case	
Operating instructions	

Feed	Manual
Core drill	Ø 36 mm L 30 mm



# RailMAB accessories

Original BDS-quality accessories for safe handling and best results.

## THE IDEAL CHOICE: ORIGINAL ACCESSORIES



Carbid tipped  
RAILcore drill  
Cutting depth 30 mm



Order no.	Rail adapters for RailMAB 925
ZAS 050U	Rail adapter UIC 50
ZAS 054U	Rail adapter UIC 54
ZAS 060U	Rail adapter UIC 60
ZAS 049S	Rail adapter S 49
ZAS 054S	Rail adapter S 54

Order no.	Rail adapters for RailMAB 965 (Standard)
ZAS 250U	Rail adapter UIC 50
ZAS 254U	Rail adapter UIC 54
ZAS 260U	Rail adapter UIC 60
ZAS 249S	Rail adapter S 49
ZAS 254S	Rail adapter S 54

Order no.	Carbide rail series
HKK-R 017	Carbide rail core drill Ø 17 mm
HKK-R 018	Carbide rail core drill Ø 18 mm
HKK-R 019	Carbide rail core drill Ø 19 mm
HKK-R 020	Carbide rail core drill Ø 20 mm
HKK-R 021	Carbide rail core drill Ø 21 mm
HKK-R 022	Carbide rail core drill Ø 22 mm
HKK-R 023	Carbide rail core drill Ø 23 mm
HKK-R 024	Carbide rail core drill Ø 24 mm
HKK-R 025	Carbide rail core drill Ø 25 mm
HKK-R 026	Carbide rail core drill Ø 26 mm
HKK-R 027	Carbide rail core drill Ø 27 mm
HKK-R 028	Carbide rail core drill Ø 28 mm
HKK-R 029	Carbide rail core drill Ø 29 mm
HKK-R 030	Carbide rail core drill Ø 30 mm
HKK-R 031	Carbide rail core drill Ø 31 mm
HKK-R 032	Carbide rail core drill Ø 32 mm
HKK-R 033	Carbide rail core drill Ø 33 mm
HKK-R 034	Carbide rail core drill Ø 34 mm
HKK-R 035	Carbide rail core drill Ø 35 mm
HKK-R 036	Carbide rail core drill Ø 36 mm



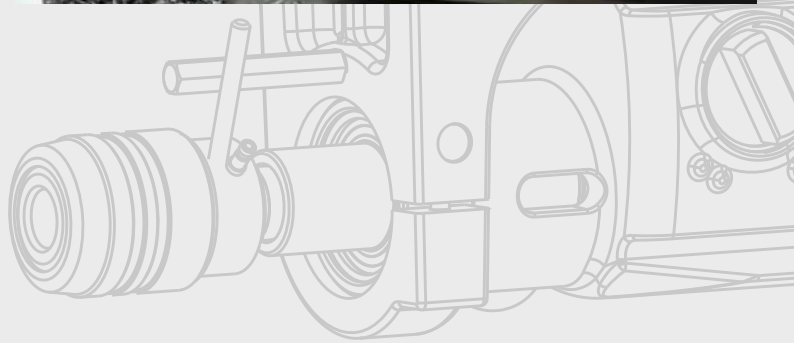


# BDS special machines

## USED IN ANY SITUATION

**A**n anywhere where metal is drilled, you'll find BDS in use:

- ▶ Steel construction
- ▶ Open line construction
- ▶ Pre engineered buildings
- ▶ Boiler manufacturing
- ▶ Plant construction
- ▶ Tool construction
- ▶ Pipeline construction
- ▶ Machine construction
- ▶ Rail track construction
- ▶ Mining operations
- ▶ Vehicle construction
- ▶ Ship construction
- ▶ Aircraft construction
- ▶ Workshops
- ▶ Installation and assembly operations and much more ...





# GOT QUESTIONS?

# WE HAVE THE ANSWERS!

In person, on the  
Web, via the app.  
Contact us however  
you wish.



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**BDSMASCHINEN**  
MADE IN GERMANY

 **ProfisPEZIAL**

**COBOTEC** **20** years of experience  
ENGINEERING



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