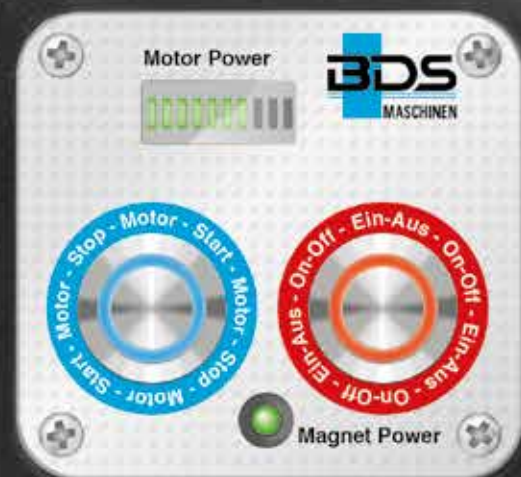


**DRILLING MACHINES**

**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.



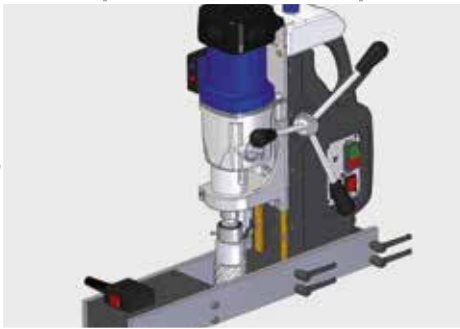
# BDS tailor-made custom drilling machines

WE BUILD

WHAT'S NEEDED

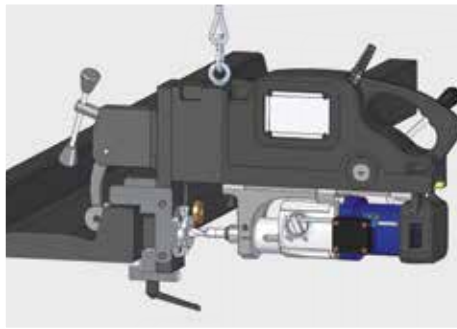
**F**or most applications BDS already has the right machine in its product range. But there are always jobs that cannot be performed with existing tools. For these special cases, we develop tailor-made custom machines for our customers, in small batches or as individual orders.

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.

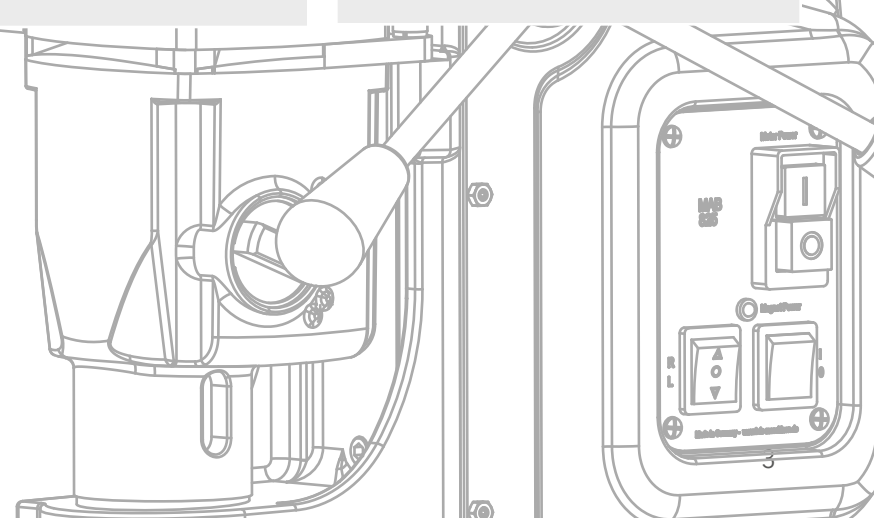


MAB 825 W90

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**



With cross table  
X 110 mm  
Y 120 mm

- ▶ 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<br>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<br>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<br>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   | Ø 45 mm |
|            | L 30 mm   | L 30 mm |
|            | L 55 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

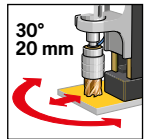
Internal motor cable

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

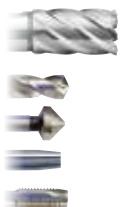
### MAB 825 V / MAB 845 V

|                                  |  |
|----------------------------------|--|
| 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<br>Ø 12–60 mm | L 30 / L 55<br>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      | L 30 Ø 12–130 mm  |
|             | Ø 12–60 mm       | L 55 Ø 12–100 mm  |
|             | L 110 Ø 20–60 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<br>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<br>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

Quick-clamp system

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



Quick-clamp system

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

| RailMAB 965                    |                              |
|--------------------------------|------------------------------|
| Motor output                   | 1.5 kW                       |
| Motor                          | Petrol Driven                |
| Displacement                   | 49.4 cm <sup>3</sup>         |
| Torque                         | 3.04 Nm                      |
| Stroke                         | 40 mm                        |
| Weight                         | 21.5 kg                      |
| Direct arbor                   | 19 mm Weldon (3/4")          |
| Gear 1 range                   | min. 110 rpm<br>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<br>L 30 mm |





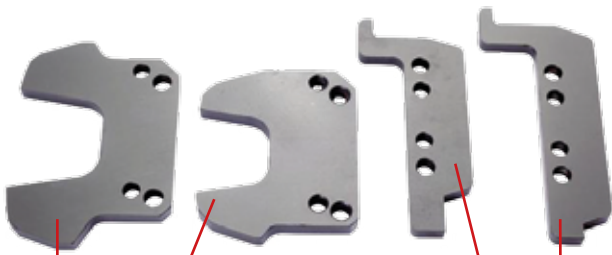
# RailMAB accessories

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 |



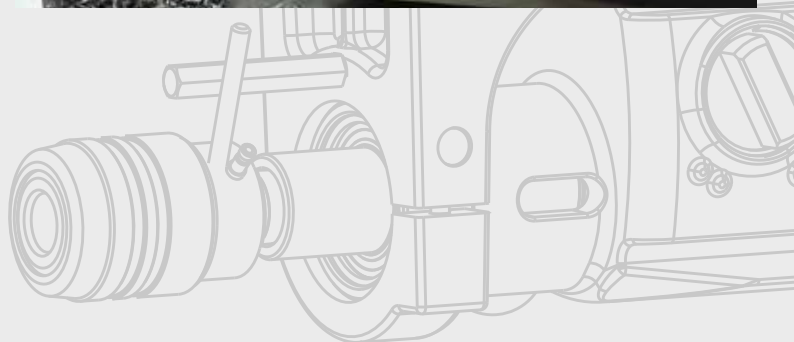
# BDS special machines

USED IN ANY

SITUATION

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**

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