



Instruction Manual BAIER Drill stand BST 200-250





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Important Information



Before starting any work with or on the machine, this instruction manual, the safety instructions and the warnings must be read through carefully and observed. Always store this instruction manual together with the machine.

Pictograms

Explanation of the pictograms on the drill stand



The CE mark on a product means that the product conforms with all the applicable European regulations and has been subjected to the prescribed conformity assessment procedures.



Environmentally friendly disposal of waste equipment

Waste equipment contains valuable recyclable materials which should be reused or recycled. Batteries, lubricants and similar materials must not be allowed to get into the environment.

Therefore, please dispose of waste equipment through suitable collection systems.



Wear hearing protection!

The typical A-weighted sound pressure level of this power tool is over 85 dB (A) – wear ear protectors when working with the tool!



Read the instruction manual!

Before starting any work with or on the machine, this instruction manual, the safety instructions and the warnings must be read through carefully and observed.

Explanation of the pictograms used in the text



Danger!

This symbol means a direct pending danger or risk to the life and health of people of a general nature. Failure to note and follow these instructions results in severe health effects, through to life-threatening injuries.

• This arrow indicates the appropriate precaution to you in order to avert the danger.



Danger due to electricity!

This symbol means a direct pending danger or risk to the life and health of people due to electricity. Failure to note and follow these instructions results in severe health effects, through to life-threatening injuries.

> This arrow indicates the appropriate precaution to you in order to avert the danger.



Attention!

This symbol indicates a potentially dangerous situation. Failure to comply with these instructions can result in slight injuries or damage to property.

> This arrow indicates the appropriate precaution to you in order to avert the danger.



Please note!

This information provides you with recommendations for use and useful tips.



For vour Safetv

General safety instructions



Read all safety information and instructions supplied with the drill stand and drill or drive units.

Failure to observe the safety instructions and precautions can result in electric shock, fire and/or serious iniuries.

Keep all safety instructions and precautions for future reference.

You must always comply with the currently valid version of the general accident prevention / health & safety regulations.

> Operating personnel requirements

- People below the age of 18 may not use the unit.
- Store drill stands out of the reach of children when not in use. Do not allow people to use the tool unless they are familiar with it, or if they have not read this instruction manual.

Drill stands are dangerous if they are used by inexperienced people.

Always work carefully, in a controlled way and sensibly when using this unit. Always pay attention to what you are doing. Do not use the unit if you are tired or are under the influence of drugs, alcohol or medication. A moment of inattention while using the unit can result in serious injuries.

> Workplace safety

- Keep your work area clean and well illuminated. • Untidiness and unlit work areas can result in accidents.
- Watch out for open and concealed electricity cables, and water and gas pipes. Use suitable detectors to find concealed utility pipes and cables, or contact the local utility company for advice.

Contact with electricity cables can cause fires and an electric shock. Damage to a gas pipe can cause an explosion. Penetrating a water pipe causes damage to propertv or could cause an electric shock.

Electrical safety

Before use, check all water-carrying parts for perfect working order and leaks. Leaking water increases the risk of an electric shock.



Safety of people

- Wear personal protective equipment and always wear goggles. The wearing of personal protective equipment, such as dust mask, non-slip safety shoes, helmet or ear protectors, depending on the type and application of the power tools, reduces the risk of injuries.
- Avoid abnormal postures when working. Ensure you are standing firmly and maintain your balance at all times.
 This will enable you to control the power tool better in unexpected situations.
- If dust/water extraction and collection devices can be installed, ensure that these are connected and are used correctly. Use of a dust/water extraction system can reduce the health hazards caused by dust.

> Hazards when using and handling the drill stand

- Before mounting the drill or drive unit, set up the drill stand correctly in accordance with these instructions. Correct assembly is important to ensure proper, faultless functioning of the stand.
- Fasten the drill stand securely on a firm, flat surface using the specified and undamaged installation materials. If the drill stand can slip or wobble, the drill or drive unit cannot be guided uniformly and safely.
- Disconnect the plug of the drill or drive unit from the socket before mounting the drill or drive unit on the drill stand, make any unit settings or change accessory parts.

Unintentional starting of drills or drive units causes accidents.

• Fix the drill or drive unit securely onto the drill stand as specified before starting work.

Slipping of the drill or drive unit on the drill stand can cause loss of control and injuries.

- Remove all setting tools, spanners and installation materials not required before switching on the drill or drive unit.
 Setting tools, spanners and installation materials located in/on a rotating part of the unit can result in injuries.
- Do not overload the drill stand and do not use it as a ladder or scaffolding. Overloading or standing on the drill stand can cause the centre of gravity of the drill stand to move upwards and the drill stand overturns.
- Do not use any accessories that have not been especially provided and recommended for this drill stand by the manufacturer.
 Just because you can attach accessories to your drill stand is not a guarantee of safe use.



For your Safety

- Additional signs or other, non-BAIER-specific parts must not be screwed or riveted onto the drill stand. This could damage the drill stand and cause malfunctions to occur.
- Note and follow all safety and work instructions for the accessories used.
- Never place the feed crank handle on the hexagon of the tapered shaft to tighten it.

Excessive torques could damage it.

> Service / Maintenance / Repair

 Maintain the unit with care in accordance with the stipulations of the instruction manual. Check whether moving unit parts are in proper working order and do not jam, whether parts are broken or damaged in such a way that they impair the function of the unit.

Many accidents are caused by poorly maintained accessories.

- Repair and maintenance work may only be carried out by an authorised service centre of Maschinenfabrik OTTO BAIER GmbH. Otherwise, all liability and warranty claims against Maschinenfabrik Otto BAIER GmbH expire.
- Ensure that original BAIER spare parts and original BAIER accessories only are used when needed.

Original parts are available from authorised dealers. Use of non original parts can cause damage to the machine and an increased risk of accidents.



Technical specifications

Drill stand	BST 200	BST 250
Maximum drilling stroke	570	570
Maximum diameter drilled in mm	200	250
Height	900	900
Width	320	320
Depth	600	485
Weight (kg)	15.5	15.4
Fastening drive unit/drill to the spindle head via	х	-
the motor collar		
Fastening drive unit/drill to the spindle head via	-	х
the mounting plate		

Scope of Supply

Please refer to the enclosed delivery note for the individual scope of supply of a customer-specific order.

Please refer to the table below for the scope of supply of basic models. Please contact your dealer if parts are missing or damaged.

Drill stand Basic selection	ID. No.	Drill stand	Mounting plate for drive unit on spindle head	Motor collar for drive unit on spindle head
Drill stand BST 200	8167	х	-	x
Drill stand BST 250	8168	х	х	-

x = included in scope of supply

Intended Use

The drill stand is intended for holding diamond drills with a maximum power of 2.2 kW in conjunction with wet diamond drill bits and a water supply for wet drilling in mineral materials such as concrete, reinforced concrete or masonry. The largest allowable diameter drilled is 200 mm. Other units, which exceed these values, may not be used. The drill stand can be attached to the floor and to the wall with the help of plugs or anchors, vacuum.



Please note!

RAWL anchors with diameter 20 mm/M12 are to be used for fixing onto walls.



Machine Parts and Controls





Machine Parts and Controls BST 200-250

- 1 Circlip
- 2 Spirit level
- 3 Tapered shaft
- 4 Drill stand plate
- 5 Nut
- 6 Adjusting screws (4x)
- 7 Cheese head screws
- 8 Machine collar*
- 9 Cheese head screws
- 10 Spindle head
- 11 Clamping lever
- 12 Hexagon bolt
- * BST 200 only
- ** BST 250 only

Tools and Accessories

- BAIER vacuum kit for drill stand BST 200-250
- BAIER water extraction kit for drill stand BST 200-250
- BAIER vacuum pump, with 10 m suction hose
- BAIER heavy duty anchor M12 Ø 16 mm
- · BAIER setting tool for heavy duty anchors
- BAIER quick-release threaded rod, complete M12
- BAIER adapter sleeve (reducer) (Ø 60 mm / 56 mm)
- BAIER adapter sleeve (reducer) (Ø 60 mm / 48 mm)

- 13 Drill stand column
- 14 Sliding element
- 15 Nut
- 16 Spindle head
- 17 Bolt-on plate**
- 18 Cheese head screw (4x)**
- 19 Feather key (4x)
- 20 Pinion shaft
- 21 Cheese head screw
- 22 Hinged cotter key
- 23 Feed crank handle

- On request On request (ID. No. 46771)
- (ID. No. 6587)
- (ID. No. 7456)
- (ID. No. 52126)
- (ID. No. 48199)
- (ID. No. 56846)



Before Starting Work



Please note!

The item numbers given here refer to the machine parts and controls given on pages 8 and 9.

Note and follow the following points before each use to ensure safe working with the drill stand:

- Read through all safety instructions and hazard information in this instruction manual and in the instruction manual of the drive unit / drill used.
- Before each use, check the fastening of the drill stand.
- Check that the drive unit sits securely in the drill stand.
- > Mounting the feed crank handle (Figure 1 and 2)
- Push the feed crank handle (23), as required, to the left or right onto the pinion shaft (20) so that the drillhole in the feed crank handle (23) and in the pinion shaft (20) coincide. (Figure 1)
- Push the pin of the hinged cotter key (22) through the coinciding holes and turn over the metal clip. (Figure 2)





Blocking the feed (Figure 3)

• By pulling the clamping lever (11) the spindle head can be clamped and therefore protect the feeding device from unexpected movements. (Figure 3)





Installing the drill stand with anchor fixing (Figure 4 and 5)



Align the drill stand plate (4) on the drillhole to be drilled of the wet diamond drill bit:

- Position the drill stand on the drillhole to be drilled.
- Mark the anchor hole for fixing the drill stand plate (4) through the mounting slot and drill (drill hole: Ø 15 mm, depth 50 mm).
- Insert the retaining screw (24) with attached quick action plug in the plug hole. (Figure 5)
- Align the drill stand plate (4) with the help of the spirit level (2) and the four adjusting screws (6).
- Screw in the retaining screw (24) using the spike (26).
- Tighten the quick action nut (25) with light hammer blows.

Fixing to the wall

If fixing to the wall, an external spirit level must be used to adjust the perpendicularity of the drill stand with the drillhole of the wet diamond drill core bit. This adjustment cannot be made using the integrated spirit level (2) in the drill stand.

Installing the drill stand with vacuum kit (accessory)

If it is not possible to install the drill stand with the anchor fixing, the drill stand can be fixed to the floor using a vacuum kit (order on request). The installation of the vacuum kit is described in the relevant installation instructions.



Adjusting the inclination of the drill stand (Figure 6)

The drill stand can be adjusted up to an inclination of 45°.

- Undo the top cheese head screw (12) and the two bottom cheese head screws (7) from the angle adjustment, it may be necessary to hold the nuts (5 and 15) on the opposite side to prevent them from moving. (See page 16 and 17)
- Set the drill stand column (13) to the required drilling angle.
- Re-tighten the two bottom cheese head screws (7) and the top cheese head screw (12).
- The drill stand may not be used again until all three cheese head screws have been screwed tight.





Using the diamond drill/drive unit with the BST 200 (Figure 7 and 8)

- Ensure that the drill stand is securely in position and stable.
- Use the clamping lever (11) to clamp the spindle head (10).
- Unscrew the tapered shaft (3) and pull it out of the spindle head (10) up to the limit stop.
- Hook the machine collar (8) from above into the holder of the spindle head (10) and push the machine collar (8) downwards.
- Push the tapered shaft (3) through the machine collar (8) and tighten it with an open-ended spanner.



Please note!

Never use the feed crank handle to tighten the tapered shaft; it could be damaged by excessive torque.

- Undo the two cheese head screws (9) in the drill stand
- Insert the drill (28) from above into the machine collar (8) of the drill stand, up to the limit stop.



Please note!

If the machine neck does not fit in the machine collar an adapter sleeve (29) must be used (\emptyset 60 mm to \emptyset 56 mm or \emptyset 60 mm to \emptyset 48 mm).

- Re-tighten the cheese head screws (9).
- · Repeat the above steps in the reverse order to remove the diamond drill.





Operation and Control

Using the diamond drill/drive unit with the BST 250 (Figure 9 and 10)

- Insert the feather key (19) in the groove of the bolt-on plate (17).
- Use the 4 retaining screws (18) to screw the diamond drill onto the bolt-on plate (17). (Figure 9)
- Use the clamping lever (11) to clamp the spindle head (10). (see page 8)
- Unscrew the tapered shaft (3) and pull it out of the spindle head (10) up to the limit stop.
- Hook the bolt-on plate (17) with the drill from above into the holder of the spindle head (10) and push the bolt-on plate (17) towards the rear. (Figure 10)
 Push the tapered shaft (3) through the bolt-on plate (17) and tighten using an openended spanner.

Please note!

Never use the feed crank handle to tighten the tapered shaft; it could be damaged by excessive torque.



Operation and Control

Work instructions

- Use the locking screw (11) to release the clamping of the spindle head (10).
- Use the feed crank handle (23) to turn the drill downwards.
- · Carefully spot drill the material with the drill bit.
- When the drill bit has drilled several millimetres into the material, the pressure on the feed crank handle can be increased.



Please note!

Use sufficient water during drilling.



Cleaning



Danger!

Risk of injuries due to hot or sharp-edged drill bit.

Before carrying out any cleaning work on the drill stand remove the drill bit and wet diamond drill first.

The drill stand must be cleaned after each drilling work session.

- Rub down carefully the toothing and the guide on the drill stand column (13) and use compressed air to remove the drill dust; the guide and toothing must not become smeared.
- Clean the toothing of the pinion shaft (20). Dismantle the circlip (1) on the pinion shaft (20) and pull the pinion shaft (20) out of the spindle head (10). Rub down the toothing of the pinion shaft (20) and use compressed air to remove the drill dust. Push the pinion shaft (20) back into the spindle head (10) up to the limit stop and install the circlip (1).
- Clean and lightly grease the thread of the tapered shaft (3). To do this, use an openended spanner to unscrew the tapered shaft (3). Pull out the tapered shaft (3) up to the limit stop. Swing the machine collar (8), or the bolt-on plate (17) upwards and remove from the spindle head (10) from above. The thread of the tapered shaft (3) can now be cleaned and greased. Re-install the tapered shaft in the reverse order.
- Ensure handles are dry and free from grease.



Attention!

The tapered shaft can be damaged if excessive torque is applied with the feed crank handle.

▶ Use an open-ended spanner only to tighten the tapered shaft.

Maintenance / Adjusting the guide clearance



Danger!

Risk of injuries due to hot or sharp-edged drill bit.

 Before carrying out any cleaning work on the drill stand remove the drill bit and wet diamond drill first.

To achieve good drilling results and lengthen the life of the drill stand, the guide clearance should be re-adjusted after approx. 100 drilling operations. The spindle head must move without any clearance. The clearance is adjusted using 2 setting screws.

- Open the clamping lever (11).
- Undo the top and bottom clamping screw (16 and 21).
- Screw in the setting screws (44) until the clearance has been removed. (See page 16 and 17)



Please note!

The clearance is correctly set if the spindle head with the mounted drive unit does not move downward under its own weight or if so, moves very slowly.



Drill stand BST 200-250





Spare parts list

Item	ID No.	Designation	Machine	Quantity
1	7723	Baseplate		1
6	7733	Drill stand column		1
7	6602	Solid rubber wheel		2
8	11189	Washer A8.4 DIN9021 GALV		2
9	49015	Cap nut M10 DIN1587		4 7
10 11	43695 7708	Hex nut M10 DIN934 Hex bolt M10X50 DIN933 GALV		4
13	7737	Slide profile		4
14	7696	Pinion shaft		1
15	6741	D-shaped handle		1
16	56499	Hexagon socket-head bolt M6X22 DIN912		2
		GALV.		
17 18	7740 7747	Lever for capstan Spherical head 40 Rd.		1 2
10	8116	Capstan, complete assembly		2 1
22	7387	Hinged cotter key		1
23	7716	Clamping profile		4
24	73015	Hexagon socket-head bolt M8X16 DIN912		2
25	7739	Tapered shaft		1
26	8109	Hexagon socket-head bolt M10X60 DIN912 GALV		2
27	8111	Hexagon socket-head bolt M10X90 DIN912 Galv		2
28	8112	Hexagon socket-head bolt M10X80 DIN912 GALV		1
29	8117	Washer M10 DIN125 GALV		8
30	19984	Hexagon bolt M10X25 DIN933		2
31 32	7728 8143	Support Spirit level		1 1
32 33	8115	Tapite screw M4X16 DIN7500 PE VZ		2
34	8107	Clamping lever M12X35		1
35	8145	Tapite screw M6X10		2
36	7736	Cover		1
37	7735	Spindle head		1
40	7742	Flanged nut		1
41 42	8113 8114	Plain bearing 20/28X25 Circlip A20 DIN471, rustproof		2 2
42	8166	Hexagon bolt M12X25 DIN933 GALV		1
		Hexagon socket-head bolt M12X45 DIN912		
44	8108	GALV		2
45	57471	Hexagon socket-head bolt M5X30 DIN912 GALV		2
46	8160	Clamping plate BST250		1
47	66837	Feather key 10X8X100 DIN6885		1
48 50	23572 7710	Hexagon socket-head bolt M8X35 DIN912 Machine collar BST200	Complete	4
50	7710		assembly with	1
			bridge Item 51	
			Bridge only	
51			available with	1
			Item 50	
52	8109	Hexagon socket-head bolt M10X60 DIN912		2
	7456	GALV Sotting tool for anchors		-
	7456 52126	Setting tool for anchors Quick-release threaded rod M12		1
	6587	Anchor M12 Ø16		4
				-

Declaration of Conformity

We herewith declare, with sole responsibility, that the product described under "Technical Specifications" conforms to the provisions of Directive 2006/42/EC.

Maschinenfabrik OTTO BAIER GmbH Heckenwiesen 26 D-71679 Asperg

ther Lorenz ppa. Dr.-Ing. Gün

ppa. Wilfried Hartmann



Warranty

The power tools placed on the market and distributed by Maschinenfabrik OTTO BAIER GmbH take into account the regulations of the laws concerning engineering tools and equipment to protect against risks to health and safety.

We guarantee the perfect quality of our products and accept the costs of subsequent repairs by replacing the damaged parts or replacement with a new machine in case of design, material and/or manufacturing errors within the warranty period. The warranty period for commercial use is 12 months.

Prerequisite for a warranty claim due to design, material and/or manufacturing errors is:

1. Proof of purchase and compliance with the instruction manual

A mechanically produced original copy of a purchase voucher must always be submitted in order to make a warranty claim. It must contain the complete address, date of purchase and type designation of the product.

The instruction manual for the respective machine and the safety instructions must have been complied with.

Damage due to faulty operation cannot be recognised as a warranty claim.

2. Correct deployment of the machine

Maschinenfabrik OTTO BAIER GmbH's products are developed and produced for specific purposes.

A warranty claim cannot be acknowledged in the event of failure to comply with the intended use in accordance with the instruction manual, misuse or use for another purpose or use of unsuitable accessories. The warranty does not apply if the machine is deployed in continuous and piece-work operation or for rental and hire purposes.

3. Compliance with servicing intervals

Regular servicing by us or a servicing and repair firm authorised by us is prerequisite for warranty claims. Servicing is specified for when the carbon brushes are worn, however at least once a year.

The machine must be cleaned in accordance with the provisions of the instruction manual. All warranty entitlements expire in case of intervention/tampering with the machine by third parties (opening the machine).

Servicing and cleaning work are not generally covered by the warranty.

4. Use of original BAIER spare parts

Ensure that original BAIER spare parts and BAIER accessories only are used. They are available from authorised dealers. The type and quantity of grease are to be used according to the valid grease list. Use of non original parts can cause consequential damage to the machine and an increased risk of accidents. Dismantled, partly dismantled machines and machines repaired with third party spare parts are excluded from the warranty.

5. Wearing parts

Certain components are subject to wear or normal wear and tear resulting from use of the respective power tool. These components include, among other things, carbon brushes, ball bearings, switches, power cords, seals, shaft sealing rings. Wearing parts are not covered by the warranty.





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