Operating instructions

KBS-200M

Kernlochbohrer GmbH
Geigersbühlweg 52
72663 Großbettlingen
Tel. 07022-5034900
Email: info@kernlochbohrer.com

Version 0 4. Output 01/2022

Content

Introduction and description

The core drilling stand KBS-200M is designed for mounting diamond core drilling rigs. These are intended for professional use and may only be used by trained personnel.

In the event of violations of the operating instructions that may lead to injuries or machine damage, our company declines all responsibility. In addition, all currently applicable regulations of the Accident Prevention Regulations (UVV) and the Employer's Liability Insurance Association (BG) must be observed.

Thanks to the buyer

Thank you for purchasing a core drill rig from Kernlochbohrer GmbH. Please read the operating instructions carefully and observe the safety instructions. By operating it correctly, you will fully appreciate the outstanding performance of our products. Keep this manual in a safe place for future reference. If you have any questions about the operation of the core drill, please contact the company Kernlochbohrer GmbH directly. We are always available to answer your questions.

Note:

Kernlochbohrer GmbH reserves the right to change the design and appearance of the products and their operating instructions. Future changes to the operating instructions will be made without prior notice.

Explanation of symbols

Warning of general danger. Failure to comply with these safety precautions and instructions may result in electric shock, fire and/or serious injury.

Safety regulations

- ❖ Read all precautions before commissioning and keep the operating instructions.

- ❖ Please follow the operating instructions carefully, as failure to observe these safety precautions and instructions may cause electric shock, fire and/or serious injury.

1. Keep your work area clean and well lit. Disorder or unlit work areas can lead to accidents.

2. Do not work with power tools, near flammable liquids, gases or dust. Power tools produce sparks that can ignite dust or fumes, causing explosions.

3. Keep children and other people away from tools while using them. If you are distracted, you may lose control of the tool.

4. Be attentive, work with concentration and pay attention to what you are doing. Do not use a power tool when you are tired or under the influence of drugs, alcohol or medicines. A moment of inattention can lead to serious injury.

5. Wear suitable protective equipment and always protective goggles. Wearing suitable protective equipment such as dust mask, non-slip safety shoes, gloves, hard hat or hearing protection reduces the risk of injury.

6. Avoid unusual postures. Ensure a secure footing and maintain your balance at all times. Do not work on a ladder. This will give you better control of the power tool in unexpected situations.

7. Wear appropriate clothing. Do not wear loose clothing or jewelry. Keep hair, clothing and gloves away from moving parts. Loose clothing, jewelry or long hair can be caught by moving parts.

8. The use of products such as cutters, grinders, drills that machine sand or other materials can generate dust and fumes that may contain hazardous chemicals. Check the type of material you are going to machine and use a suitable respirator.

9. Never work alone, always make sure that another person is nearby. Apart from the fact that you can get help with the assembly of the drill, you can also get help if an accident should happen.

10. Never use a drilling instrument that is faulty. Carry out the maintenance and service instructions described in this manual. Some maintenance and service measures must be performed by trained and qualified personnel.

11. Before mounting the drill motor and drill bit, make sure that the stand is properly secured.

12. The drill stand must be fixed on a level and firm surface. Drilling with a loose and/or wobbling stand can lead to a dangerous situation.

13. The core drill rig serves the intended purpose of mounting the drill motor for stationary drilling. All other uses not intended for the intended purpose are prohibited.

14. Always use compatible drilling tools with the drill stand. The connection on the power tools must be in accordance with the stand.

15. When used for overhead drilling, a functional water collection ring must be used. Make sure that no water can get into the motor.

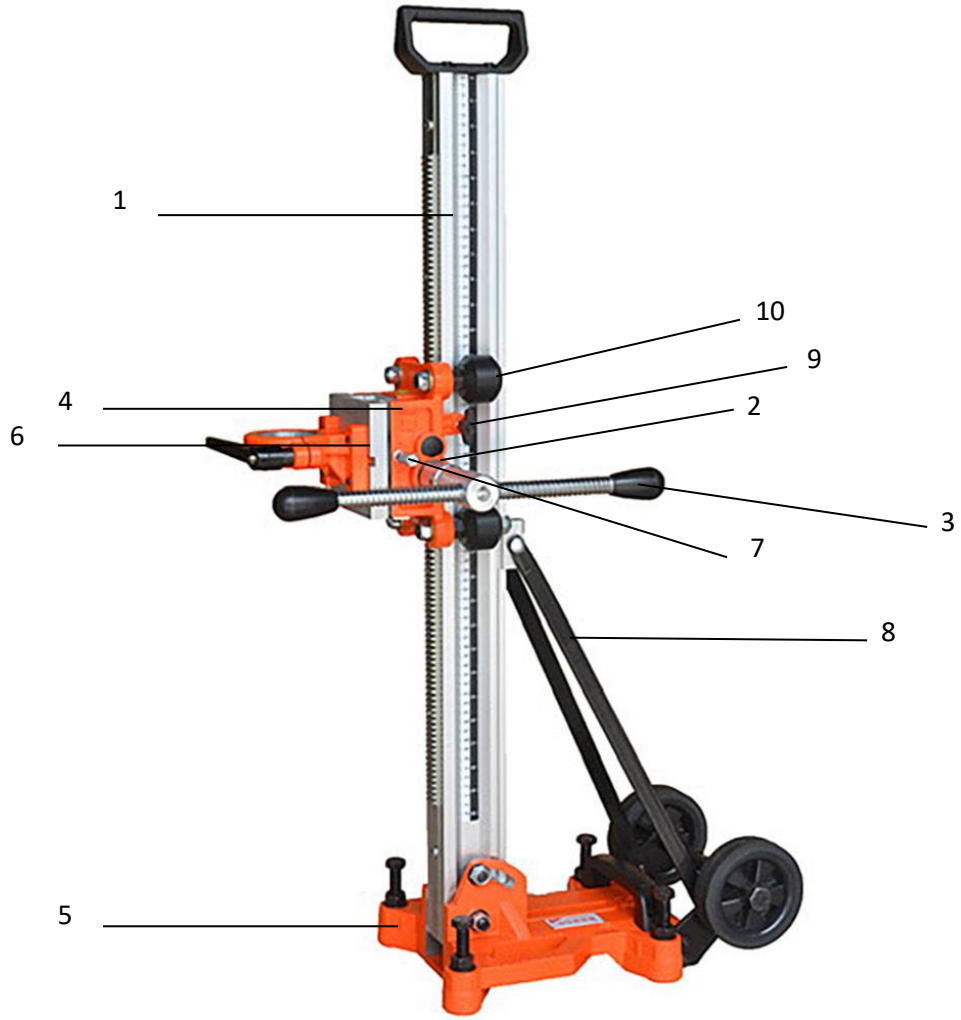
16. Check all moving and clamped parts before use.

17. Only use original spare parts from Kernlochbohrer GmbH.

Technical data

Model	**Max. Drill size (mm)**	**Net weight (kg)**	**Adjustable angle**	**Minimum size fixing anchor**
KBS-200M	200	20	0-45°	M14

Product description



1.Drill column
2.Feed ratio
3.Drilling lever
4.Feed slide
5.Stand drill plate
6.Adapter plate with clamp
7.Clamping screw adapter
8.Column support
9.Slide locking device
10.Eccentric clamp

Mounting the drill stand

Fixing is possible with the help of anchor bolts or metal dowel M14 with threaded rod.

Determine the desired position of the stand. Then fix the stand with a metal anchor and a threaded rod or a suitable fixing set. To do this, drill a hole of suitable size for the anchor using a hammer drill.

If anchoring to a brick wall, a special masonry anchor and brick fastening kit must be used. Using a concrete drive-in anchor in brick could result in brick breakage and loosening of the anchor!

To bring the drill rig into the correct position, use the four leveling screws and the bubble level attached to the drill carriage for this purpose. Then tighten the lock nuts on the leveling screws. The entire stand must be firmly mounted.

Adjust the angle of the drill stand to the position based on the drill center of the desired drill hole. The adjustable drilling angle ranges from 0° to 45°. If you need to drill at 45°, loosen the clamping screw on the column support and adjust the angle on the drill column. Once the angle is set, tighten the clamping screw again. Make sure that the mounting adapter and the carriage are fixed.

The lower clamping screw should be adjusted so that the angle can be changed easily. If you notice that the drill column has too much play in the lower area, tighten it slightly with a 19 mm wrench and the hand crank.

Note!
Do not overtighten the clamping screw, otherwise the column support and the bracket may deform.

The KBS-200M has a 60 mm clamping bracket which is pre-mounted on an adapter plate.

Before you attach the core drill to the column support, first set the drill slide to a higher position to make it easier to insert the core drill.

In order to be able to fix the drill carriage to the drill column, there is a locking device on the side of the drill carriage. It is intended to prevent the drill carriage from falling down and causing possible injuries or damage to the drill or the machine.

Turn the carriage lock to the left to unlock the carriage, then crank the drill carriage up or down to the desired position and turn the carriage lock to the right to lock the drill carriage. After you have made the desired adjustments, such as inserting the core drill, unlock the locking device to start operation.

Note!
Do not crank the carriage up and down when the carriage lock is in the locked position, as this will damage both the rack and the carriage lock.

For easy removal of the drill, use a copper ring which is placed on the drill shaft in front of the drill bit.

If you are drilling a wall with a stand, first secure the stand to the wall, then mount the core drill on the stand.

Care and maintenance

Repairs may only be carried out by qualified personnel suitable on the basis of their training and experience. The core drill rig is designed to require a minimum of care and maintenance. However, the following point must always be observed:

- After completing the drilling work, clean the core drill rig from dirt and dust and, if necessary, grease the rig for easier operation.

- After finishing work with the stand, grease the shafts and their threads. Make sure that no water runs out of the carriage and there is no dust buildup on the carriage.

- If possible, do not use water to clean the drill stand, as some metal parts can accumulate flash rust and this can lead to malfunction. Make sure that the drill stand is dry after use and cleaning.

- In the rear area of the drill slide there are 4 rollers. There are also 2 eccentric clamps in the rear area. In the course of time, wear may occur on the rollers. If this is the case, adjust the 2 eccentric clamps on the rear of the core drill rig slightly until the slide can be moved again without play. The eccentric clamps (silver colored) are located on the left side. If it is no longer possible to readjust the eccentric clamps, all 4 rollers must be replaced to prevent further damage to the gear shafts and the rack.

- Always pay attention to the wear listed above. Replace the rollers and/or the eccentric clamps if necessary. If the problem persists, replace the drill column.

- Check the stability of the drill stand before each use. If the base plate of the drill stand is damaged, replace it before using the drill stand.
-
- Periodically perform a visual and functional check to ensure that all terminals and moving parts are fully functional.

- Only use the drill stand up to the maximum permissible diameter. This can be found on the type plate of the respective stand.

- Failure to comply with this specification may result in malfunction during operation of the drill stand as well as injury to the operator.

Maintenance and inspection plan

Regular inspection according to the maintenance and inspection schedule is urgently required. Shorten the intervals between maintenance if you use the product very frequently.

Maintenance parts	each time before use	monthly or after 25 hours of work	every 3rd month or after 50 working hours	annually or after 200 working hours
Greasing the needle bearing of the gear shaft	√	√	√	√
Carriage locking	√	√	√	√
Clamping and wheels	-	√	√	√
Drill column	-	-	-	√
Gear shaft and gears	-	-	-	√
all clamping parts and threads	√	√	√	√
Angle clamp	√	√	√	√
Rack	√	√	√	√

Troubleshooting

Error	Cause	Troubleshooting
the sled wobbles	Rollers worn	Retighten the 2 eccentric clamps.
the gear shaft is jammed	all 4 rollers worn out	Replace all 4 casters.
Concentricity of the drive shaft on the rack	Wear on the gear shaft or the gear rack	Replace the worn part.
After replacing all the eccentric clamps and aligning the impellers, the carriage movement is still unreliable.	The drill column is worn.	Replace the drill column.
The angle adjustment on the drill rig cannot be tightened at 45°.	When tightening the locking screw for the angle adjustment, the nut was overtightened.	Replace clamp for angle adjustment on the back of the drill column
Core drill can not be clamped	Wear on the clamping surface	Replace the clamping bracket ø60mm.
Drill column starts to wobble slightly	Crack on the base plate to the column holder	Replace the base plate of the drill stand.

Environmental protection

Raw material recovery instead of waste disposal!

To avoid transport damage, the device must be delivered in sturdy packaging. Packaging as well as the device and accessories are made of recyclable materials.

The plastic parts of the device are marked according to the material. This enables environmentally compatible, single-variety disposal via the collection facilities provided.

Warranty

In accordance with our general terms and conditions of delivery, a warranty period for material defects of 12 months applies in business transactions with companies (proof by invoice or delivery bill). Damage due to natural wear and tear, overloading or improper handling remains excluded from this. Wear parts such as the column, the tensioner and the locating wheels or needles etc. are excluded from the warranty. Damage caused by material or manufacturer defects will be remedied free of charge by repair or replacement. Complaints can only be accepted if the device is sent to the supplier unassembled.

EC Declaration of Conformity

It is necessary that the machine operated with this drill stand (e.g. DKB- series) complies with the requirements described in the technical data of the drill stand (e.g.: drill diameter, machine mounting). We hereby declare that this unit has been designed in accordance with Directive 2006/42/EC. Commissioning of this drilling unit is prohibited until it has been determined that the power tool to be connected to this unit complies with the provisions of Directive 2006/42/EC (recognizable by the CE marking on the power tool).

Name and address of the person authorized to compile the technical documentation:

Kernlochbohrer GmbH
Geigersbühlweg 52
72663 Großbettlingen

Location: Frickenhausen
Date: 10.01.2022

Guido Pillat
Chief Executive Officer