Operating Instructions

Diamond Drill Rigs

P 40082

Operating Instructions

Important Instructions

Important instructions and warning notices are allegorized on the machine by means of symbols:

Warning: general precaution

Warning: dangerous voltage

Warning: hot surface

Tool, drill bit and rig are heavy – Caution: risk of squashing

Danger of tearing or cutting

During work you should wear goggles, ear protectors, protective gloves, and sturdy work clothes!

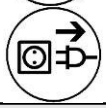
Wear ear protection

Wear safety goggles

Wear protective helmet

Wear protective gloves

Wear protective boots



Do disconnect from power before working on the tool!

Technical Characteristics

Diamond Drill Rig P 40082

Measures:	330 x 240 x 800 mm
Length of the column:	680 mm
Weight:	7,5 kg
Max. drilling diameter:	102 mm
Carriage brake:	Yes
Locking in top position:	Yes
Fixture of the motor:	collar clamping Ø 53 / Ø 60
Adaptation to surface:	4 positioning screws / 2 bubble levels

Available special accessories:

Item (Eibenstock)	Order no.
Fastening set (concrete)	35721
Fastening set (brickwork)	35724
Spare dowel	35722
Rawl – dowel	35725
Quick action bracing unit	35730
Vacuum pump VP03	09201
Vacuum tube	35855
Vacuum plate	35851
Water collection ring WR 131	35875

Supply

Diamond drill rig with turnstile and operating instructions in a cardboard box.

Application for Indented Purpose

The diamond drill rig is made for diamond core drills with a collar diameter from 53 (60).

The max. drilling diameter P 40082 must not exceed 102 mm.

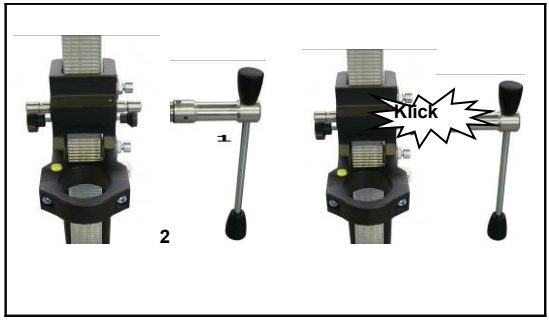
In case of wrong handling or misuse, the producer does not assume any liability.

Use

After each readjustment always check that the screws are tightly fixed so that safe operating of the drill rig is possible.

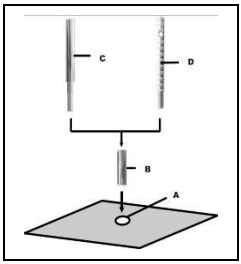
Mounting the turnstile

- Mount the turnstile (1) on the right or left side of the carriage (2) depending on the work to be performed.
- Check whether the turnstile (1) is fixed tightly.



Fastening of the Drill Rig

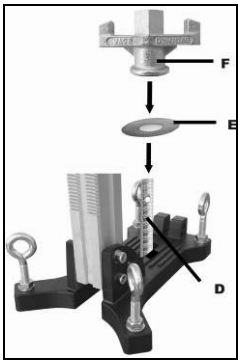
Fastening by means of dowels in concrete



For brickwork, Rawl-Dowels must be used.

- Mark the position of the drill holes for the fastening on the surface to be drilled.
- Drill a hole (Ø 15) 50 mm deep (A), into which the dowel M12 (B) is to be placed; insert and secure

the dowel with the doweling tool (C).



- Screw the quick action clamping screw (D) into the dowel.
- Install the drill rig.
- Fix the washer (E) and finally the fastening nut (F) on the quick action clamping screw (D).
- Tighten the fastening nut (F) with a wrench SW 27.
- Before and after tightening the nut (F), the 4 adjustable screws have to be adjusted in order to adapt the rig to the surface.

Do check whether the drill rig is installed safely and firmly.

Fastening of the drill stand by means of a vacuum plate
(as accessories available)

Don't use the vacuum mounting on the wall and overhead!

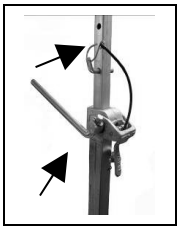
For a low-pressure mounting the surface which is to be drilled must be not porous, must be flat and free of cracks.
If this is not the case, this kind of mounting can't be use. For the vacuum mounting you need a vacuum pump, a vacuum plate and vacuum hoses (see illustration). These items are available on request.



Connect the drill rig with the vacuum plate and the vacuum pump by means of the vacuum tube with the male coupling of the vacuum plate.
Get the drill rig with the vacuum plate in the correct position and switch on the pump.
Make sure, that all four levelling crews in the foot plate are turned back and that a low pressure of -0,8 bar is reached.
The vacuum pump must run during the whole working time and has to be placed so that one can see the manometer.

Attention! It is important, that the drill unit is firmly connected to the surface. If not fixed correctly, injuries to the operator or damages to the drilling unit may be caused. Uncontrolled movements during drilling will cause the drill bit to hit the surface to be drilled which may lead to a chipping of the segments. The drill bit might also tilt in the bore hole which consequently will damage it.

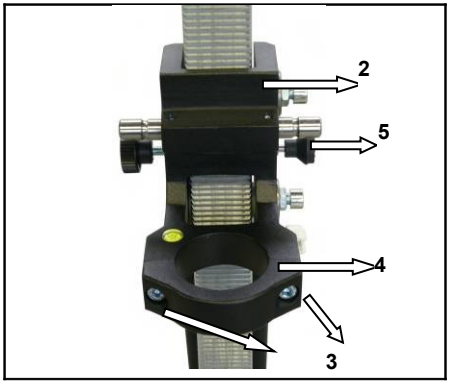
Fastening by means of quick action bracing unit
In order to brace the drill rig by means of the quick action bracing unit, the distance to the opposite wall must be between 1.7 m and 3 m.



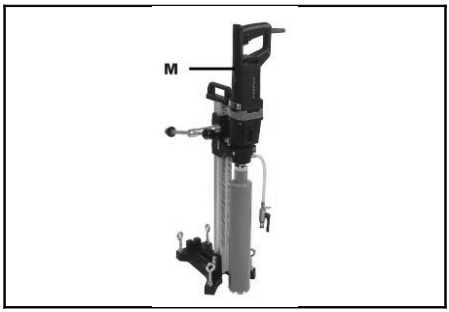
Position the drill rig. Position the quick action bracing unit as close as possible behind the support on the base of the rig. Fix the drill rig by turning the crank (G) clockwise. Secure in position by means of the appropriate bolt (H).

Fixing the Core Drill Motor

Wear protective gloves!
Caution! When mounting the machine, risk of squashing.



- Move the machine holder (2) upwards until the locking pin (5) locks in the column.
- Remove both Allen screws M8 (3) and take off the clamp (4).



- Put the core drill (M) on the carriage and close the clamp (4) by means of the Allen screws (3).

Operations

In order to operate the tool safely, please observe the following notes:

Details of the work area

- Keep the work area free of everything which could obstruct operations.
- Provide for adequate illumination of the work area.

- Adhere to the regulations concerning the power connection.
- Lay the power cable in such a way that any damage by the drill can be avoided.
- Make sure to always keep the work area in view and to be able to reach all necessary operating elements and safety installations.
- Keep other persons away from your work area in order to avoid accidents.

Space requirements for operating and maintenance

Whenever possible, keep a free space for operating and maintenance of about 2 m around the drill position, so that you can work safely and have immediate access in case of a failure.

Drilling

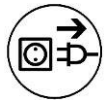
At the beginning, drill very slowly, since the drill bit does only starts cutting with a fraction of the cut surface in the material. If you drill too fast or with too much pressure, the drill bit could get jammed.

In order to reach the max. drilling depth, you probably have to use an extension for the drill bit!

Demounting the Core Drill Unit





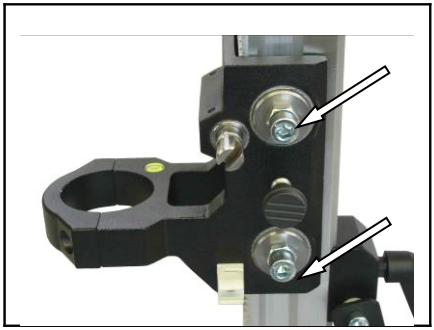


- Move the machine holder with the core drill upwards until it locks in the final top position.
- Remove the drill bit.
- Loosen the fastening nut (F) (see page 13)
- **While doing so, hold the drill rig firmly!**
- Remove the drill rig.
- Unscrew the quick action clamping screw (D) (see page 13).

Care and Maintenance

- Always keep the drill rig clean, especially the column with the toothing and the 4 sliding pieces in the machine holder.
- In order to allow the free movement of the pinion shaft, it should be slightly lubricated.

- In order to achieve a good performance of the drill rig, the 4 sliding pieces in the machine holder have to move along the column without slackness.
  Attention:
- After every tenth drilling you should check if the sliding pieces have got loose-fitting due to drilling vibration.
- If the position should have changed, it can be readjusted as follows:



- Loosen the counter nut on the Allen screw by means of an jaw wrench SW 17
- Adjust the Allen screws and the position of the thrust piece to the column by means of a hex head wrench SW 8.
- Tighten the counter nut again and check whether the carriage moves easily on the column.

Behavior at Malfunction

Turn off the machine at malfunction and disconnect from the main supply. Operations on the electrical system of the machine can be executed by a specialist only.

Trouble Shooting

malfunction	possible cause	repair
Drill unit has to much play (vibration)	stand has been loose guidance has to much play thrust piece worn	adjust the wing nut adjust guidance (see above) replace the thrust piece

Warranty

According to our general terms of delivery for business dealings, suppliers have to provide to companies a warranty period of 12 months for redhibitory defects (to be documented by invoice or delivery note).

Damages due to natural wear, overstressing or improper handling are excluded from this warranty.

Damages due to material defects or production faults shall be eliminated free of charge by either repair or replacement.
Complaints will be accepted only if the tool is returned in non-dismantled condition to the manufacturer or an authorized Eibenstock service centre.

CE Declaration of Conformity

We explain the sole responsibility that this product meets the European standards in terms of drilling stand.

Vakuum Technik GmbH Eibenstock
Lothar Lässig

Oktober 2008

Your distributor