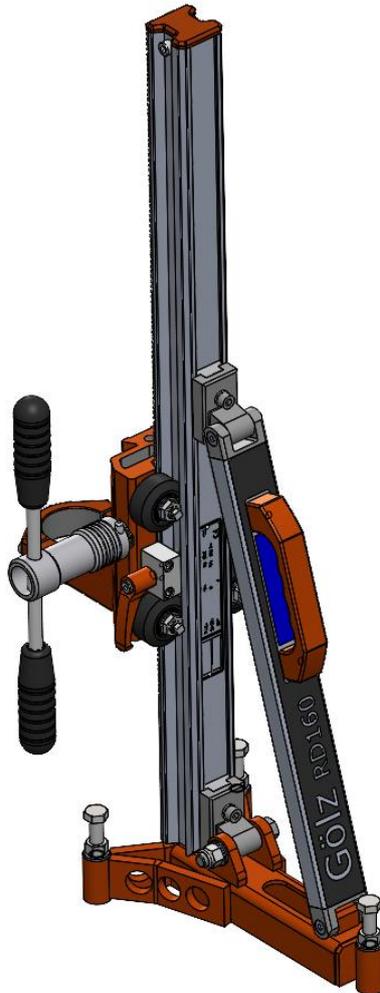


Translation of the Original Operating Manual

Drill rig RD160



**Read operating manual before starting any work!
Keep the operating manual for future use!**

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Date	Chapter	Reason of changed	Person responsible
11-22		Reissue	Design
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2 General

2.1 Operating manual

This operating manual provides guidance on safe and efficient operation and should form a basis of any actions involving the machine. It is an integral part of the machine, which should be kept in the immediate vicinity accessible for its operating personnel.

Prerequisite of safe operation is adherence to all safety and handling instructions. Therefore, before starting any work, the personnel must read carefully and understand the operating manual.

Moreover, the accident prevention regulations applicable at the site of the machine operation and general safety regulations must be complied with.

2.2 Symbols, acronyms, terminology

Symbols, acronyms and specialist terminology used in this document have the following meaning:

- ▶ See item
- ▶ Enumeration
- ▶ Enumeration
- ▶ Position number
- ▶ Action step

Text in italics Explanation of facts

 Refers to the document contained in the enclosed documentation. The source of the document is specified in italics behind the symbol.

2.3 Explanation of symbols

Warnings and safety instructions

Warnings and safety instructions in the manual are identified with the pictograms and provided in blocks highlighted in grey.

Warnings and safety instructions, which draw attention to fundamental dangers, are additionally precluded by signal words, which specify the scope of damage. Their structure is as follows:

SIGNAL WORD!
Origin of the danger.
Consequences of ignoring the danger.
- Actions to avoid danger

- ▶ All warnings and safety instructions must be implicitly complied with!
- ▶ During the works, always act with caution, to avoid accidents, personal and material damage!

Pictograms combined with signal words mean:



DANGER!

... draws attention to an immediate danger that, if not avoided, may result in heavy or even fatal injuries.



WARNING:

... draws attention to potentially dangerous situations that, if not avoided, may cause heavy or even fatal injuries.



CAUTION!

... draws attention to potentially dangerous situations that, if not avoided, may result in slight injuries.



ATTENTION!

... draws attention to potentially dangerous situations that, if not avoided, may result in material damage.

Tips and recommendations



NOTE!

... highlights tips and recommendations as well as information on efficient and trouble-free operation.

Special safety instructions

To make aware of special dangers, the following pictograms are used in combination with the safety instructions:



... marks danger due to electric current.

Failure to observe the safety instructions leads to danger of heavy or fatal injuries.



... marks danger of crushing.

Failure to observe the safety instructions leads to danger of heavy injuries from moving parts.



... marks danger due to hot surface.

Failure to observe the safety instructions leads to danger of burns and heavy skin injuries caused by heat.



... marks danger from moving tools.

Failure to observe the safety instructions leads to danger of cuts and heavy skin injuries caused by rotating tools.

2.4 Liability limitation

All data and instructions provided in this manual were compiled with consideration of applicable standards and regulations, state of the art in this field and our long-standing insights and experience.

The manufacturer accepts no liability for damages caused by:

- ▶ Non-observance of the Operating manual
- ▶ Unintended use
- ▶ Employment of unskilled and uninstructed personnel
- ▶ Unauthorised conversions
- ▶ Technical changes
- ▶ Use of non-approved spare parts

The responsibilities agreed in the delivery contract, the General Terms and Conditions as well as the delivery conditions of the manufacturer and the statutory regulations valid at the time of the conclusion of the contract shall apply.

Warranty

The manufacturer guarantees the functional capability of the applied process technology and performance parameters identified.

The warranty period commences with the defect-free delivery.

Wear parts

Wear parts are all parts having direct contact with the processed or machined material during normal operation.

These parts are excluded from warranty and defect claims, insofar as tear and wear resulting from normal operation.

Service life warranty

Service life warranty is granted for wear parts for the period of 6 months from the acceptance of the defect-free product.

Warranty conditions

12 months after delivery of mechanical and electrical components for one-shift operation, except for the wear parts and tools.

The warranty claim expires, if the system was not installed and started up by our experts.

The warranty extends to the replacement parts.

Consequential damages are excluded.

Damage caused by natural wear, deficient or improper maintenance, failure to comply with the operating regulations, excessive loads and use of inappropriate equipment shall be excluded from the warranty.

2.5 Customer service

Our customer service department is available to provide technical information.

Service-Hotline
02482 – 12 200

You can obtain tips via the regional competent contact person by phone or via fax, email or website at any time.

Moreover, our employees are interested in new information and experience arising from use and which can be valuable for the improvement of our products.

2.6 Copyright

This document is protected by copyright. An unauthorised transfer to third parties, duplication of any kind, including in parts, as well as use and/or disclosure of the content without written permission of the publisher is prohibited.

Non-compliance with this provision is subject to damages. The right for further claims remains reserved.

3 Safety

This section provides an overview of all safety aspects of protection of operators and users from potential dangers, and safe and trouble-free operation. Disregarding these handling instructions, warnings and safety instructions may pose serious risks.

3.1 Intended use

The Drill-Rig RD160 is designed exclusively for the following purposes in the commercial sector:

The Drill-Rig RD160

- is intended for stand-guided core drilling of the solid construction materials such as: reinforced concrete, concrete, artificial stones and masonry with a diamond drill engine and diamond drill bit.



WARNING: Risk of unintended use!

Any use beyond the intended use of the machine may result in dangerous situations.

- The machine must be basically used for the intended purpose according to data contained in this document, in particular, within the application limits provided in the technical data.
- Refrain from any use beyond this scope or different use of the machine.
- Refrain from remodelling, refitting or changing the design or separate parts of the machine for the purpose of changing the field of application or applicability of the machine.

- ▶ Any claims for damages resulting from unintended use are excluded.
- ▶ The operator alone is responsible for all damages due to unintended use.

3.2 Rationally foreseeable misuse



WARNING: Risk of injury caused by misuse!

When misused, the machine may create dangerous situations for persons and cause heavy material damage.

- Refrain from any misuse of the machine.

Any use of the machine going beyond the intended one, shall be deemed unintended and thus prohibited.

This also applies to:

- the drilling of unauthorised construction materials, e.g., timber, metals, plastics
- the drilling any materials other than presented
- Drilling in hand-held operation
- operation with mains voltage and frequencies not listed in the operating manual of the core drilling motor

3.3 Responsibilities of the operator

Operator

An operator is every natural or legal person, who uses the machine or delegates its use to others and is responsible for the safety of the user, personnel or third parties in the course of such use.

Operator's duties

The machine is used in the commercial sector. Therefore, the operator of the machine is subject to statutory obligations regarding occupational safety.

In addition to the warnings and safety instructions in this manual, the occupational safety, accident prevention and environmental protection regulations applicable to the field of the machine operation must be adhered to.

The operator, in particular, must:

- ▶ be informed about current occupational safety regulations,
- ▶ determine, through hazard evaluation, any potential additional dangers resulting from specific usage conditions at the site of the machine operation,
- ▶ put necessary behavioural requirements of the operating instructions into practice during the machine tool operation at the operation site,
- ▶ check regularly throughout the service life of the machine, whether the operating instructions drawn up by the operator are in line with the current status of rules and regulations,
- ▶ adjust the operating instructions, where necessary, to the new regulations, standards and operating conditions,
- ▶ exercise control of the competence for installation, operation, maintenance and cleaning of the machine in a clear and unambiguous manner,
- ▶ make sure that all personnel involved with the machine have read and understood the operating instructions. Moreover, the personnel must undergo training in handling the machine at regular intervals and be informed about potential dangers,
- ▶ provide the persons appointed for operating the machine with the prescribed and recommended protective devices.

Moreover, the operator is responsible for ensuring that the machine

- ▶ is always in a technically perfect condition,
- ▶ is maintained according to the specified maintenance intervals, and
- ▶ that all safety mechanisms of the machine are regularly controlled for completeness and functionality.

3.4 Responsibilities of the personnel

The machine is in the commercial use. Therefore, the personnel are subject to statutory obligations regarding occupational safety.

In addition to the warnings and safety instructions in this manual, the occupational safety, accident prevention and environmental protection regulations applicable to the field of operation must be adhered to.

In particular, the personnel must:

- ▶ be informed about current occupational safety regulations,
- ▶ adhere to behavioural requirements set out in the operating instructions issued at the site of the machine operation,
- ▶ properly exercise the responsibilities entrusted to them as regards installation, operation, maintenance and cleaning of the machine,
- ▶ fully read and understand the operating manual before starting work,
- ▶ use the prescribed and recommended protection equipment,

Moreover, scope of responsibility of every person operating the machine includes the duty of always

- ▶ keeping it in a technically perfect condition,
- ▶ performing maintenance, according to the intervals specified,
- ▶ controlling all safety mechanisms for completeness and functionality on a regular basis.

3.5 Personnel requirements

Fundamentals

Any operation with the machine may only be carried out by the persons, capable of performing their work properly and reliably and meet every requirement mentioned.

- ▶ No works can be carried out by the persons, whose response capability is affected, e.g., by drugs, alcohol or medicines.
- ▶ When deploying personnel at the site of operation, always adhere to the applicable occupational and age-specific regulations.

Qualification



WARNING:
Risk of injury for unqualified personnel!

Improper operation can result in significant personal and material damage.

- Any operations must be only carried out by the persons having required training, knowledge and experience.

Instructed personnel

Instructed personnel are the persons, who have been instructed by the operator on the tasks to be carried out and potential dangers in a detailed and verifiable way.

Specialist personnel

Specialist personnel are the persons, who, due to their professional training, knowledge and experience, as well as knowledge of the relevant provisions, are capable of duly carrying out the works assigned, recognise potential dangers independently and avoid personal and material damage.

Qualified electricians

As a matter of principle, all works on the electrical installations must be carried out by qualified electricians.

Qualified electricians are the persons, who, due to their specialist training, knowledge and experience, as well as knowledge of the relevant provisions, are capable of duly carrying out the works on electrical systems, recognising potential dangers independently and avoiding personal and material damage caused by electric current.

Unauthorised persons



WARNING:
Danger of injuries for unauthorised persons!

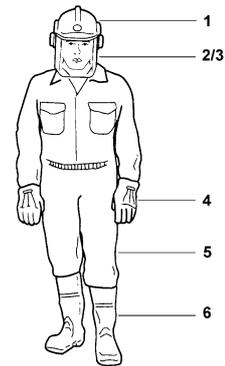
Those who have not been instructed are not aware of the dangers in the area of operation and must be considered unauthorised persons.

- Keep unauthorised persons away from the area of operation; if in doubt, address the persons met and banish them from the area of operation.
- Suspend operations until unauthorised persons leave the area of operation.

3.6 Personal protective equipment

Wearing personal protective equipment is required during the work.

- (1) Helmet with ear protectors
- (2) Visor or protective goggles
- (3) Dust mask / respirator
- (4) Safety gloves
- (5) Suitable protective clothing
- (6) Protective footwear with protection



NOTE!

It is prohibited to wear protective gloves near rotating parts, which pose the danger of pinching. Here, danger created by wearing protective definitely surpasses the intended protection.

3.7 Dangers

The machine has undergone a risk review. Wherever possible, the identified dangers were eliminated and risks reduced. Nevertheless, the machine poses residual risks described in the following section.

- ▶ Strictly observe warnings and safety instructions specified here and in the chapters about handling to avoid potential damage to health and dangerous situations.
- ▶ Danger of accidents due to possibly falling drill cores when drilling through ceilings and the like. Areas into which cores may fall during drilling must always be secured against foot traffic and cordoned off at a large distance!

3.7.1 Residual risks

Even if used as intended, the machine may pose the following residual risks:

- ▶ Danger of finger and hand injury by the rotating tool.
- ▶ Injuries from flying workpieces in case of improper keeping or guiding.
- ▶ Injuries by snapped, ejected or faulty diamond segment.
- ▶ Injuries resulting from touching live parts in case of opened or defective electric components.
- ▶ Hearing impairment due to long periods of work without hearing protection.

3.7.1.1 Risks through mechanical hazards

Rotating tools



CAUTION!
Risk of cut injuries!

Reaching into rotating tools may lead to heavy injuries.

- Do not touch rotating drill bit in any circumstances
- Only work with safety equipment
- Remove drill cores only when the drill motor is not running

Flying clippings / tool**CAUTION!**
Risk of injury by flying clippings or tool parts!

Failure to wear appropriate protective equipment or working with inappropriate drill bits may lead to heavy injuries.

- Wear protective goggles
- Maintain sufficient safety distance to rotating tool
- Only work with drill bits that are designed for the object to be drilled

Movable parts**CAUTION!**
Risk of injury by pinching in movable parts!

Failure to wear appropriate protective equipment may lead to heavy injuries.

- Wear protective gloves
- Always fix the drilling carriage when moving the machine

3.7.1.2 Risks through electrical hazards

Electric current**DANGER!**
Danger to life from electric current!

Touching live parts leads to death. Damaged insulation or individual components can be life-threatening.

- Disconnect the machine from the power supply before any work on the electric system. Verify that the system is disconnected from power supply.
- Switch off power supply before maintenance, cleaning and repair operations and secure the machine against being restarted.
- If the power supply insulation is damaged, switch off immediately and arrange for repairs.
- Never bypass or disable fuses.
- Always use fuses with correct amperage when replacing defective fuses.
- Keep moisture away from live parts.
- Any works on the electrical installations must be carried out by qualified electricians.

3.7.1.3 Risks through thermal hazards

Hot surfaces**CAUTION!**
Risk of burns on hot surfaces.

Contact with hot parts may cause burns.

- Do not touch the surface.
- Before every work, make sure that the parts have cooled down to the ambient temperature.

3 Safety

3.7.1.4 Risks posed by special physical effects

**CAUTION!**
Danger of injuries caused by special physical effects

Failure to wear appropriate protective equipment may lead to heavy injuries.

- Wear ear protectors
- Wear protective gloves
- Take adequate breaks
- Regular medical examinations 'G20'

3.7.1.5 Risks due to hazardous substances

**CAUTION!**
Risk of injury by hazardous substances, such as dust and cutting water or slurry!

Failure to wear appropriate protective equipment may lead to damage to health.

- Use personal protective equipment
- Renew the cutting water regularly
- Use the protective goggles and dust mask

3.7.1.6 Risks due to work environment conditions

**CAUTION!**
Risk of injury due to inadequate lighting.

Work in inadequate lighting conditions may lead to heavy injuries.

- Provide for adequate lighting at the workplace.

3.8 Safety devices**WARNING:**
Danger to life due to defective or bypassed safety devices!

Inoperable, bypassed or disabled safety devices do not protect from hazards and may lead to heavy or fatal injuries.

- Before commencement of works, always make sure that all safety devices are properly installed and functional.
- Never disable safety devices.
- Ensure that the safety devices are always freely accessible.



NOTE!
See safety devices in → "Instruction manual core drilling motor".

3.9 Spare parts



WARNING:
Risk of injury due to wrong spare parts.

Wrong spare parts can seriously compromise safety and cause damage and malfunction up to total failure.

- As a matter of principle, only original spare parts must be used.

Original spare parts can be obtained via an authorised dealer or directly from the manufacturer.

3.10 Actions in emergency and in case of accidents

Necessary actions

- ▶ Always be prepared for accidents or fire.
- ▶ First aid facilities (first aid box, cloth, etc.) and fire extinguisher must be close at hand.
- ▶ Personnel must familiarise themselves with accident signalling equipment, first aid and rescue facilities.
- ▶ Access roads for rescue vehicles must be always kept free.

If the need arises, act properly

- ▶ Activate emergency stop immediately
- ▶ Initiate first aid measures
- ▶ Remove persons affected from the danger area.
- ▶ Inform persons responsible at the operation site.
- ▶ Alert doctor and/or fire brigade in case of heavy injuries.
- ▶ Keep access roads for rescue vehicles free.

3.11 Signage

Danger from electric current!



DANGER!
Danger to life from electric current!

Touching live parts leads to death. Damaged insulation or individual parts can be life-threatening.

- Disconnect the machine from the power supply before any work on the electric system. Check that no voltage is present!
- Switch off power supply before maintenance, cleaning and repair operations and secure the machine against being restarted.
- If the power supply insulation is damaged, switch off immediately and arrange for repairs.
- Never bypass or disable fuses.
- Always use fuses with correct amperage when replacing defective fuses.
- Keep moisture away from live parts.
- Any works on the electrical installations must be carried out by qualified electricians.
- Annual check of the electric system according to VDE0701.

Danger of cutting damage



CAUTION!
Risk of cut injuries!

Reaching into moving tools may lead to heavy injuries.

- Do not touch rotating drill bit in any circumstances
- De-energise the machine before replacing the drill bit

Illegible signs



CAUTION!
Risk of injury due to illegible symbols!

Stickers and signs that got illegible, make danger zones insufficiently recognisable and may become incapable of indicating potential injury risks.

- Always maintain legibility of pictograms, safety, warning and operating instructions.
- Immediately replace the pictograms, labels, signs or stickers that became illegible.

There are the following symbols and information signs on the machine that refer to potential dangers:

	<p>Wear gloves Wear ear protectors The machine meets EU guideline Observe the operating manual Wear protective goggles</p>	
--	--	--

4 Technical data

4.1 Dimensions of the machine

Specification	Value	Unit
Length	444	mm
Width	265	mm
Height	901	mm
Operating weight drill rig	10,3	kg

4.2 Dimensions of drill bit

Specification	Value	Unit
max. length	600	mm
max. width Ø	160	mm

4.3 Dimensions Dowel Base

Specification	Value	Unit
max. length	293	mm
max. width	182	mm
Height	85	mm

4.4 Engines and fixing types

Engine	Connection
FB20P	Engine neck
FB23P	Engine neck
FB25P	Engine neck
FB33PNT / SNT	Engine neck

4.5 Noise emission, Vibration

Specification	Value	Unit
Sound pressure level	88	dB (A)
Sound power level	101	dB (A)
Guaranteed sound power level	102	dB (A)
Vibration level	< 2,5	m/s ²

Measuring tolerance	Value	Unit
Sound pressure level	4	dB (A)
Sound power level	2,5	dB (A)
Vibration level	0,2	m/s ²

The data define the sound level of the noise exposure at the workplace of the operator and sound power level of the machine tool.

The emission values meet standards EN ISO 3744, EN 12418 and Directive 2005/88/EC.

Noise emissions for drill rigs in the system with core drill motor FB23P/S and diamond core bit RM30 Ø162mm.

4.6 Operating conditions

Working zone

Specification	Value	Unit
Temperature range	Ambient temperature 5-45	°C
Relative air humidity, maximum	60 (without condensing)	%
Conditions	Only operate the machine tool in the dust-free environment! Avoid direct impact of dampness, dust and frost. Do not operate in strong electric and magnetic fields! Do not operate the machine tool in explosive atmosphere!	

4.7 Drill bits

Drill bit type	Drill bit diameter	Material
RM 30	Ø10-Ø160 mm	reinforced concrete, reinforced concrete heavily reinforced, granite ductile cast iron pipes
RM 52		Premium concrete, reinforced concrete, medium-hard masonry
RM 65		Reinforced Concrete



DANGER! Risk of injury by defective or incorrectly mounted drill bits!

Damaged drill bits may cause injuries of personnel!

- Before starting work, check the drill bit for breakage of individual segments, segment pieces, cracks at the segment base, deformation of the drill bit or wear.
- Replace defective drill bits immediately

4.8 Drill bit contact force

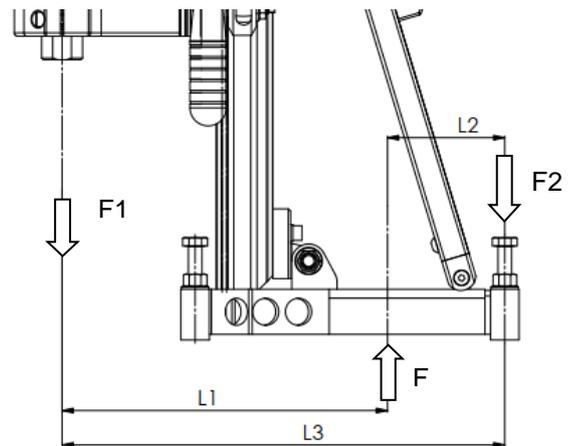


Note!

The dowel extraction forces should be minimised!

The greater L2 is selected, the lower the dowel extraction forces!

$$F1 \times L3 = F \times L2$$



Drill bit Ø (mm)	Segment (piece)	Contact force drill bit (N)	Dimension L3	Dimension L2	Extraction force F(kN)
50	5	1080	387	80	5,2
100	9	1890	387	80	9,1
160	12	2880	387	80	13,9
200	14	3780	387	80	18,3



DANGER! Risk of injury by unchecked or unapproved tool!

Drill bits that have not been checked or approved may cause injuries of personnel!

- Before starting work, check whether a proper drill bit is mounted.
- Observe the speed reference values (engine operating manual) and select the appropriate gear!

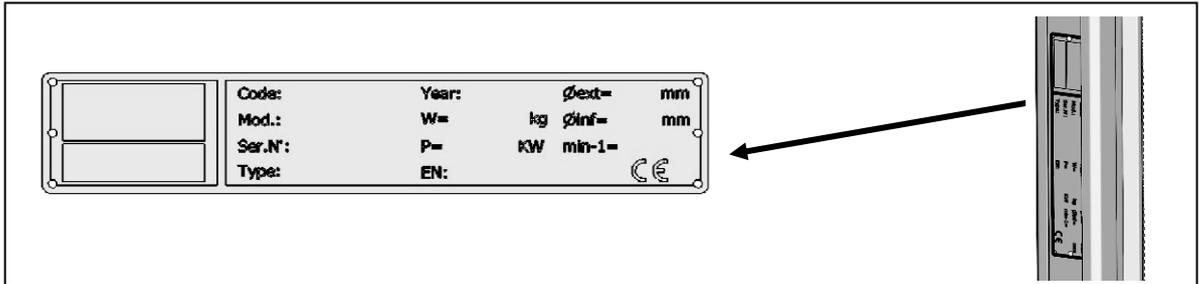


NOTE!

All drill bits used must be designed for the corresponding drive speed of the machine and the intended use with regard to their permissible maximum cutting speed. Optimum peripheral speed: 2 to 4 m/s

4.9 Type plate

The type plate is located on the rear of the column profile.



4.10 Installation site requirements

The floor surface must:

- ▶ have sufficient load bearing capacity,
- ▶ be free of barrier,
- ▶ withstand the required extraction force,

Installation conditions

- ▶ Choose the installation site as per space requirements according to the technical data.



NOTE!

The machine is designed for use in daylight. In case of work zones with poor or no lighting, ensure sufficient lighting of the workplace.

4.11 Storage requirements

Storage conditions

As a matter of principle, the machine, its components, assemblies or parts must be only stored in the following conditions:

- ▶ do not store outdoors
- ▶ store in dry and dust-free place
- ▶ do not expose to aggressive media
- ▶ protect from solar radiation
- ▶ avoid mechanical vibrations
- ▶ storage temperature range 5 to 45°C
- ▶ relative air humidity, max. 60%

In case of storage for over 3 months, check general condition of all parts and packaging on a regular basis. If necessary, renew or replace conservation materials.

5 Design and function

The drill stand is mounted on a dowel base which is made of a robust welded construction. The aluminium column with tooth profile has an indirect connection to the dowel foot and is provided with a support to the dowel foot for stabilization. Drill carriage with roller guide, the clamping neck is removable.

5.1 Scope of delivery and responsibility

The machine was developed and manufactured under sole responsibility of Gölz GmbH.

Upon transfer to the operator, the responsibility for safe handling and instruction of the personnel passes to the operator.

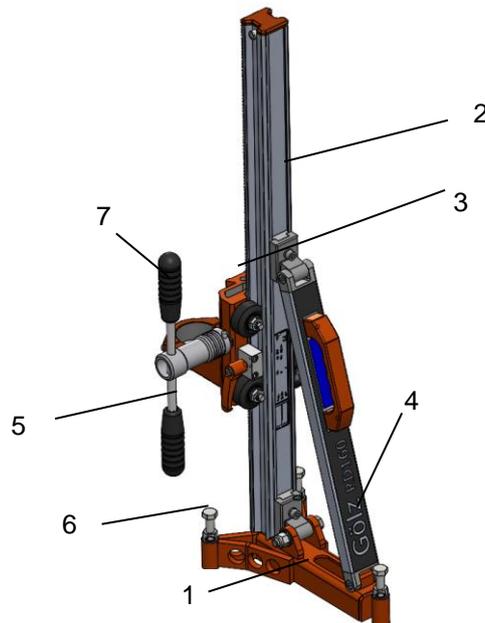
The manufacturer offers training on the machine.

The scope of delivery includes the following components:

Components	Quantity
Drill rig	1
Technical documentation	1

Optional accessories	Quantity
Water retention ring Ø130	1

5.2 RD 160



1	Dowel base	5	Hand wheel
2	Column	6	Adjusting screws
3	Drill carriage	7	Engine neck
4	Support		

Dowel base

The dowel base (1) is made of a robust welded construction. On the Dowel base the column and the support are fastened. He has three adjust screws.

Column

The column (2) is an aluminium profile with integrated toothed rack and a scale as depth indication as well as a plug to close the column.

Drill carriage

The drill carriage (3) is available with roller guide and consist of an aluminium profile including mounting parts. It can be used to mount and fix the engine neck (7), engine and handwheel (5).

Support

The support (4) is to stabilize the entire drill stand. For transport or relocation of the machine, a handle is located on the support for carrying.

Hand wheel

The hand wheel (5) is used to move the carriage over the column. It can be attached to both sides of the carriage.

Adjusting screws

With the adjusting screws (6) you can adjust the drill rig exactly.

Engine neck

The engine neck (7) is a separate component and is the connecting element from the carriage to the engine.

5.3 Functional description

These drill rigs are exclusively designed for drilling building materials in the sizes specified under ->Technical Data using a drill motor and diamond core bit.

The core drill stand is the central unit of the stand guided diamond core drilling and is firmly attached to the object to be drilled at the place of use. The holder of the core drilling motor is located on the drill carriage or on the clamping neck of the core drilling stand. The drill motor can be firmly connected via this holder. The appropriate diamond drill bit is attached to the spindle of the drill motor.

The drill stand guides the drill bit precisely during drilling and provides the required contact pressure via the drill carriage using a hand crank.

6 Transport & packaging

6.1 Transport safety information



ATTENTION!
Damage through improper transportation!

Improper transportation can result in considerable damage of the transported goods and objects in the vicinity.

- Always act with utmost caution and care when loading and unloading transported goods.
- Pay attention to instructions and symbols on the packaging.
- Never remove transport locks earlier than before assembly.

6.2 Transport inspection

Inspect the condition of the transported goods immediately upon delivery for completeness and damage.

In the event of externally recognisable damages:

- ▶ do not accept the delivery or accept it only conditionally,
- ▶ record the scope of the damage in the transport documents and indicate it in the carrier's consignment note,
- ▶ lodge complaint.



NOTE!

*Claim any defect immediately upon delivery of the transported goods!
 Claims regarding transport damage can only be lodged within valid complaint periods.*

6.3 Transport symbols

On the outside of the transported goods, there are symbols corresponding to the content, which must be strictly observed during transportation and storage.

Meaning of the transport symbols

The following transport symbols can be placed on the transported goods:

	<p>This side up</p> <p>The arrowheads indicate the top end of the transported goods. These should point upwards otherwise the content can be damaged.</p>		<p>Keep dry</p> <p>Protect the transported goods from dampness and keep them dry.</p>
	<p>Anchor point</p> <p>Only attach lifting tackle to the indicated points.</p>		<p>Centre of gravity</p> <p>Indicates the centre of gravity of the transported goods. Pay attention to the centre of gravity position when handling the goods!</p>

6.4 Transport and storage

Handling packaging

The machine is packed in a safe and environmentally sound manner for the anticipated transport conditions. The packaging protects the parts up to the beginning of assembly from damage and corrosion.

- ▶ Only remove packaging and transport locks before assembly.
- ▶ Dispose of packaging materials according to applicable local regulations.



ATTENTION! **Environmental damage through improper disposal!**

Packaging material is valuable raw material and can be used again or expediently reprocessed and recycled.

- Always dispose of packaging materials in an environmentally sound manner.
- Follow local regulations. If necessary, employ a specialised company for waste disposal.

Transport of the machine



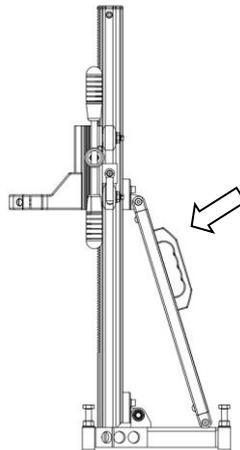
ATTENTION! **Damage through improper transportation!**

Improper transportation can result in considerable damage of the machine and objects in the vicinity.

Before every transport:

- the slider is to be fixed
- the machine is to be disconnect from the electricity

The machine can be carried by one person using the handle attached to the support.



NOTE!
The machine is not designed for crane transport. There are no appropriate load suspension points on the machine.

Storage of the machine

Store the machine in the following conditions:

- ▶ indoors only,
- ▶ store in dry and dust-free place,
- ▶ do not expose to aggressive media,

- ▶ protect from solar radiation,
- ▶ avoid mechanical vibrations,
- ▶ storage temperature: 5 to 45 °C,
- ▶ relative air humidity: max. 60%.
- ▶ In case of storage for over 3 months, check general condition of all parts and packaging on a regular basis. If necessary, renew or replace conservation materials.



Note!

Protect from moisture!

Clean the machine thoroughly before storing and grease components such as rollers, bearings and threads.

7 Installation and first commissioning

7.1 Installation safety information



WARNING!
Risk of injury due to improper installation!

Improper work performance and installation errors can result in heavy injuries during work and life-threatening situations during commissioning and operation.

- Any installation works must be only carried out by trained personnel authorised by the operator.
- Sufficient assembly freedom must be ensured before commencement of works.
- Always keep the working zone tidy and clean!



DANGER!
Danger to life from electric current!

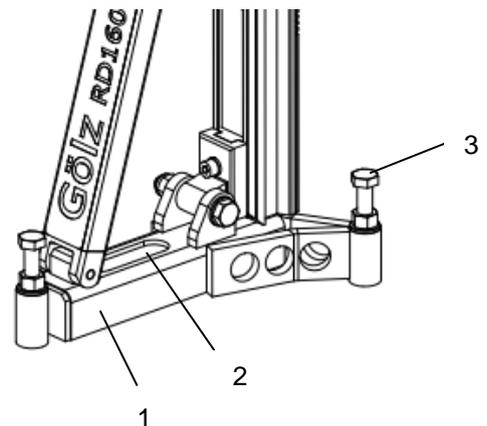
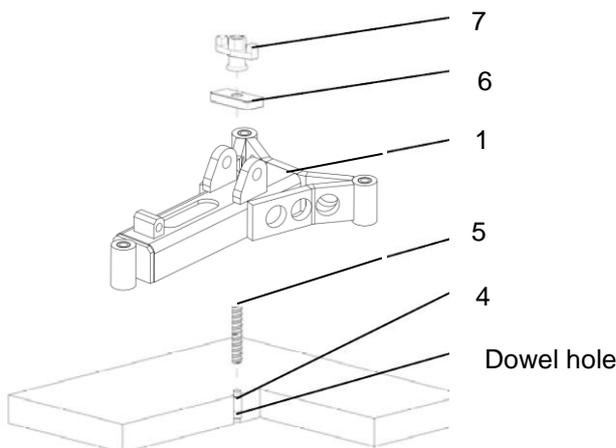
Touching live parts leads to death. Damaged insulation or individual parts can be life-threatening.

- Connection, inspection and measurements of electric parts must be carried out by qualified electricians.
- In case of defective electric components switch off immediately and arrange for repairs.
- Keep humidity away from live parts.

7.2 Site assembled drill rig

Dowel techniques:

Place the drill stand at the desired position, the laser will show the exact centre of the drill hole. Mark the dowel point through the dowel hole (2) in the dowel base (1) and drill with a percussion drill. Follow the installation instructions for the dowels (Fischer FDBB16SE). Then screw on anchor rod (5) and spread dowels (4). Attach the core drill stand to the anchor rod using the washer/dowel latch (6) and fixing nut (7) and align via the adjusting screws (3).



Personal protective equipment

- ▶ Protective clothing
- ▶ Protective gloves
- ▶ Safety shoes
- ▶ Ear protectors
- ▶ Protective goggles

7.3 Mounting drill motor

Before you mount the drill motor on the drill stand, make sure the following

- ▶ The drill stand is fixed in accordance with regulations
- ▶ The attachment of the drill rig to the drilling object must withstand the pull-out forces
- ▶ The drill stand is aligned via the compensation screws
- ▶ The working area in front of and behind or under the drilling object is closed off and secured
- ▶ The drill motor is disconnected from the power supply

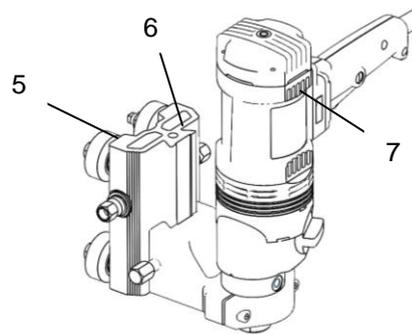
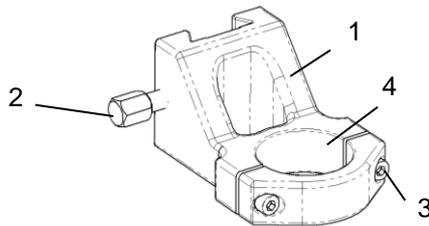


Note!

Do not attach diamond core bits to the drill spindle until the drill motor has been mounted!

When mounting a motor, proceed as follows:

- ▶ Push the engine neck (1), if not yet assembled, from above into the locating wedge (6) on the carriage (5). Push on the clamping neck as far as it will go. (Only for RD160)
- ▶ Tighten the fixing screw (2) of the clamping collar. The clamping collar is now secured against slipping out. (Only for RD160)
- ▶ Insert the engine (7) from above into the round engine mount (4) and tighten the two screws (3).
- ▶ The drill bit can now be attached.



Personal protective equipment

- ▶ Protective clothing
- ▶ Protective gloves
- ▶ Safety shoes

7.4 Attachment drill bit



NOTE!

Clean all fastening elements carefully before mounting the core bit!

7.4.1 With drill motor spindle

Fit the drill bits directly to the drill motor spindle. Wind the drill carriage up, but only to such point that the drill bit easily fits under the drill motor spindle.

When fitting the drill bit, please observe the following order:

- ▶ first the brass disc
- ▶ then the O-ring
- ▶ finally the drill bit

7.4.2 With 3-hole flange

Fit the 3-hole flange to the gear box. Fit the flange to the gear shaft in such a way that the serration meshes and screw the two set screws in the flange into the gear shaft. Now wind the drill carriage up, but only to such point that the drill bit easily fits under the flange.

Then, with a wrench SW 17, screw the three screws M 10 x 20 through the flange into the holes of the drill bit.

Lock the flange with a SW 41 wrench.

7.5 First commissioning and acceptance, general

**DANGER!**

Risk of injury during the first commissioning or adjustment works. Therefore:

- Before starting work, disable the machine and secure the machine against being restarted. Affix warning signs!
- Ensure that the machine is properly and sufficiently secured to the object to be drilled
- Ensure that all components of the machine are firmly connected and secured against slipping out
- Ensure sufficient lighting
- Ensure that there are no unauthorised persons in the work area
- Make sure that the power and water lines leading to the motor are long enough and have been laid in accordance with regulations.

The drill rig is delivered fully assembled. The machine is set up and aligned at the place of use. All components such as motor, clamping neck and drill bit are attached to the machine and firmly mounted.

7.6 Steps before commissioning

Before putting the machine into operation, make sure that the motor is connected exactly according to the operating instructions of the motor and that the water and power lines have been installed safely and according to regulations.

**Danger!**

Risk of injury due to improper laying of supply lines!

Water and power lines leading to the motor must not be a tripping hazard!

8 Operation

8.1 Operation safety information



WARNING!

Risk of injury due to improper operation!

Improper operation may lead to heavy injuries.

- The machine may only be operated by trained personnel authorised by the operator.
- Before every work, make sure that the safety devices are correctly installed and function without flaws.
- Never disable safety devices.
- Always keep the working zone tidy and clean! Objects, parts, workpieces, tools and cleaning devices loosely lying around are accident sources.



DANGER!

Danger to life from electric current!

Touching live parts leads to death. Damaged insulation or individual parts can be life-threatening.

- In case of defective electric components switch off immediately and arrange for repairs.
- Keep humidity away from live parts.

Personnel

- ▶ Instructed personnel

Personal protective equipment

- ▶ Protective clothing
- ▶ Protective gloves
- ▶ Safety shoes
- ▶ Ear protectors
- ▶ Protective goggles

8.2 Intended working position of the operator

The operator stands laterally behind the machine so that he can see the complete machine and the drilling process in front of him, comfortably operate the handwheel and immediately disconnect the power supply to the motor.



8.3 Start-up preparation

To safely use the machine as intended, the following preconditions must be met:

- ▶ The machine is securely fastened and all components are firmly mounted
- ▶ The water and power lines are connected and safely installed.
- ▶ The water supply is functional
- ▶ The drill motor was set in the right gear for this drill bit. You will find the exact procedure and speed table in the motor operating instructions.
- ▶ There must be no wrench or auxiliary tool left on the machine
- ▶ The working area above and below or in front of and behind the object to be drilled is widely blocked and secured

8.4 Start-up



Note!

Check after start:

The machine is switched on via the main switch. This is located on the power cable of the drill motor. Observe the motor operating manual.

Follow the instructions.

8.5 Drilling process

8.5.1 Vertical drilling

For vertical drilling, the column of the drill stand rests directly on the attachment point of the dowel base. This is the delivery condition of the drill stand.

To set up for this setting, proceed as follows:

1. Switch off the machine -> motor and core bit must not rotate!
2. Loosen the column slightly at its fixing points and its sliding elements.
3. Push the column to the stop point on the dowel base.



Note!

When adjusting the drill stand, it is easier if components such as the drill motor and drill bit have been removed beforehand! Always disconnect the power plug!

4. Tighten the fixing screws on the sliding elements again -> check that the column is fixed and cannot move.
5. Position the machine at the desired location and fasten it using dowel technology.
6. Attach all components back to the drill stand and fix them.
7. Grip the handle of the handwheel with one hand and the main switch of the drill motor with the other hand.



Note!

*Never touch the drill bits while the engine is running!
In an emergency, immediately pull out the mains plug!*

8. After starting the engine, switch on the water.
9. Now slowly plunge the rotating drill bit into the material via the hand crank and drill through it.
10. After piercing the material, move the rotating drill bit out of the hole using the hand crank. Now switch off the motor and the water supply.

8.5.2 Angled bores

The machine offers the possibility to perform inclined drilling.

For angled bores we proceed as follows:

1. Turn off the machine -> The engine and drill bit must not turn anymore!
2. Loosen the guide column slightly at its fixing points and its sliding elements.
3. Swivel the guide column until the desired drilling angle is reached.
4. Tighten the fixing screws on the sliding elements again -> check that the guide column is fixed and cannot move.
5. Position the machine at the desired location and fasten it using dowel technology.
6. Make sure that all components are attached and firmly mounted.
7. Grasp the handle of the handwheel with one hand and the main switch of the motor with the other hand.
8. Start the machine.



Note!

*Never touch the drill bits while the engine is running!
In an emergency, immediately pull out the mains plug!*

9. After starting the engine, switch on and adjust the water supply.
10. Now slowly plunge the rotating drill bit into the material via the hand crank and drill through it.
11. After piercing the material, move the rotating drill bit out of the hole using the hand crank. Now switch off the motor and the water supply.

8.5.3 Water supply

The drill motor is connected to a fresh water pipe.

- ▶ Dirty water can clog the water supply line to the drill bit
- ▶ Collect the cutting mud during drilling, then filter and dispose of properly

8.6 Stop the drilling process

After the material has been drilled through and the rotating drill bit is running freely again outside the hole, switch off the motor and the water supply now.

Proceed exactly according to the engine operating instructions.



Note!

*Never touch the drill bits while the engine is running!
In an emergency, immediately pull out the mains plug!*

9 Maintenance & cleaning

9.1 Maintenance safety information

**WARNING!****Risk of injury due to improper maintenance!**

Improper maintenance may lead to injuries.

- Any maintenance works must be only carried out by instructed specialist personnel authorised by the operator.
- Sufficient assembly freedom must be ensured before commencement of works.

**DANGER!****Danger to life from electric current!**

Touching live parts leads to death. Damaged insulation or individual parts can be life-threatening.

- Switch off the electric system before maintenance and repair operations and secure it against being restarted.
- Keep humidity away from live parts.

**WARNING!****Risk of injury due to wrong spare parts.**

Wrong spare parts can seriously compromise safety and cause damage and malfunction up to total failure.

- As a matter of principle, only original spare parts must be used.

**CAUTION!****Risk of cut injuries!**

Reaching into moving tools may lead to heavy injuries.

- Do not touch rotating drill bit in any circumstances
- If any works need to be carried out, disconnect the machine from power supply

9.2 Maintenance plan

Maintenance works necessary for optimum and trouble-free operation are described in the following sections.

- ▶ If an increased wear of parts is revealed by regular inspections, reduce the maintenance intervals!
- ▶ Draw up a maintenance log after every maintenance! The log assists in error analysis, enables adjusting the intervals to actual usage conditions and validating guarantee claims.
- ▶ If you have any queries on maintenance works and intervals:
contact manufacturer.

Interval	Maintenance work	Personell
Before every commissioning	Visual check <ul style="list-style-type: none"> - Entire machine - Tool holder (engine spindle) - tools (drill bit) - operation elements (handle...) - drill rig and slider - all components 	Operating personnel
	Visual check <ul style="list-style-type: none"> - engine - the column 	Specialist personnel
	Checking the tool (drill bit) for replacement necessity	Operating personnel
	Slider <ul style="list-style-type: none"> - lubrication - greasing - oiling - applying corrosion protection 	Operating personnel
After completion of work	Cleaning of <ul style="list-style-type: none"> - entire machine - operation elements (handle...) - tools (drill bit) - Drill rig 	Operating personnel
	Cleaning of <ul style="list-style-type: none"> - engine und drill spindle 	Specialist personnel
	tool holder (drill spindle) <ul style="list-style-type: none"> - lubrication - greasing - oiling - applying corrosion protection 	Operating personnel
weekly	Check and adjust <ul style="list-style-type: none"> - Operation elements (handle...) - slider and guide elements - Screw fitting 	Operating personnel
Yearly	Perform statutory safety test for engine	Qualified electricians
In case of an error	Visual check <ul style="list-style-type: none"> - entire machine - drill bit 	Operating personnel
	Visual check <ul style="list-style-type: none"> - engine - Drill rig 	Specialist personnel
In case of damage	change and replacement <ul style="list-style-type: none"> - entire machine - drill bit - Drill rig - Operating elements (handle...) - Engine neck - engine 	Operating personnel

9.3 Description of the maintenance works to be carried out by the operator



ATTENTION!

Cleaning by a high-pressure cleaner will damage the machine.

ATTENTION!

Foaming and cleaning with water will damage the machine.

ATTENTION!

The drill bit may not be cleaned by metal cleaning tools (scraper, metal sponge or similar), otherwise it will be damaged.

9.3.1 Change the drill bit

The drill bit needs to be changed if:

- the diamond segments on the drill bit are completely worn, damaged or broken off
- that material to be drilled changes
- the drill bit runs out of round

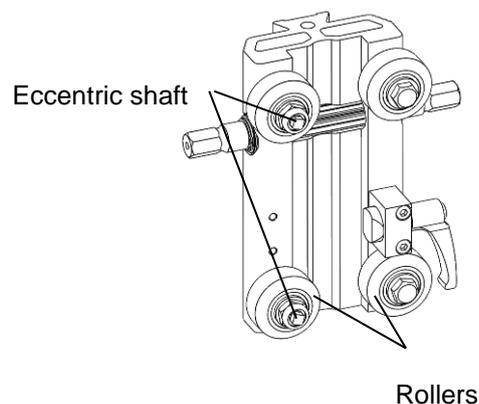
9.3.2 Adjust the drill carriage

The slides with roller guide have guide elements: Rollers made of plastic which wear out after a certain time. Due to friction between the guide elements and the column, an inaccuracy (play) becomes noticeable in the long run. This inaccuracy of the carriage guide can be eliminated by readjusting the guide elements. If the guide elements are worn out too much, they must be replaced by new ones.

Adjust roller guide

- Hold the eccentric shaft over the square head with a wrench
- Loosen the lock nut of the adjusting roller
- Minimize inaccuracy by turning the eccentric shaft and bringing the roller back into contact with the column
- Hold the eccentric shaft with a wrench and retighten the lock nut

Drill carriage with roller guide



9.4 Steps after completing maintenance

After completion of the maintenance works and before switching on, follow the following steps:

1. Check for tightness all threaded joints previously detached.
2. Check the proper installation of all previously removed protective devices and covers.
3. Make sure that all tools, materials and other equipment have been removed from the working zone.
4. Clean the working zone and remove any spilled substances such as liquids, processing materials or similar.
5. Make sure that all safety devices of the system function properly.

9.5 Parts susceptible to wear

Machine parts susceptible to wear are:

- Column
- Scale
- Sticker
- Plug
- Flanged bush
- Box level
- Brake plug
- Roller eccentric
- Roller concentric
- Handle bar
- Spring

Wear of these parts does not present any product defect.



NOTE!

Wear parts are highlighted in grey in the spare parts list!

10 Errors

10.1 Troubleshooting safety information

**WARNING!****Risk of injury due to improper troubleshooting!**

Improper actions in the course of troubleshooting may lead to heavy injuries.

- Any repair works must be only carried out by instructed specialist personnel authorised by the operator.
- Sufficient assembly freedom must be ensured before commencement of works.
- Always keep the working zone tidy and clean! Objects, parts, workpieces, tools and cleaning devices loosely lying around are accident sources.
- Check correct assembly of spare parts if these have been replaced. Fit properly all fastening elements. Observe screw tightening torques.
- Before recommissioning, make sure that all safety devices are properly installed and functional.

**WARNING!****Risk of injury resulting from unauthorised restarting!**

Personnel working on individual parts can be injured if the machine is restarted unexpectedly.

- Before working on any individual parts, switch off the machine and secure it against being restarted.

**DANGER!****Danger to life from electric current!**

Touching live parts leads to death. Damaged insulation or individual parts can be life-threatening.

- Switch off the electric system before maintenance and repair operations and secure it against being restarted.
- Keep humidity away from live parts.

10.2 Actions in case of errors

The following basically applies:

1. In case of errors posing an immediate danger for personnel or property, immediately activate the emergency stop.
2. Switch off power supply and secure it against being restarted.
3. Inform persons responsible at the operation site.
4. Depending on error reason type, assign responsible authorised specialist personnel to identify and eliminate it.

10.3 Troubleshooting table

Error message / error	Possible cause	Troubleshooting	Personnel
Machine when starting without function	Power plug not properly attached	Check power connection	Operating personnel
	Power plug defective	Check power plug for function	Qualified electricians
	Engine defective	Check engine. If defective, replace or repair	
	Main switch defective	Check main switch and replaced if necessary	
Machine has no power	Cable too long or Cable reel not unwound	Observe the prescribed length of the power cable. Unwind the cable drum	Operating personnel
	Power grid is not enough	Follow the connection data of the machine	
	Engine does not keep the speed	Check engine or replace engine	Qualified electricians
No cooling water	Hose clogged	Clean and route hoses correctly	Operating personnel
	Hose leaking	Repair or replace hose	
Diamond drill bit does not cut well	Not enough or too much water	Adjust the amount of water correctly	Operating personnel
	Engine speed too high	Choose the right gear (engine- speed list)	
	Diamond segments have become clogged, worn out or defective	Sharpen drill bit	
	engine overloading (feed too high)	Reduce feed rate	
	Very hard concrete	Reduce feed rate or change drill bit	
	Diamond drill bit is stuck	Check the drill rig fixing. if necessary, realign the drill rig	

Error message / error	Possible cause	Troubleshooting	Personnel
Diamond drill bit is out of round	Engine bearing or spindle defective	Replace affected component	Manufacturer
	Diamond drill bit is dented	Change diamond drill bit	Operating personnel
Bore runs during drilling	Drill rig fixing insufficient	Fix the drill rig better	Operating personnel
	Slider guidance too inaccurate	Adjust the slider	

10.4 Steps after troubleshooting

After completion of the troubleshooting and before switching on, follow the following steps:

1. Check for tightness all threaded joints previously detached.
2. Check proper installation of all previously removed protective devices and covers.
3. Make sure that all tools, materials and other equipment have been removed from the working zone.
4. Clean the working zone and remove any spilled substances such as liquids, processing materials or similar.
5. Make sure that all safety devices of the machine function properly.

11 Dismantling and disposal

After the design service life is over, the machine must be dismantled and disposed of in an environmentally sound manner.

11.1 Dismantling and disposal safety information

**WARNING!****Risk of injury resulting from improper dismantling!**

Improper actions in the course of dismantling may lead to heavy injuries.

- Any dismantling works must be only carried out by instructed specialist personnel authorised by the operator.
- Sufficient assembly freedom must be ensured before commencement of works.
- Always keep the working zone tidy and clean! Objects, parts, workpieces, tools and cleaning devices loosely lying around are accident sources.
- Mind sharp-edged parts, corners and points.
- During dismantling operations, always secure parts so that cannot fall or overturn.
- Dismantle parts properly and in a professional way with consideration of local labour and environmental protection regulations.
- In cases of doubt, contact the manufacturer.

**DANGER!****Danger to life from electric current!**

Touching live parts leads to death.

Damaged insulation or individual parts can be life-threatening.

- Before dismantling operations, switch off power supply and secure the machine against being restarted.

Personnel

- ▶ Instructed specialist personnel authorised by the operator

11.2 Dismantling

1. Switch off the machine and secure it against being restarted.
2. Physically disconnect the power supply from the unit and discharge stored energy. Check that no voltage and pressure are present.
3. Remove operating and auxiliary materials, and remaining processing materials and dispose of them in accordance with the environmental regulations
4. Clean properly assemblies and parts and disassemble them with consideration of the applicable local labour and environmental protection regulations.

11.3 Disposal

If no return or disposal agreement was made, send the dismantled components for recycling:

- ▶ scrap metal parts.
- ▶ hand over plastic parts for recycling.
- ▶ dispose of other components assorted according to material characteristics.



EU countries only

Electric waste is recyclable and must not be disposed of in the household waste!!
According to the European directive 2012/19/EU on electrical and electronic waste and version transposed into national law, used power tools must be collected separately and sent for recycling in an environmental-friendly manner.



ATTENTION!

Environmental damage resulting from improper disposal!

Wrong or negligent disposal may result in significant environmental pollution.

- Electrical scrap, electronic components, lubricants, operating and other auxiliary materials must be disposed of by specialised companies.
- In case of hazardous substances, treatment and disposal provisions of the material safety data sheets must be taken into consideration.
- In case of doubts, consult the manufacturer or local municipal authorities or specialised disposal companies on the environmentally safe ways of disposal.

12 Spare parts list

12.1 Using the spare parts list

The spare parts list is not a mounting or dismounting instruction. The only purpose of the spare parts list is to easily and quickly find spare parts which can be ordered with distribution agencies.



DANGER!
Risk of injury when mounting or dismantling assemblies!

Use of the spare part lists for mounting or dismantling may result in grave personal damage or death!

- During mounting or dismantling operations, relevant descriptions of the operating manual must exclusively be followed.

12.2 Distribution agencies

Deutschland - Germany - Allemagne - Duitsland

GÖLZ® GmbH
 Dommersbach 51
 DE-53940 Hellenthal
 Tel: +49 (0)2482-12 200
 Fax: +49 (0)2482-12 222
 E-Mail: info@goelz.de / Internet: www.goelz.de

Österreich - Austria - Autriche - Oostenrijk

GÖLZ® Ges.m.b.H
 Samstraße 52
 A-5020 Salzburg
 Tel: +43 (0) 662 - 43 81 75
 Fax: +43 (0) 662 - 43 07 34
 E-Mail: info@goelz.at / Internet: www.goelz.at

Frankreich - France - France - Frankrijk

GÖLZ® S.A.S.
 1, rue de la Mairie
 F-67370 Berstett
 Tel: +33 (0)3.88.59.43.00
 Fax: +33 (0)3.88.59.47.77
 E-Mail: info@golz.fr / Internet: www.golz.fr

Großbritannien - Great Britain - Grande-Bretagne - Groot-Brittannië

GÖLZ® (UK) Ltd.
 Unit A5, Springhead, Enterprise Park
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 Kent DA11 8HB
 Tel: +44 1 474321679
 Fax: +44 1 474321477
 E-Mail: info@goelz.co.uk / Internet: www.goelz.co.uk

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 Tel: +1 573 474 4961
 E-Mail: info@golzusa.com / Internet: www.goelz-online.com



NOTE!

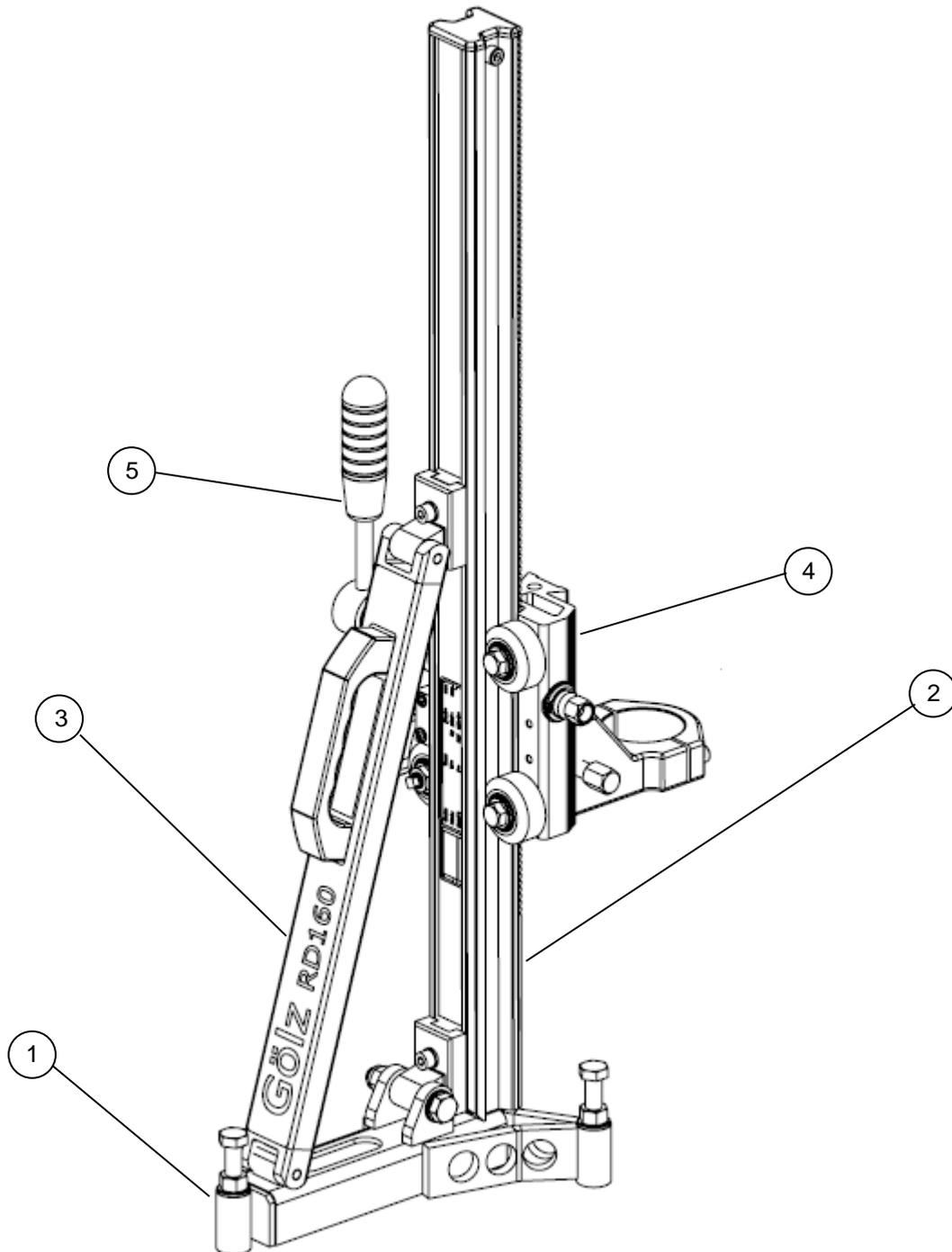
In order to avoid wrong deliveries the information the ordering information should be checked for accuracy and completeness before sending it! Completely indicate the delivery address!

		
<p>So bekommen Sie schnell und richtig Ihr Ersatzteil</p>	<p>Always indicate</p>	<p>Pour obtenir rapidement les pièces de rechange indiquer</p>
<ul style="list-style-type: none"> • Maschinentyp gemäß Typenschild • Baujahr gemäß Typenschild • Artikelnummer gemäß Ersatzteilliste • Maschinennummer gemäß Typenschild 	<ul style="list-style-type: none"> • machine type according to nameplate • year of manufacture according to nameplate • order number according to spare part list • serial number according to nameplate 	<ul style="list-style-type: none"> • type de la machine conforme de plaque d'identification • Année de construction selon plaque d'identification • Numéro de l'article selon la liste des pièces de rechange • numéro de la machine conforme de plaque d'identification
<p>Für Bestellungen, Fragen und Informationen wenden Sie sich bitte an die zuständigen Stellen.</p>	<p>For orders, questions and information, please contact the competent departments.</p>	<p>Pour les commandes, questions et informations, veuillez-vous adresser aux points de ventes correspondants.</p>

12 Spare parts list

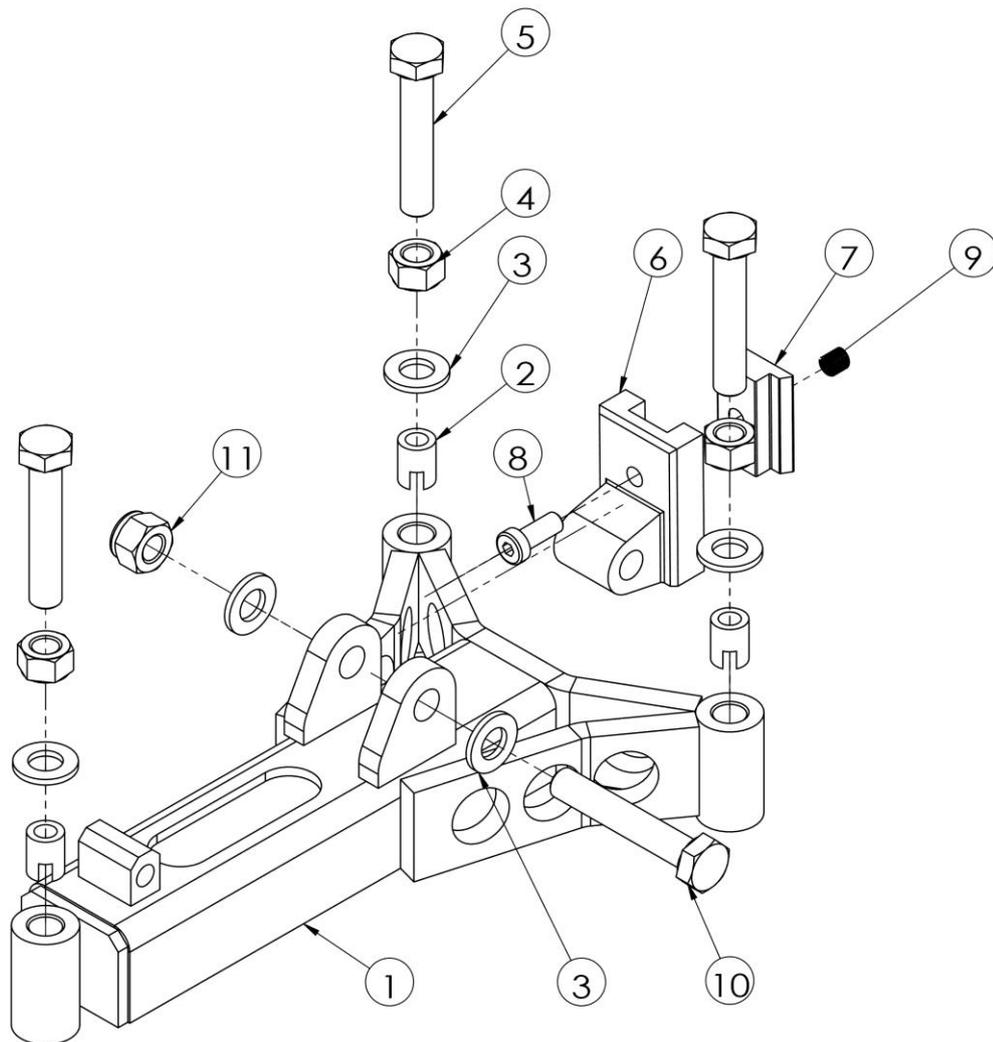
12.3 Exploded view and spare parts list

12.3.1 Drill rig RD160



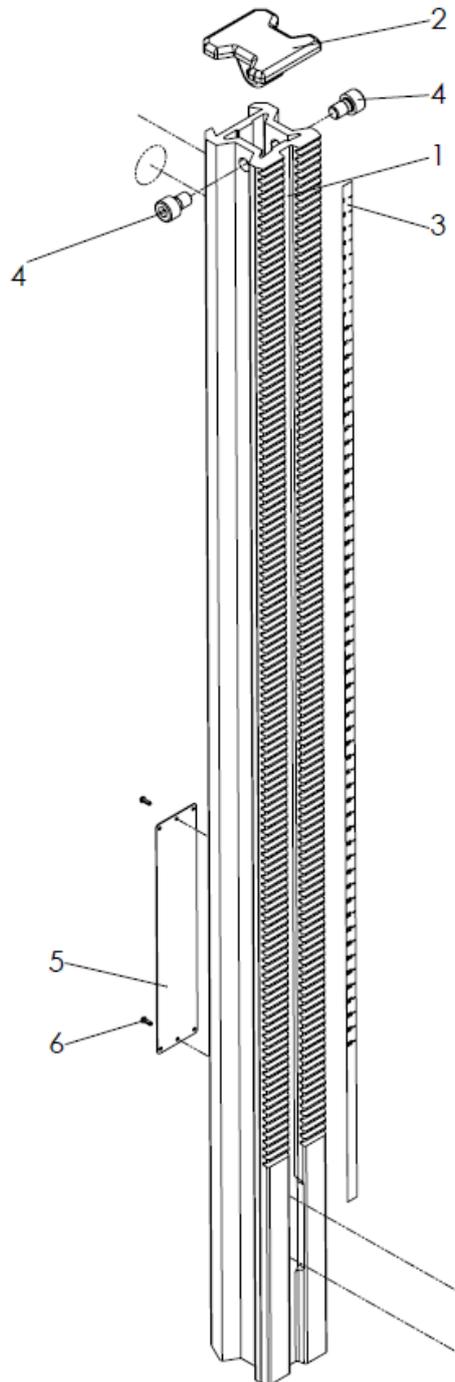
Pos.	Art.-Nr.	Qty.	Norm	Info	Bezeichnung	Description	Désignation
1	CDR000180 -	1			Dübelfuß kpl.	Dowel base complete	Socle à cheviller complet
2	CDR000154 02951109102	1			Führungssäule kpl.	Column complete	Guide column complete
3	CDR000155 -	1			Abstützung kpl.	Support complete	Etayage complet
4	CDR000164 -	1			Bohrschlitten kpl.	Drill carriage complete	Chariot complet
5	CDR000011 1120087	1			Handrad kompl.	Hand wheel complete	Volant complete

12.3.2 Dowel base



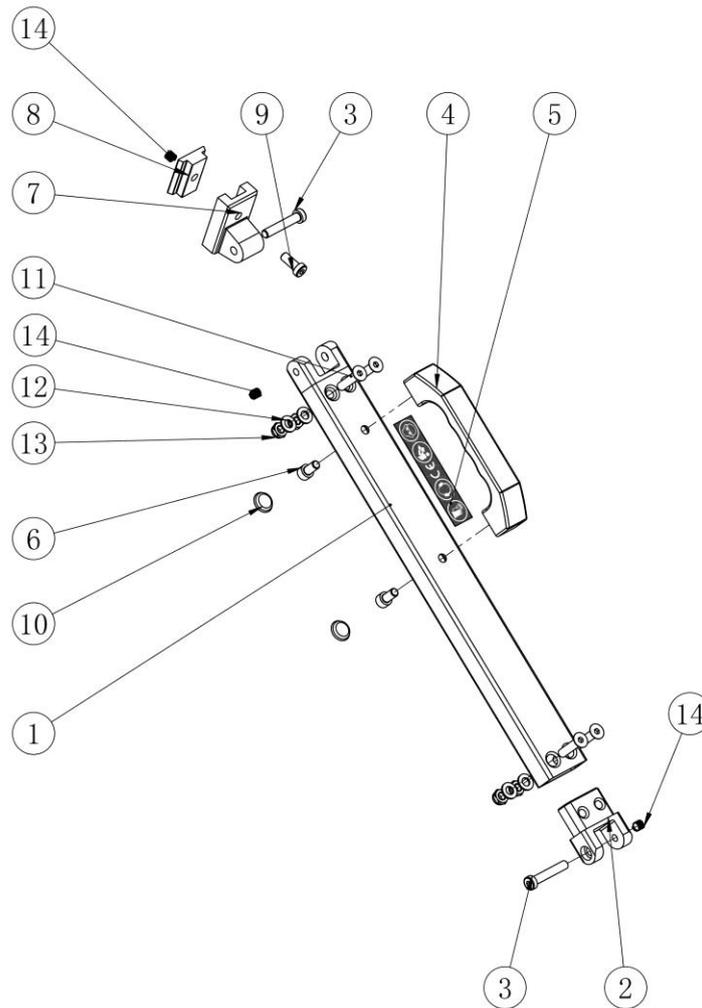
Pos.	Art.-Nr.	Qty.	Norm	Info	Bezeichnung	Description	Désignation
1	C04022992 -	1			Dübelfuß	Dowel base	Socle à cheviller
2	C04023000 -	3			Gewindeinsatz	Wire thread insert	Insert fileté
3	C02030021 0282 250 0105	5	ISO 7089 12		Scheibe	Washer	Rondelle
4	C02020053 -	3	DIN 934 M12		Mutter	Nut	Écrou
5	C02010189 0295 080 0028	3	ISO 4017 M12x65		Schraube	Screw	Vis
6	C04021960 0295 125 9901	1			Säulenbefestigung	Column mounting	Fixation colonne
7	C04022040 -	1			Klemmstück	Clamping piece	Pièce de serrage
8	C02010273 0312 000 820	1	DIN 7984 M8x20		Schraube	Screw	Vis
9	C02020003 -	1	M8-1xd		Helicoil	Helicoil	Hélicoil
10	C02010168 -	1	ISO 4017 M12x70		Schraube	Screw	Vis
11	C02020049 -	1	DIN 982 M12		Mutter	Nut	Écrou

12.3.3 Column



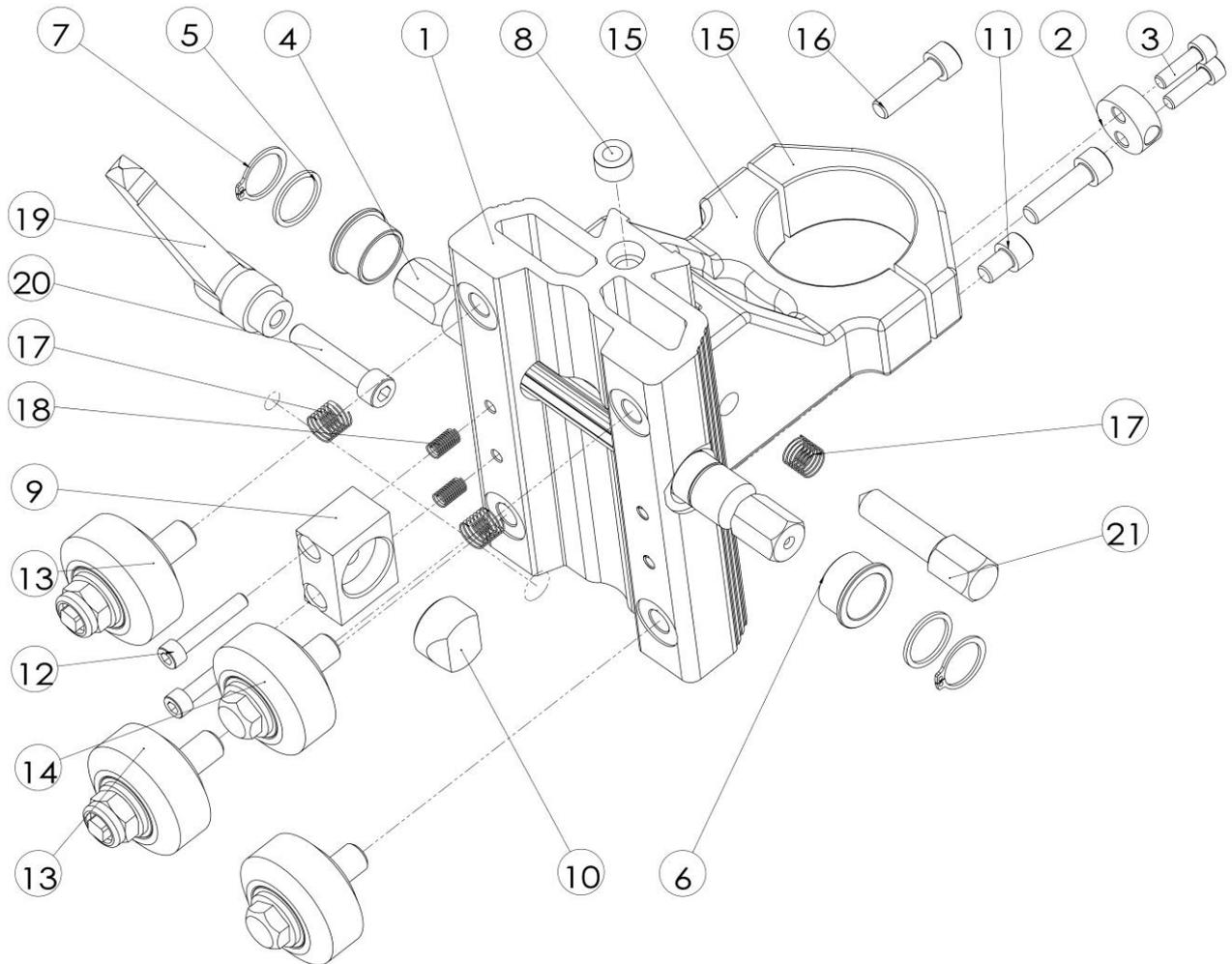
Pos.	Art.-Nr.	Qty.	Norm	Info	Bezeichnung	Description	Désignation
1	C04021961 -	1			Führungssäule	Column	Guide column
2	C04020052 11E01128	1			Deckel	Cover	Couvercle
3	C06020001 12N00114	1			Skala	Scale	Graduation
3	C02010080 0282 170 0226	2	ISO 4762 M8x12		Schraube	Screw	Vis
5	C06020192 -	1			Typenschild	Type plate	Plaque d'identification
6	C0204002 -	2	ISO 8746 2 x 6 - A		Niete	Rivet	Rivet

12.3.4 Support



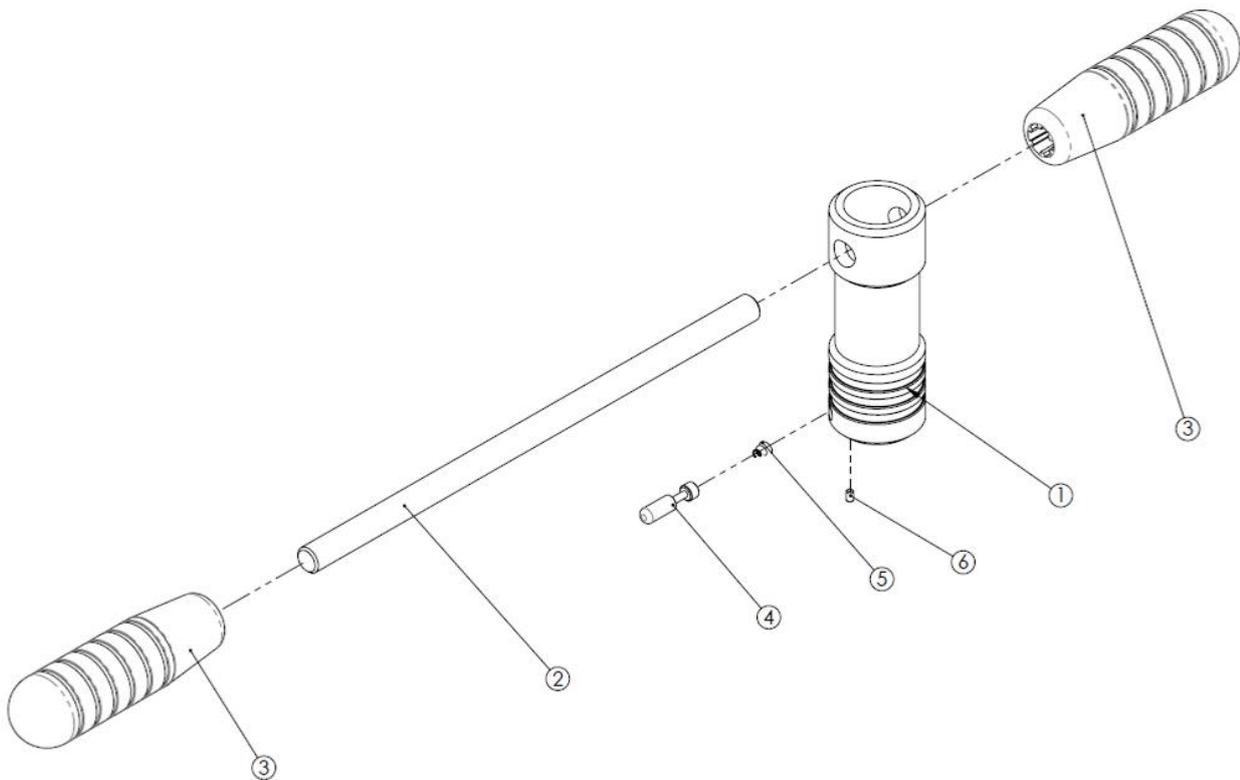
Pos.	Art.-Nr.	Qty.	Norm	Info	Bezeichnung	Description	Désignation
1	C04021962 -	1			Abstützung	Support	Etayage
2	C04021966 0295 110 6905	2			Befestigungsstopfen	Fixing plug	Embout de fixation
3	C02010272 -	2	DIN 7984 M8x45		Schraube	Screw	Vis
4	C04021963 -	1			Bügelgriff	Transport handle	Poignée de transport
5	C06020025 0289 400 9105	1			Aufkleber	Sticker	Autocollant
6	C02010144 0295 000 0343	2	ISO 4762 M8x16		Schraube	Screw	Vis
7	C04021964 0295 125 9902	1			Säulenbefestigung	Column mounting	Fixation colonne
8	C04022040 -	1			Klemmstück	Clamping piece	Pièce de serrage
9	C02010273 0312 000 820	1	DIN 7984 M8x20		Schraube	Screw	Vis
10	C03010222 -	2		ø15	Stopfen	Plug	Bouchon
11	C02010140 0266 350 0105	4	ISO 10642 M8x35		Schraube	Screw	Vis
12	C02030017 0282 250 0006	4	ISO 7089 8		Scheibe	washer	Rondelle
13	C02020056 -	4	ISO 10511 M8		Mutter	Nut	Ecrou
14	C02020003 -	3	M8-1xd		Helicoil	Helicoil	Hélicoil

12.3.5 Drill carriage



Pos.	Art.-Nr.	Qty.	Norm	Info	Bezeichnung	Description	Désignation
1	C04022037 -	1			Bohrschlitten	Drill carriage	Chariot
2	C04020082 11E02223	1			Stahl Einsatz	Steel insert	Pièce intermédiaire
3	C02010093 0295 000 0084	2	ISO 4762 M6x20		Schraube	Screw	Vis
4	C04020063 -	1			Ritzelwelle	Pinion drive shaft	Arbre de pignon
5	C04020101 -	2	Ø24xØ20x1.5		Scheibe	Washer	Rondelle
6	C04020099 -	2			Bundbuchse	Flanged bush	Douille
7	C02030027 0282 250 0020	2	DIN 471 20x1,2		Sicherungsring	Lock ring	Circlip
8	C03010016 11N00301	2			Libelle	Box level	Niveau
9	C04020090 0295 125 0019	1			Halter Bremsstopfen	Brake plug holder	Support de bouchon
10	C03010002 11E00808	1			Bremsstopfen	Brake plug	Bouchon de frein
11	C02010080 0282 170 0226	1	ISO 4762 M8x12		Schraube	Screw	Vis
12	C02010145 -	2	ISO 4762 M6x35x24		Schraube	Screw	Vis
13	CDR000007 11B02104-1	2			Laufrolle exzentrisch kpl.	Roller eccentric	Rouleaux excentriques
14	CDR000008 11B02104-2	2			Laufrolle konzentrisch kpl.	Roller concentric	Rouleaux concentriques
15	C04020075 0295 110 6903	1			Spannhals	Engine neck	Collier de serrage
16	C02010092 0295 000 0771	2	ISO 4762 M8x30		Schraube	Screw	Vis
17	C02020025 -	4	M12-1.5xd		Helicoil	Helicoil	Hélicoil
18	C02020027 -	4	M6-2xd		Helicoil	Helicoil	Hélicoil
19	C03010026 0289 400 9043	1	M8		Klemmhebel	Clamp lever	Levier de serrage
20	C02010088 0295 000 0386	1	ISO 4762 M8x40		Schraube	Screw	Vis
21	C04020091 11E02429	1			Schraube	Screw	Vis

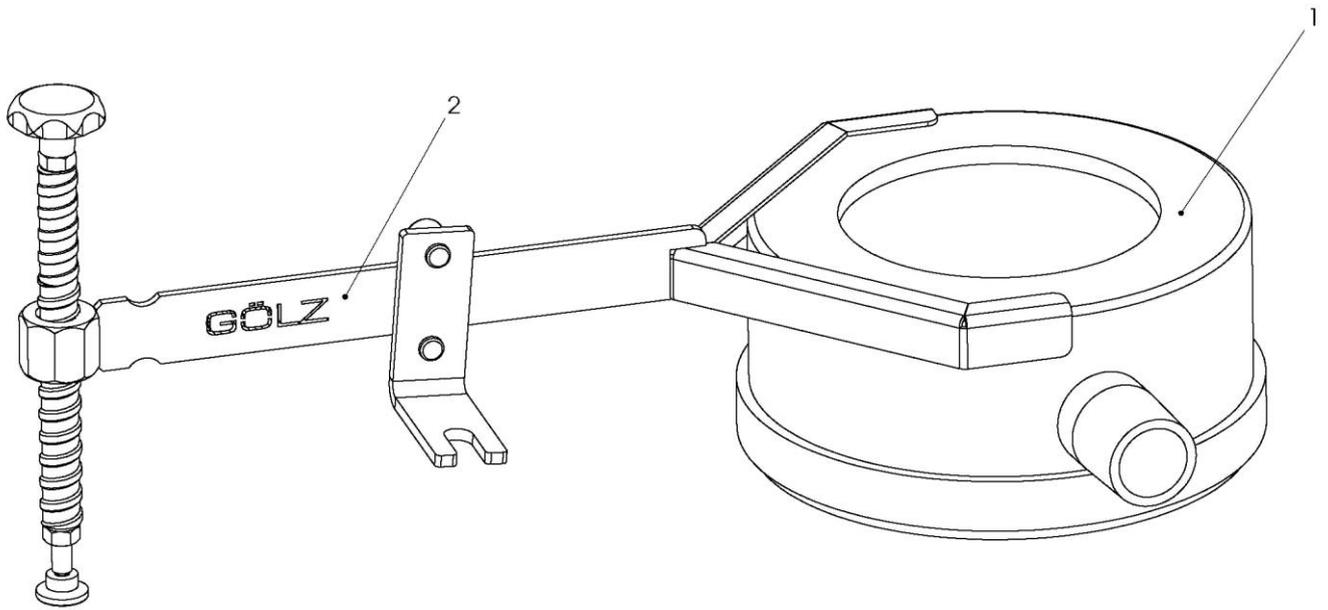
12.3.6 Hand wheel



Pos.	Art.-Nr.	Qty.	Norm	Info	Bezeichnung	Description	Désignation
1	C04020070 11E01510	1	M12		Nabe Handrad	Wheel hub	Moyeu roue à main
2	C04020065 11E01420	1			Griffstange	Handle bar	Bras
3	C03010005 11E01919	2			Handgriff	Grip	Poignée
4	C04020071 0282 130 0498	1			Bolzen	Pin	Goujon
5	C02060001 0282 130 0499	1			Feder	Spring	Ressort
6	C02010091 -	1	M3 x 5 ISO 4026		Gewindestift	Set screw	Vis sans tête

12.4 Optional accessory

12.4.1 Water retention ring Ø130



Available as spare parts package								
Pos.	Art.-Nr.	K.-ZN-Nr.	Qty.	Norm / Info	Inhalt	Bezeichnung	Description	Désignation
-	0295 000 6000	5008029	1	Ø130	Pos. 1-2	Wassersammelring kpl.	Water retention ring complete	Collecteur d'eau complet

Contents of spare parts package						
Pos.	Art.-Nr.	Qty.	Norm / Info	Bezeichnung	Description	Désignation
1	0295 000 6000	1		Wassersammelring	Water retention ring	Collecteur d'eau
2		1		Halter	Holder	Cadre support

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EU conformity declaration



GÖLZ® GmbH
Dommersbach 51
D-53940 Hellenthal
Deutschland

declares under sole responsibility that

Model:	Drill rig
Make:	GÖLZ
Type:	RD 160

comply with the relevant provisions of the Directives

2006/42/EG	2014/30/EU
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and has been developed and fabricated in compliance with the following standards valid as at the production date:

DIN EN IEC 61000-3-2:2023-10; VDE 0838-2:2023-10 DIN EN IEC 61000-3-11:2021-03; VDE 0838-11:2021-03	DIN EN 12348:2010-01
DIN EN IEC 55014-1:2022-12; VDE 0875-14-1:2022-12 DIN EN IEC 55014-2:2022-10; VDE 0875-14-2:2022-10	DIN EN ISO 12100 Corrigendum to 1:2013-08

In the system with drilling motors:

2014/35/EU	2005/88/EG
2002/44/EG	2012/19/EU

Technical documentation kept by:

GÖLZ® GmbH
Development and design

Year of construction and machine number are indicated on the unit.

Hellenthal, 28.04.2025
GÖLZ® GmbH


Managing Director