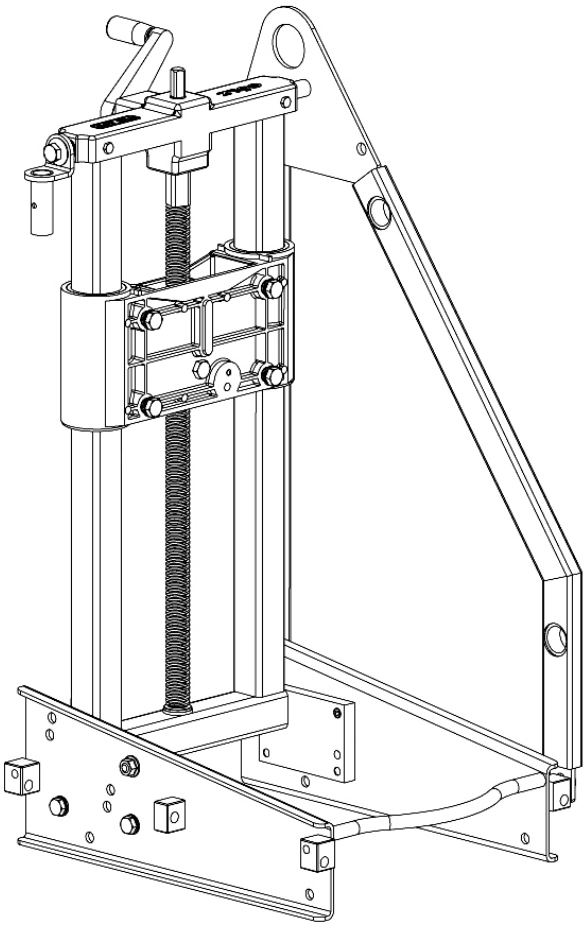
Drill rig
KB 300 - KB 350



ZN der Bedienungsanleitung:	5005279-08
Erstellt am:	04 / 2014
Erstellt von:	Sabrina Linden
Datei:	K:\KDV\5005xxx\5005279-Bedienungsanleitung\ 5005279-08-Bedienungsanleitung-E.doc

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

GÖLZ® GmbH
Dommersbach 51
D-53940 Hellenthal

Guarantee

We reserve the right to amend any information included in this document (manual instruction and spare parts list) at any time and without prior notice.
GÖLZ® assumes no warranty for these documents.
GÖLZ® shall not be liable for errors in this document (manual instruction and spare parts list) or for any collateral or consequential damage in connection with shipment, performance or use of the material.

EC-DECLARATION OF CONFORMITY

Manufacturer

GÖLZ® GmbH
Dommersbach 51, D-53940 Hellenthal
Tel.: +49 (0) 2482 12 200 / Fax: +49 (0) 2482 12 222

Declare hereby certifies on its sole responsibility that the following product:

KB 300 / KB 350
Drill rig

Serial number:_____

which is explicitly referred to by this declaration meet the following directives:

2006/42/EC	Safety and health requirement
2004/108/EC	Electromagnetic compatibility

meet the follwing standards:

EN 12100-1 / EN 12100-2, EN 12348:2000, EN 13309:2000, EN 61000, DIN EN ISO 3744-1995

Documented evidence conforming to the requirements of the directives is kept available for inspection at the above manufacturer's address.

CE

Hellenthal, den 08.04.2014

.....	.....
General Manager	Chief of Design
B. Schmitz	H. Schulte

Contents

Preface

This operating manual is designed to familiarize the user with drill rig, hereinafter referred to as the machine, and to use its intended applications.
The operating manual contains important information on how to operate the machine safely, properly and most efficiently. Observing these instructions helps to avoid danger, to reduce repair costs and downtimes and to increase the reliability and the life of the machine.
This operating manual is to be supplemented by the respective national rules and regulations for accident prevention and environmental protection.
The operating manual must always be available wherever the machine is in use.
It is to be read and applied by any person in charge of work with or on the machine, such as:

- **Operation** including setting up, troubleshooting in the course of work, elimination of manufacturing waste, care and disposal of fuels and consumables.
- **Servicing** (maintenance, inspection, repair) and/or
- **Transport**

In addition to the operating manual and to the mandatory rules and regulations for accident prevention of the country and place of use of the machine, the recognized technical rules for safe and proper working conditions and procedures are also to be observed.
In this manual all the information required for the intended use of the unit is included. If though you have any specific questions, please refer to your representative, to one of our sales representatives or directly to us:

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

General description


Wear safety glasses!


Wear hard hat!


Wear ear muffs!


Wear safety boots!


Wear safety clothes!


Wear dust protection!


Wear protective gloves!


Read owner's manual before first initiation!


Important advice!


Danger exists to cut oneself!


General danger!


Never touch!

1. Technical data and accessory

1.1 Technical data of the machine

Type	KB 300	KB 350	
Stroke	450 - 17.7	450 - 17.7	mm - in.
Feed	Manual	Manual	
Angle drilling	up to 45°	up to 45°	
Weight	21 - 46.3	24 - 53	kg - lbs.
Length	440 - 17.3	550 - 21.6	mm - in.
Breadth	340 - 13.4	410 - 16.1	mm - in.
Height	800 - 31.5	800 - 31.5	mm - in.
Drilling range	Ø 110 - Ø 290 Ø 4.4 - Ø 11.4	Ø 110 - Ø 354 Ø 4.4 - Ø 13.9	mm - in.

1.2 Provided accessory

- Strap; 2,1 m, Clamping ratchet, Linch pin
- Ground spike
- Pressure tank 10l with hose
- 3-hole-flange or UNC-adapter
- Wrench SW 17
- Operating instruction and Spare parts list

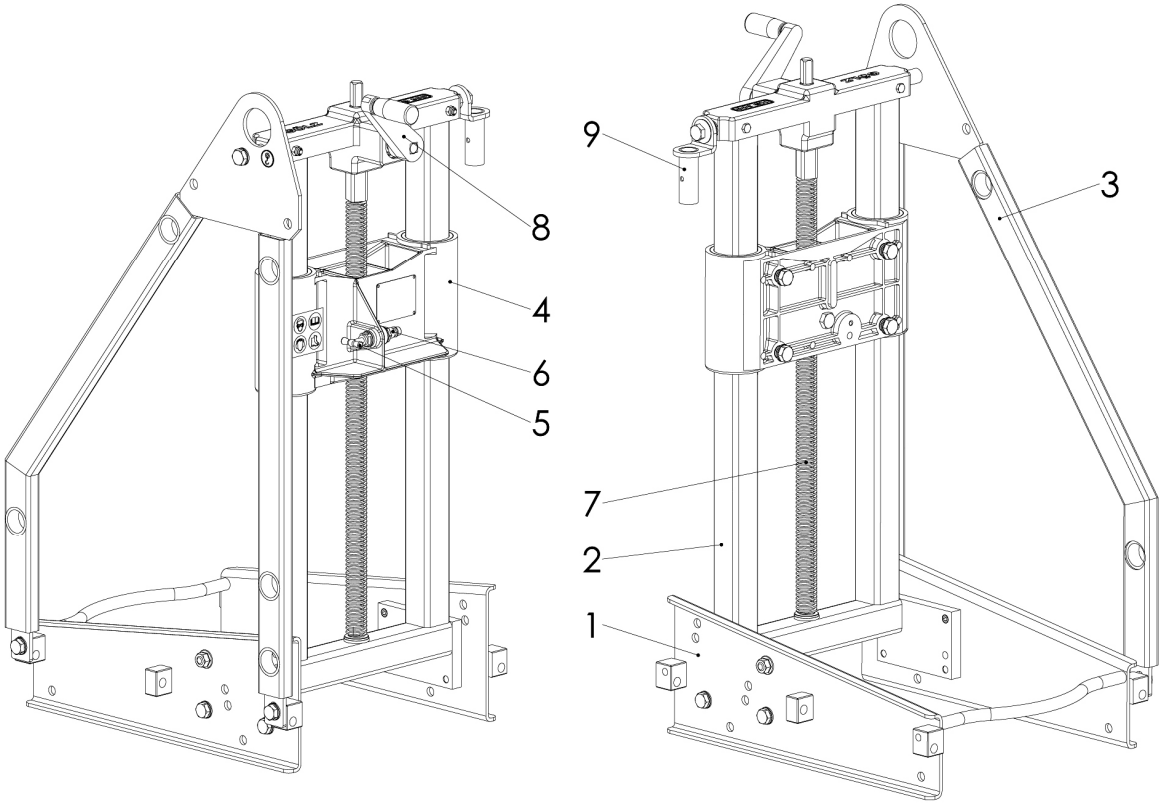
1.3 Optional accessory

	KB 300	KB 350
Work with **electric motor**	✓	✓
Work with **pneumatic motor**	✓	✓
Work with **hydraulic motor**	✓	✓
Work with **petrol engine**	✓	✓
Suction plate kit (Suction of smooth pipes)	✓	✓
Vacuum pump C10	✓	✓
Base plate kit (sample coring)	✓	✓
Roller guide kit (base plates)	✓	✓
Frame extension (pipes < Ø 300)	✓	✓
Support (drill holes in the pipe Ø 1000 or more)	✓	✓
Dowel plate kit (dowels and screws)	✓	x
backhoe attachment kit	✓	✓
Sharpening plate (drill bits)	✓	✓
Fine dust vacuum cleaner, dry vacuum cleaner, wet vacuum cleaner	✓	✓

For the item number of accessories, please refer to the current catalogue of **GÖLZ®**
If accessories are used which do not correspond to **GÖLZ®** specifications, no liability is assumed for any damage resulting hereof.
For details regarding the selection of the right **GÖLZ®** diamond drill bits, please refer to the current **GÖLZ®** catalogue for diamond tools.

2. Description

2.1 Main parts



1) Pipe base
2) Column
3) Floor frame with lifting eye
4) Carriage
5) Water tap
6) Water coupler
7) Spindle
8) Handle
9) Control holder for petrol engines

2.2 Functional description

Due to its compact design and its lightweight construction, the KB300/350 offers a practice-oriented use in a tight space. The proven **GÖLZ®**-System Technology ensures highest operational safety and economic efficiency.
The KB300/350 is used as a channel core drill for drills up to Ø 300 respectively Ø 350 mm for manufacturing sewer pipes and manholes, for manufacturing new channels on the construction site as well as for manufacturing later channel house connections.
The machine makes it possible to use different drill motors.
Thanks to the quick cutting system (STS), different electric motors can be fitted to the machine with a few simple steps. Likewise, the firmly fitted gear carrier allows, after loosening a few screws, a direct exchange between the hydraulic system, pneumatic engines and combustion engines.
On the gear box, either a drill bit flange or an adapter for the different tool sizes can be fitted.
The assembly of the tool is simple and easy. Regarding the flange the drill bit is fixed via a screw connection,

regarding the adapter via a threaded bolt.
When using electric motors, the tool is directly attached to the drill motor spindle. The safe and easy assembly allows a quick exchange of the tools for any drive system.
Water is supplied either via the supplied pressurized water container or via an external water connection. The water hose of the pressurized water container is fitted via a coupling on the connection of the drill carriage. Thus the water is directly routed via the gearbox into the drill bit and provides a sufficient cooling of the tool and binds the cutting material. When using electric motors, the water supply is to be connected to the motor.
The drill carriage moves on a double-guide column by means of a trapezoidal spindle. The trapezoidal spindle allows an easy and smooth movement of the drill carriage on the column.
The drive is provided manually by default via the hand crank which can be fixed to the unit in two different ways.
Due to its special form, the pipe base can be set up with sewer junctions having different pipe diameters but also at ground level. The base frame is fitted on the left by default, but can also be fitted on the right side. The base frame provides the optimal support for working with the unit sidewise.
The KB300/350 offers the possibility of angle adjustment. Via the guide column, drill cuttings can be adjusted at angles of 90°, 55° and 45°. This requires only a few screws to be loosened and the base frame to be rotated.
Due to its variable tension belt fastening or by using pegs, the unit can be used in different operative positions.
The wide range of accessories allows opening up additional working areas and additional drive systems.
Due to its compact design, the unit is easy to transport. The motors can be easily and quickly removed for transport. Via the crane eye which is attached to the base frame the KB300/350 can also be lifted with a crane.
The operator's station is behind the guide column or on the left or right next to it.
For working with this unit we recommend **GÖLZ®** diamond tools.

3. Basic safety instructions

In this manual the following terms and symbols are used for particular important information:

Note / Important: Contains important information which stands out from the other text!

Attention: Contains instructions which must be strictly observed to prevent damage from the unit and the operator!

Important text passages are highlighted in italics or bold or can be found in a grey highlighted text field.

3.1 Intended use

The machine has been built in accordance with state-of-the-art standards and the recognized safety rules. Nevertheless, its use may constitute a risk to life and limb of the user or of third parties, or cause damage to the machine and to other material property.
The machine must only be used in technical perfect condition in accordance with its designated use and the instructions set out in the operating manual, and only by safety-conscious persons who are fully aware of the risks involved in operating the machine. Any functional disorders, especially those affecting the safety of the machine, should therefore be rectified immediately!
The machine is designed exclusively for drilling in concrete, reinforced concrete, natural stone, cast stone and brickwork. Using the machine for purposes other than mentioned above (such as drilling in wood and so on) is considered contrary to its designated use. The **GÖLZ® GmbH** cannot be held liable for any damage resulting from such use. The risk of such misuse lies entirely with the user.
Only use gear drives and motors, which are provided by **GÖLZ® GmbH**. Also attend those operating manuals.
Operating the machine within the limits of its designated use also involves observing the instructions set out in the operating manual and complying with the inspection and maintenance directives

Attention: Read and observe all the operating instructions which belong to this unit!

3.2 Operating range

The operating range of the unit can be extended due its wide range of accessories allowing easy retrofitting which can be carried out by the operating personnel themselves.
Do not modify, add components to or retrofit the unit in a way which could affect its safety and do not use non-official accessories! This is not allowed without prior approval of **GÖLZ® GmbH!**

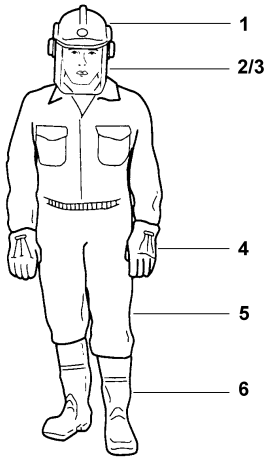
Note: Read and observe the operating instructions to the accessories!

3.3 Organisational measures

This operating manual must always be at hand at the place of use of the machine and must be accessible to the person operating the machine!
In addition to this operating manual, all other generally applicable legal and other mandatory regulations relevant to accident prevention and environmental protection must be observed! Such obligations may also comprise the handling of hazardous materials, provisioning and/ or wearing of personal protective equipment, or road traffic regulations.
This operating manual must be supplemented by instructions covering the duties involved in supervising and notifying special organizational features, such as job organization, work flows or the person entrusted with the work. Person entrusted with work on the machine must have read the operating manual prior to taking up work. This applies especially to persons working only occasionally on the machine, e.g. during set-up or maintenance activities.
Check - at least from time to time - whether the personnel is carrying out the work in compliance with the operating manual and paying attention to risks and safety-relevant factors.
For reasons of safety, long hair must be tied back or otherwise secured, garments must be close-fitting and no jewellery - including rings - may be worn.
Severe injury may result from being caught by moving parts of the machine. Personal protective equipment must be used wherever required by the circumstances or by law (e.g. safety glasses, ear protectors, safety boots, suitable safety clothing). Observe the regulations for prevention of accidents! Observe all safety precautions and warnings attached to the machine and always keep them in good and perfectly legible condition.

The personal protection equipment should consist of the following parts:

1) Hard hat with ear muff
2) Visor or safety glasses
3) Dust mask
4) Protective gloves
5) Safety clothes
6) Safety boots



In case event of safety-relevant modifications or changes in the behaviour of the machine, stop the machine immediately and report the malfunction to the competent authority/ person. Do not remove or make inoperative any safety devices the machine is equipped with.
Never make any modifications, additions or conversions which might affect safety without **GÖLZ® GmbH** prior approval! This also applies to the installation and adjustment of safety devices as well as to welding and drilling work on supporting structures.
Damaged or worn parts of the product must be replaced immediately. Use genuine spare parts only.
All spare parts and tools must comply with the technical requirements specified by the **GÖLZ®**.
Adhere to the legally prescribed preventive maintenance and inspection intervals or those specified in this operating manual!
Hydraulic hose pipes must be changed within the specified or appropriate intervals, even if no safety-relevant defects are visible.

All maintenance and repair activities must be performed by qualified personnel using suitable tools and other suitable workshop equipment. Observe the fire alarm and fire fighting measures. The personnel must be made familiar with the location and handling of fire extinguishers!

3.4 Selection and qualification of person

Only permitted personnel is allowed to work on and with the machine! The legal minimum age is to be observed! Only assign trained and instructed personnel! Clearly define the responsibilites of the personnel with regard to operating, setting-up, maintaining and repairing the machine! The **GÖLZ® GmbH** can assist you in training your personnel.
Make sure that only instructed and competent personnel works on the machine. Define the responsibility of the machine operator, also in terms of traffic regulations and enable him to refuse instructions of third parties which breach safety regulations.
Personnel that is to be trained or to be instructed or that is serving a general training is only to be permitted to operate the machine under the supervision of an experienced person.
To operate the machine you must be rested, in good physical condition and mental health. If you have any condition that might be aggravated by strenuous work, check with your doctor before operating with the machine. Do not operate the machine if you are under the influence of any substance (drugs, alcohol) which might impair vision, dexterity or judgment.
Works on electrical, pneumatic, combustion and hydraulic fittings and equipment are only to be carried out by qualified personnel or instructed people being directed and supervised by qualified personnel in compliance with the respective rules!

3.5 Safety instructions governing specific operational phases

Before work
Avoid any operational mode that might be prejudicial to safety!
Before beginning work, familiarize yourself with the surroundings and circumstances of the site, such as obstacles in the working and travelling area, the soil bearing capacity and any barriers separating the construction site from public roads.
Take the necessary precautions to ensure that the machine is used only when in a safe and reliable state. Operate the machine only if all protective and safety-oriented devices, such as removable safety devices, emergency shut-off equipment, sound-proofing elements and exhausters, are in place and fully functional.
Regard all safety specifications!
Check the machine at least once per working shift for obvious damage and defects. Report any changes (incl. changes in the machine's working behaviour) to the competent organization/ person immediately. If necessary, stop the machine immediately and lock it. Have any defects rectified immediately.
At any time, ensure the operator has sufficient view to his working area, in order to have intervention to the working process. Wet drilling is to be accomplished while working. This prevents the appearance of particulate matter and increases the life-time of the diamond tool.
During start-up and shut-down procedures always watch the indicators in accordance with the operating instructions!
Before starting or setting the machine in motion, make sure that nobody is at risk. Keep children and unauthorized persons away from the work area. Noise protection equipment on the unit must be in protective position during operation. Wear the required individual ear protection!
Always keep at a distance from the edges of building pits and slopes. Avoid any operation that might be a risk to machine stability! Keep the work area clean. Cluttered areas and benches invite injuries! Do not operate when you are tired! Watch what you are doing! Risk of stumpling! Cables and hoses must complete rolling up.
After assembly do not leave any tools, a wrench for example, on the unit.
Check to see that the tools are removed from the drill rig before operating! Damaged drill bits have to be changed immediately. Use only recommended drill bits from the **GÖLZ® GmbH**.
Control the working area for water-, gas- and electrical lines!

	Important: Wet drilling is to be accomplished while working! This prevents the appearance of particulate matter and increases the life-time of the diamond tool!

During work
Make sure, that the drill rig is well fastened before and while drilling!
Never touch rotating parts like drill spindle or drill bit!

After work
Before leaving the machine always secure it against unauthorized use!

3.6 Special work related to the maintenance and repair of the machine

Observe the adjustment, maintenance and inspection activities and intervals set out in the operating instructions, including information on the replacement of parts and equipment! These activities may be executed by skilled personnel only.
Brief operating personnel before beginning special operations or maintenance work, and appoint a person to supervise the activities.
In any work concerning the operation, conversion or adjustment of the machine and it's safety-oriented devices or any work related to maintenance, inspection and repair, always observe the start-up and shut-down procedures described in the operating instructions and the information on maintenance work. Ensure that the maintenance area is adequately secured.
Carry out maintenance and repair work only of the machine is positioned on stable and level ground and has been secured against inadvertent movement and buckling. If the machine is completely shut down for maintenance and repair work, it must be secured against inadvertent starting.
To avoid the risk of accidents, individual parts and large assemblies being moved for replacement purposes should be carefully attached to lifting tackle and secured. Use only suitable and technically perfect lifting gear and suspension systems with adequate lifting capacity. Never work or stand under suspended loads.
The fastening of loads and the instructing of crane operators should be entrusted to experienced persons only. The marshaller giving the instructions must be within sight or sound of the operator.
For carrying out overhead assembly work always use specially designed or otherwise safety-oriented ladders and working platforms. Never use machine parts as a climbing aid. Wear safety harness when carrying out maintenance work at greater heights.
Clean the machine, especially connections and threaded unions, of any traces of oil, fuel or preservatives before carrying out maintenance / repair. Never use aggressive detergents. Use lint-free cleaning rags.
Before cleaning the machine with water, steam jet or detergents, cover or tape up all openings which -for safety and functional reasons - must be protected against water, steam or detergent penetration.
Do not clean the machine with a high-pressure cleaner. The hard water jet can put damage to parts of the machine. After cleaning, remove all covers and tapes applied for that purpose.
After cleaning check the machine for loose connections, chafe marks and damage! Have identified defects repaired immediately!
Always tighten any screwed connections that have been loosened during maintenance and repair.
Any safety devices removed for set-up, maintenance or repair purposes must be refitted and checked immediately upon completion of the maintenance and repair work. Ensure that all consumables and replaced parts are disposed of safely and with minimum environmental impact.

3.7 Information about special risks with electrical energy

Observe the relevant national regulations or standards. Electrical connections must always be kept free from dirt and moisture.
Use only original fuses with the specified rating! Switch off the machine immediately, if trouble occurs in the electric power supply!
If your machine comes into contact with a live wire:

- warn others against approaching and touching the machine
- have the live wire de-energized

When working with the machine, maintain a safe distance from overhead electric lines. If work is to be carried out close to overhead lines, the working equipment must be kept well away from them. **Caution, danger to life!**

- Check out the prescribed safety distances.
- Work on the electrical system or equipment may only be carried out by a skilled electrician himself or by specially instructed personnel under the control and supervision of such electrician and in accordance with the applicable engineering rules.
- If provided for in the regulations, the power supply to parts of machines and plants, on which inspection, maintenance and repair work is to be carried out must be cut off.
- Before starting work, check the de-energized parts for the presence of power and ground or short-circuit them in addition to insulating adjacent live parts and elements.

The electrical equipment of machines is to be inspected and checked at regular intervals. Defects such as loose connections or scorched cables must be rectified immediately.
Necessary work on live parts and elements must be carried out only in the presence of a second person who can cut off the power supply in case of danger by actuating the emergency shut-off or main power switch. Secure the working area with a red-and white safety chain and a warning sign. Use insulated tools only.
If mobile electrical equipment, connecting cables and/ or extension/ appliance cords with plug connectors are used, ensure that such equipment, cables and cords are checked for correct function at least once every six months by a qualified electrician or - if suitable testing equipment is available - by a properly instructed person.
Protective installations with fault-current protection units used in non-stationary equipment must be checked for correct operation at least once a month by a properly instructed person.
Fault-current and fault-voltage protection units must be checked for correct operation by actuating the testing facility:

- once on every working day in the case of mobile equipment,
- at least once every six months in the case of stationary equipment.

3.8 Gas, dust, steam, smoke

Operate combustion engines only in well-ventilated rooms! Before starting the unit in closed rooms, make sure that the room is sufficiently ventilated and use the exhaust gas hose!
Welding, burning and grinding operations on the machine are only to be carried out if this is explicitly authorized (there is the danger of fire and explosion)!
Before welding, burning and grinding operations clean the machine and its surrounding area from dust and flammable substances and care for sufficient ventilation (danger of explosion)!
When working in confined spaces observe any existing national regulations!

3.9 Hydraulic

Work on hydraulic equipment may be carried out only by persons having special knowledge and experience in hydraulic systems.
Check all lines, hoses and screwed connections regularly for leaks and obvious damage. Repair damage immediately. Splashed oil may cause injury and fire.
Depressurize all system sections and pressure pipes to be removed for the unit concerned before carrying out any repair work. Hydraulic must be laid and fitted properly.
Ensure that no connections are interchanged. The fittings, lengths and quality of the hoses must comply with the technical requirements.

3.10 Noise

During operation sound protection devices on the machine must be in safe position. Wear the prescribed personal ear protection! (UVV 29 § 10, Article 29 of the Accident Prevention regulations).
The use of noise emitting machines may be restricted to certain times by national or local regulations.

3.11 Illumination

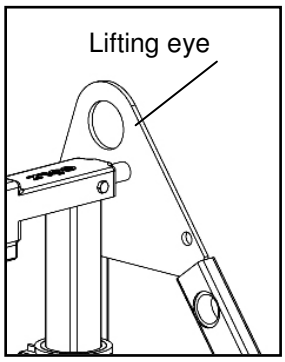
The machine is designed for use in daylight! The machine operator / owner must ensure sufficient workplace lighting for non-illuminated work sites!

3.12 Oils, greases and other chemical substances

When handling hydraulic fluids, lubricants, greases or preservatives (referred to hereinafter as fuels and lubricants), the safety regulations which apply to the respective machine are to be observed!
Avoid long contact of the fuels and lubricants with your skin! Careful cleaning of the skin from adhering fuels and lubricants is necessary.
Be careful when handling hot consumables (risk of burning or scalding) particularly at liquid temperatures above 60°C, avoid any skin contact with these liquids!
If you get fuels or lubricants in your eyes, rinse them immediately and carefully with potable water. Then consult a doctor.
Remove flown out fuels and lubricants immediately! Therefore use a binder.
Fuels and lubricants must not seep into the soil or into the public sewage system! Fuels and lubricants which can no longer be used are to be collected, properly stored and to be properly disposed of.
The respective regulations and laws for handling fuels and lubricants which are valid in the country of use are to be observed and adhered to. This also applies to the disposal of such fuels and lubricants. To inform yourself turn to the responsible authorities.

3.13 Transport

Use only suitable means of transport and lifting gear of sufficient capacity when loading or transporting the machine! Appoint an experienced instructor for the lifting operation!
Always observe the instructions given in the operating manual when lifting the machine (use only the prescribed lifting eyes for attaching the lifting gear)!
Use only suitable transport vehicles with sufficient load capacity! Secure the load carefully. Use suitable fastening points for securing!
Before loading the machine or parts of it, secure the machine against inadvertent movement! Attach a suitable warning sign!
The drill bit must be removed for transport. Even in case of a minor change of location, the engine must be stopped!
Before using the machine again, make sure that such protection material or devices are properly removed! Parts which had to be removed for transporting of the machine must be refitted and secured carefully before the machine is used again!
Before setting the machine in motion always check that all accessories are safely stowed.
The recommissioning procedure must be strictly in accordance with the operating instruction! Observe the instructions given in the operating instruction when reassembling and operating the machine.



Attention: Check that all parts of the machine are well fastened before transporting.
Before transport the drill bit must be removed!
For loading only, use lifting gear and tackle of sufficient capacity.
Lift the machine using the lifting eye.

3.14 Store

Store the machine in a dry, high or locked place, out of the reach of children or unauthorized persons. Clean and preserve the machine with corrosion preventive if storing over a longer time like winter time!

Note: store not mounted drill bits in a dry, high or locked place, out of the reach of children or unauthorized persons!
Drill bits with a small diameter are only to be stored in a horizontal position, drill bits with a large diameter only in a vertical position. Do not place any other parts or components on the drill bits.

4. Bringing into service

Attention: Do not yet turn the engine on! The following work is to be done with the drill motor being stopped!

4.1 Export checking

Remove the transport packaging and place the unit vertically on a horizontal, flat and stable surface.
Dispose of the transport packaging according to environmental regulations. Since the unit is delivered completely assembled, you need only check if it is complete and intact.
For the scope of delivery, see "Technical Data and Accessories". In addition, check the travel path of the drill carriage for proper movement.

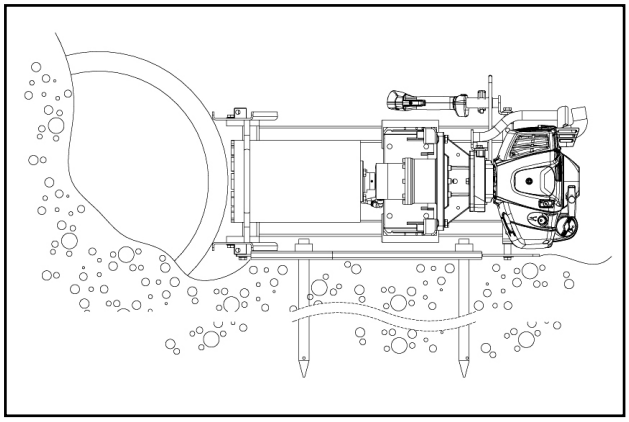
4.2 Drill motor

Note: Read and observe the instructions to the drill motor!

For how to prepare the operation of the drill motor, please refer to the respectively enclosed instructions!

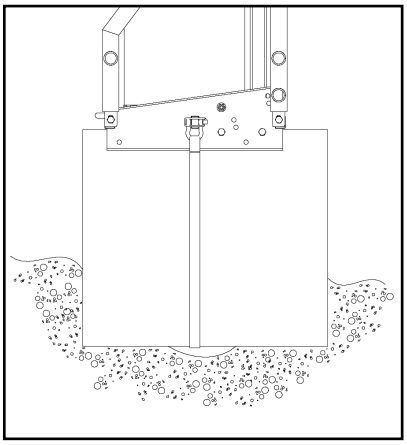
4.3 Fixing the machine

4.3.1 Placed on the ground secured by spikes



Place the machine so that pipe base fits tight to the pipe. Back fill or remove material underneath the frame if necessary.
The pipe base is centering the machine automatically. Secure the ground frame with minimum two ground frame.

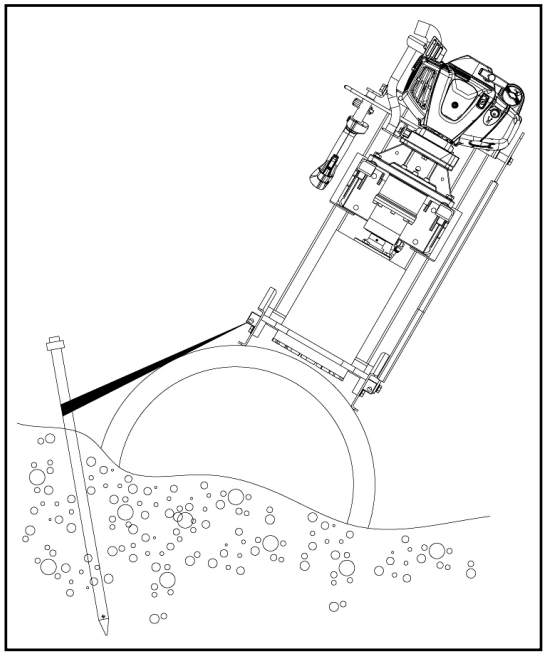
4.3.2 By strap and ratchet at exposed pipe



This application is only possible, if the pipe is completely exposed, so that the strap can be wrapped around the pipe.
The end of the strap that has an „eye“ is attached to the holder by means of a shackle to the notch at the pipe base. Attach the ratchet to the notch. Pull the strap through the split in the ratchet and stretch the strap by moving the flap of the ratchet. **Pull strap under the pipe. Do not twist the strap!**

Releasing the ratchet: Pull up the pawl in the ratchet tensioner. Stretch the ratchet to the point the handle engages.

4.3.3 Combination of ground spikes and strap



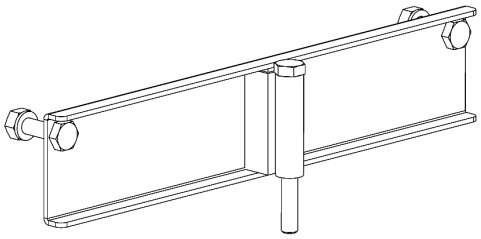
If the ground-condition at the drill-hole side are not convenient you can try a combination of Spikes and Strap as follows:

- Hit one or two ground spikes on other side of pipe into the ground and wrap the strap around it (them) and mount the shackle and the ratchet in the two outer notches on the pipe-base and stretch the strap.
- While drilling the operator’s weight should hold the machine down against the pipe. Reduced feed-pressure should be obtained during this way of operation!

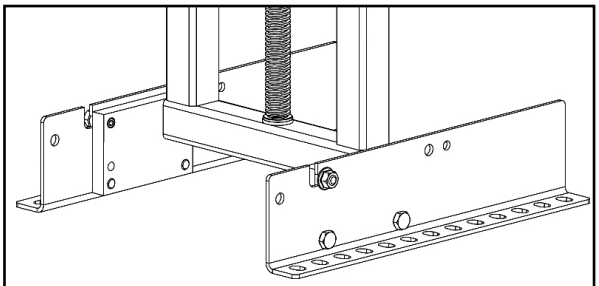
4.3.4 Fixing with dowels

Set up of the machine on walls or flat surfaces one can choose two ways: Dowel plates or dowel base.

- Dowel plates are attached with bolts to the pipe base.
- Drill dowel holes, mount the dowel and set up the machine with bolts into the dowels. Please follow the instructions of the dowel-producer!
- Use screws with a minimum length of 140 mm (51/2") when using dowel plates.
- Dowel base is consisting of 2 L-formed plates. The dowel base is attached into the holes of the pipe base, so first the pipe-base has to be removed and then the two dowel base-plates are mounted instead of the pipe base.



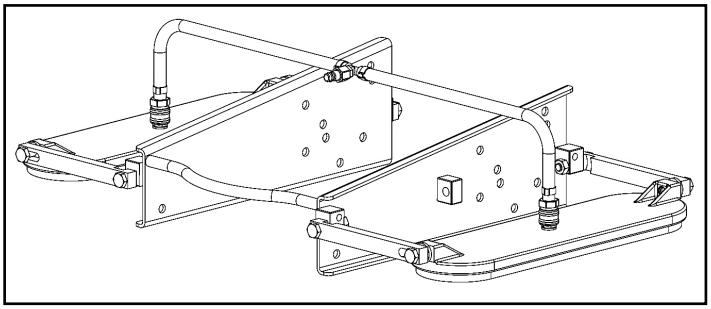
Fixing with dowel plates



Fixing with dowel base

4.3.5 Fixing with vacuum hold down

- Remove the ground frame and place the machine with the pipe base onto the pipe.
- Attach the vacuum pads to the left and to the right of the pipe-frame, but do not tighten the bolts yet!
- Start the vacuum pump and wait until gauge on vacuum pump shows a minimum of 0,7 bar (10 PSi).
- Connect one male coupler of the vacuum system to one of the vacuum pads and wait until vacuum is built-up.
- Repeat this operation to the second vacuum pad. Tighten all the bolts that connect the pads to pipe frame.

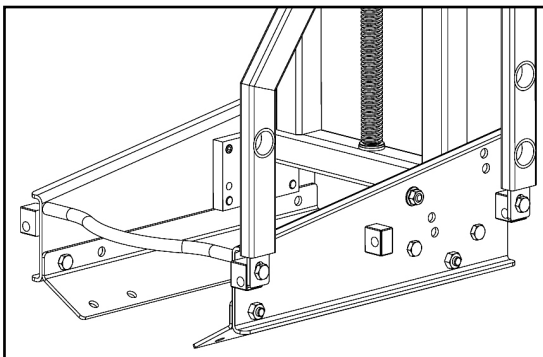


Note: Vacuum is built up faster and safer if the pipe-surface is wetted with water before attaching a pad.

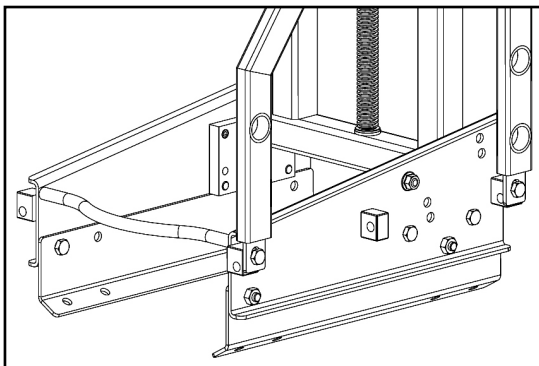
Note: Read and observe the operating instructions to the vacuum suction plates!

4.3.6 Frame extension

The frame extension is used to attach the machine on pipes less than 380mm (15 in.).
Fasten the frame extension with the added screws at the drill rig. Attach the drill rig as described with strap and spikes.



Frame extension Ø 270 - 180 mm



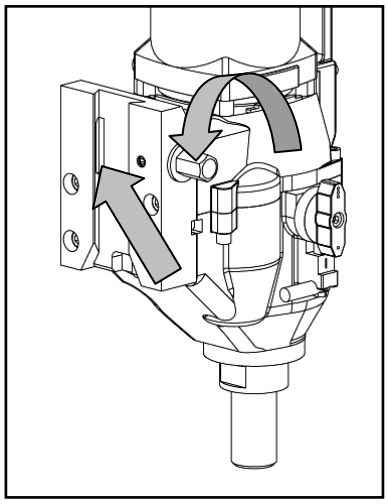
Frame extension Ø 380 - 270 mm

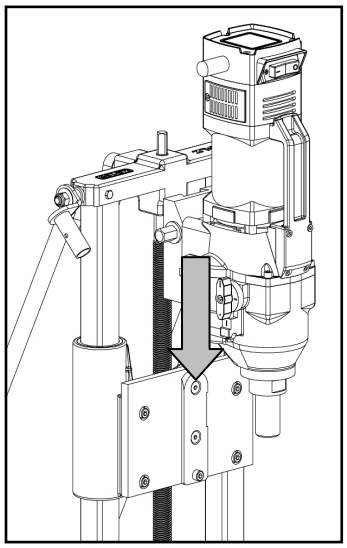
4.4 Assembling a drill motor

Attention: The following work is to be done with the drill motor being stopped!

4.4.1 Assembling a drill motor with quick cutting system (STS)

The quick cutting system-fixture is fitted to the drill carriage by default. Likewise, the quick cutting system (STS) is attached to the respective drill motor.
Turn the STS-axis on the drill motor by means of the hand wheel so that the clamping piece is loose. Due to the rotation, the clamping piece moves backwards.

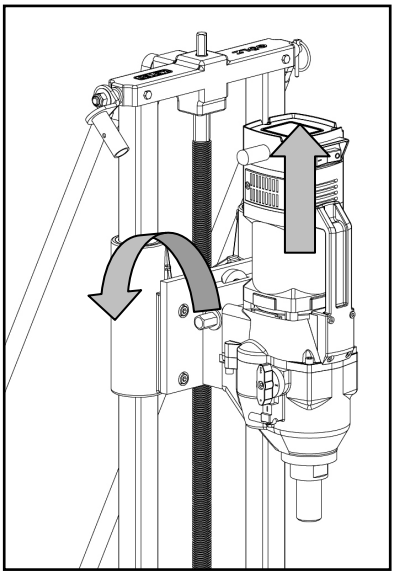




Shift the drill motor over the guiding key from above onto the drill carriage. Push the drill motor down up to the end of the guide until the STS-plate rests on the screw head.
Turn the STS-axis again by means of the hand wheel in the opposite direction. This will pull the clamping piece to the guiding key. The drill motor is now assembled to the drill carriage.

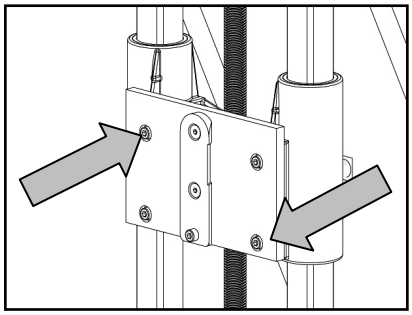
4.4.2 Changing a drill motor with quick cutting system (STS)

Loosen the connection of the water supply to the drill motor.
Then loosen the STS-axis by means of the hand wheel. This will loosen the tensioning. Pull the drill motor out from above.



Assembling a drill motor with quick cutting system (STS)
Fit the new drill motor as described under „Assembling a drill motor with quick cutting system (STS).

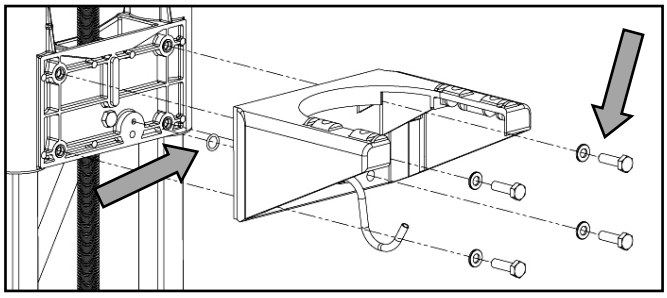
Assembling a drill motor with gear box
If you want to fit a drill motor with gear box, also remove the plate of the quick cutting system (STS).



Loosen the 4 M8x25 screws, Allen key SW6, and remove the intermediate plate of the quick cutting system (STS).

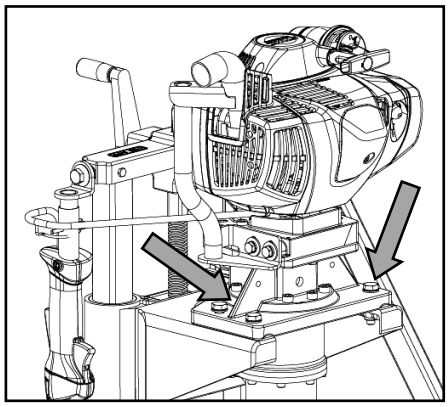
Insert the feather key to the gear carrier into the drill carriage.
Fit the gear carrier with four M10x35 screws, SW17, and four washers to the drill carriage.

⚠	***Attention: Position the O-ring behind the connection of the gear carrier before fixing the gear carrier to the drill carriage!***

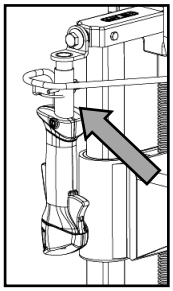


For fitting the drill motor, proceed as described under "Assembling a drill motor with gear box".

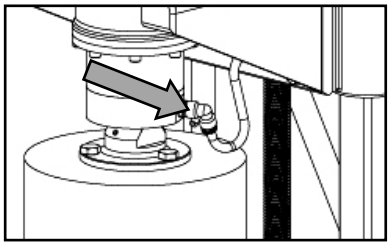
4.4.3 Assembling a drill motor with gear box



The gear carrier is fitted to the drill carriage by default.
Place the motor via the gear box onto the gear carrier and screw the components with four M10x45 screws, SW17, as well as eight washers and four nuts.

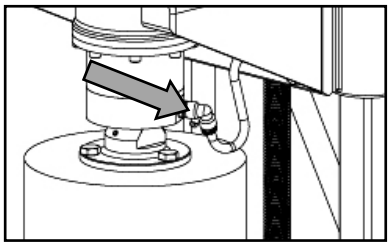


With the combustion engine FS560 you can attach the operating handle to the support of the operating handle and secure with the clip splint.

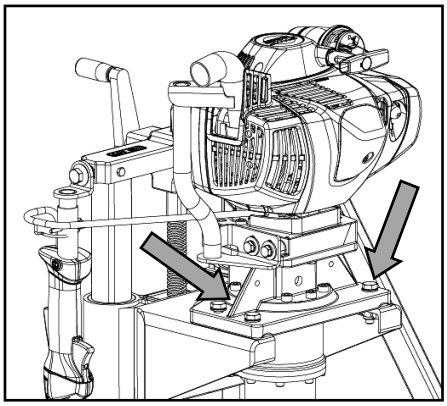


Provide the water supply to the gear box. The water supply is ensured via a plug connection between the gear carrier and the gear box.

4.4.4 Changing a drill motor with gear box



Loosen the connection of the water supply to the gear box. The water supply is ensured via a plug connection between the gear carrier and the gear box.
Loosen the plug connector on the gear box and pull out the water hose.



Loosen the four M10x45 screws, SW17, between the gear box and the gear carrier.
Remove the four screws as well as the eight washers and the four nuts.
You can remove the drill motor with the gear box from the gear carrier.
With the combustion engine FS560 make sure that the operating handle is no longer attached to the support of the operating handle.

Assembling a drill motor with gear box
Fit the new drill motor as described under „Assembling a drill motor with gear box".

Assembling a drill motor with quick cutting system (STS)
If you want to fit a drill motor with quick cutting system (STS), also remove the gear carrier.
Loosen the four M10x35 screws, SW17, and remove the gear carrier from the drill carriage.

⚠	***Attention: Make sure not to forget the O-ring! The O-ring must always be used when assembling a drill motor with gear box!***

Fit the intermediate plate of the quick cutting system (STS) again to the drill carriage with four M8x25 screws, Allen key SW6. For fitting the drill motor, proceed as described under "Assembling a drill motor with quick cutting system (STS)".

4.5 Water supply

	***Important: Wet drilling is to be accomplished while working! This prevents the appearance of particulate matter and increases the life-time of the diamond tool!***

	***Attention: Tools which are only designed for wet cutting, are never to be used without water supply! Always ensure sufficient water supply!***

The water supply at the interface ensures that the tool is cooled, the dust of the material is bound and the drill hole is rinsed out.

	***Attention: For cutting only use water which is free from coarse impurities! Do not use salt water!***

4.5.1 With water tank-pressurzied type

New delivery: mount first the pressure-hose into the bottom-side-hole and tighten well.

Operation:

- Always make sure that there is no **pressure** left in the tank before you open the water-filling hole - so lift red button on top-lock and release eventual existing pressure.
- Depress **pump-handle** and turn handle left (anticlockwise).
- Fill approx. 10 litres (2.64 US gallons) but do not fill up completely. Put back hand pump and tighten clockwise.
- Pump up a pressure of approx. 2 bar (29 PSI).
- During drilling a constant pressure of minimum 0,5 bar (7 PSI) is needed to guarantee a frequent water flow.

Connection to core drilling machine
Connect Female Coupler on pressure hose to Male Nipple at the water-tap of the core drilling machine. The water flow is increased or reduced by the water tap.

Release the female-coupler
The water hose is disconnected by pulling the outer sleeve of the **female-coupler** backwards and pulling off the connection of the nipple

Safety regulations
Check periodically the pressure-relief-valve for proper function!
The maximum pressure is 6 bar (87 PSI). If the pressure is not released at max., pressure automatically, the valve has to be replaced immediately. Any sort of damage on the tank (bottle) cracks or bumps, the bottle must be changed and taken out of operation. No repairs on the tank are permitted.
Do not expose the filled water tank to sun for a longer time, increased water temperature results in increased internal pressure! Store water tank empty and protect against freezing!

Note: Read and observe the operating instructions to the pressurized water container!

4.5.2 Public water mains

Connect a 1/2" water hose to the water tap of the core drilling machine. The flow of water is to be regulated by the tap.

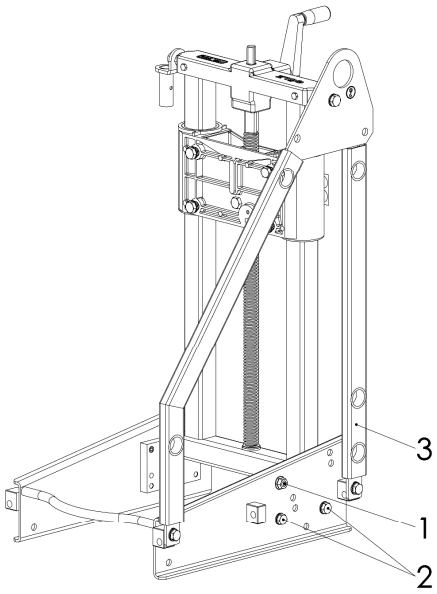
4.5.3 With electric motor

Note: Read and observe the instructions to the motor with regard to the water supply!

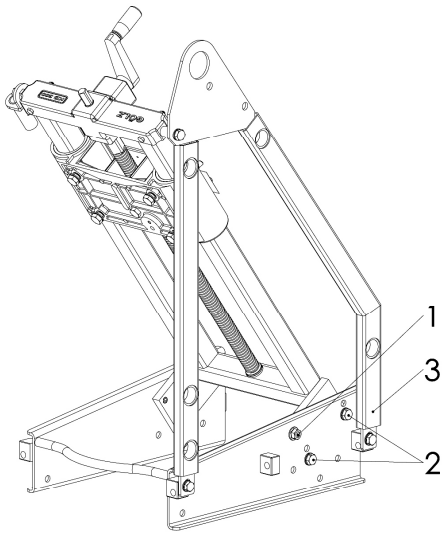
With electric motors the water supply is ensured via the motor and not via the drill carriage. In this case, the connection to the drill carriage is not used!
Read the instructions to the electric motor regarding the water supply.

4.6 Angle-drilling

Upon delivery the unit is in the 90°-position. Do the angle adjustment as follows:



Ground frame in delivery position
90°-position



Ground frame turned 180° around
55°-position

- Remove the bolts holding the ground frame (3) and remove frame
- Loosen the Nuts (1), left and right of pipe-base, but do not remove!
- Remove 4 Bolts (2) (2 on each side)

- Holding column, to base and tilt the column into required angle
- Secure 4 Bolts by hand
- Turn the ground-frame (3) around the other way and tighten bolts and nuts well.

4.7 Drill bit

The drill bits must meet the specifications of **GÖLZ® GmbH**. Use the appropriate bits depending on the material to be processed, the working process and the type of work to be carried out! In case of non-intended use, no liability is assumed for any damage resulting thereof.
All the bits which are used must, as far as their maximum admissible cutting speed is concerned, be designed for the maximum drive speed of the unit. For units with a variable drive speed use drill bits which, as far as their maximum admissible cutting speed is concerned, correspond to the respective drive speed. Ensure the right rotational direction of the drill motor and of the drill bit!
Check the drill bits for proper fit. Defective drill bits must be immediately replaced!
Each time a drill bit is fitted or changed, the drill motor is to be stopped first. After assembly do not leave any tools, a wrench for example, on the unit.

	***Important: Before fitting the drill bit, carefully clean all the fastening elements!***

4.7.1 With UNC-Adapter

	***Important: The connection threads must be clean!***

Fit the UNC-Adapter firmly to the gear box. Fit the adapter to the gearshaft in such a way that the serration meshes and screw the two set screws in the adapter into the gearshaft.
Now wind the drill carriage up, but only to such point that the drill bit easily fits under the adapter.
When fitting the drill bit, please observe the following order:

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

4.7.2 With 3-hole flange

	***Important: The connection flanges must be clean!***

Fit the 3-hole flange to the gear box. Fit the flange to the gearshaft in such a way that the serration meshes and screw the two set screws in the flange into the gearshaft. 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.

4.7.3 With drill motor spindle

Important: The connection threads must be clean!

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

5. Operation

Attention: Make the site free of parts that might obstruct the operation! Make sure, the drill bit is well mounted! Make sure, only authorized personnel is in the working area!

Warning: Never touch rotating parts like drill spindle and drill bit!

Attention: Make sure, that there are no mains in the material and location of the hole to be drilled!

5.1 Before starting

Check that your machine is properly assembled and in good condition:

- All parts must be assembled properly and securely.
- The functions of the drill motor must work properly.
- Never attempt to modify the controls or safety devices in any way.

Do not operate your machine if it is damaged or not properly assembled!
Pay attention to the whereabouts of the cooling and rinsing water as well as of cutting slurries. Cutting slurries must be collected, filtered and disposed of. Attach the unit according to the drilling problem. Move the drill bit with the hand crank to 5mm to the drilling surface.

5.2 Starting the engine

Start the drill motor as described in the corresponding instruction manual.

5.3 Start drilling

Important: Observe all the previous chapters in this manual, in particular the safety and warning instructions!

Warning: Never touch rotating parts like drill spindle and drill bit!

Attention: Transport the unit only when the engine is stopped! This applies also to a short change of location!

Attention: Wear appropriate individual protective equipment!

Care for safety clearance regarding third persons and take the operator's station behind the unit or slightly right or left of it.
First provide the water supply as described in the chapter "water supply". The drill bit is about 5mm above the material which is to be drilled. Then start the motor as described in the chapter "Start the motor". When you start drilling first use a moderate feed pressure - turn the hand crank slowly to make the first cut.
After start of drilling you should care for an even drill feed (drill bit pressure). The drill feed must be adapted to the material to be drilled!

Feed too high - Motor overload!
Feed too low - Blunt segments!

5.4 Stop drilling

When winding the crank in the opposite direction, you move the drill bit out of the drill section. As soon as the drill bit has left the section, stop the motor.
To stop the motor, proceed as described in the corresponding instruction manual to the drill motor. Next, block the water supply. If no further drilling is done, the drill bit is to be removed. Carry out the maintenance and care work according to the chapter "maintenance and care".

5.5 Changing the drill bit

The drill bit is changed if:

- the diamond segments of the drill bit are completely worn
- the material to be cut changes
- the drill bit turns irregularly
- the diamond segments are damaged or broken

For fitting a new drill bit, proceed as described in the chapter 4.7 "drill bits".

6. Maintenance and care

Attention: All maintenance, repair and care work is only to be done with the motor being stopped!

Spare parts must comply with the technical requirements specified by the manufacturer. Spare parts from **GÖLZ®** can be relied to do so! Observe the following indications:
In accordance to the given cycles, the subsequently described maintenance work has to be enforced. Also the wearing parts subject to no certain maintenance-intervals have to be checked regularly for wear and to adjust if necessary or to exchange. With I.C. engines, the maintenance work has to be enforced in accordance with the separate maintenance-instruction of the engine manufacturer.

		Before starting work	After work	Weekly	In the event of a malfunction	If damaged
Machine	Visual inspection	**x**			**x**	**x**
	Clean		**x**			
Threaded spindle	Grease			**x**		
Column	Spray with sliding spray		**x**			
Drill bit	Check	**x**	**x**		**x**	
	Clean thread		**x**			
	Repair					**x**

6.1 Drill rig

Clean the machine and also the carriage well after each duty and check all functions. Replace all necessary parts that are out of order or worn out immediately. Spray in the column with commercial sliding spray.

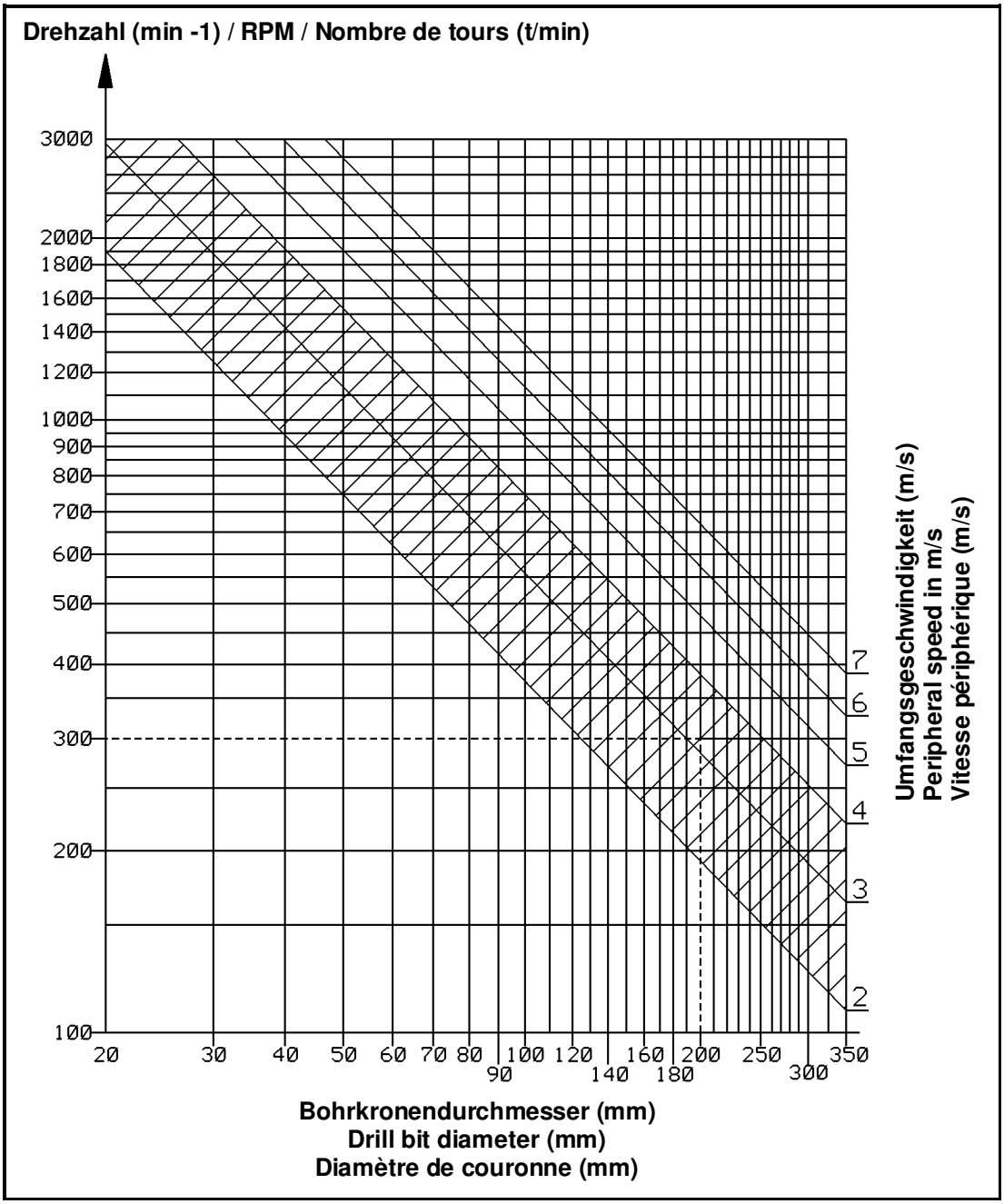
6.2 Drill bit

When ending a drill job - check drill bit as follows:
Check segments for cracks or break-outs, Cracks between segment and core barrel, Deformation and out of round wear.
In case of doubt, send the drill bit for repair (retip). Blunt drill bits should be re-sharpened.

6.3 Drill motor

To maintain the motor, proceed as described in the corresponding instruction manual to the drill motor.

7. RPM recommendation chart



- - - - Example: Drill bit Ø 200 mm at 3 m/s = approx. 300 RPM
Optimum peripheral speed: 2 to 4 m/s

8. Troubleshooting

Cause	Remedy
Blunt drill bit	
Hard bonded segment!	Use segments one class softer bonded
Segment too big surface	Attach a drill bit with less segments or reduce the rpm an increase the feed compression.
Too fast RPM!	Use lower RPM.
Drilling in steel!	Use lower gear and reduce feed and increase water flow.
Drill bit worn out!	Replace with a new one.
Diamond grains pressed into the binding!	Sharpen drill bit in sharpening plate, work with low feed.
Segment surface is daubed with material sludge	Increase the water flow, re-sharp the segments
Segment surface is daubed with steel chips	Reduce the speed, increase the water flow, re-sharp the segments
No free cut because of side wards wear-out of segments!	Replace the drill bit and have the drill motor spindle checked.
Excessive wear of segments	
Soft bonded segments!	Use segments one class harder bonded or increase rpm and reduce the feed compression
Segments to narrow!	Use drill bit with wider segments or reduce feed.
Too low RPM!	Shift the higher gear.
Drill bit is deformed!	Change drill bit for a new one and bring worn drill bit for rebalancing. Check drill stem and adjust or replace it. Do not use deformed drill bits - it is also wearing out the drill motor.
Drill bit out of true!	Change drill bit and bring worn drill bit for re-balancing.
Abrasive material!	Use segments one class harder bonded. Increase the water flow and the speed.
Water supply low!	Water supply raising.

Cause	Remedy
Drill bit is stuck	
Loose material (cut steel or aggregate is blocking the drill bit or between drill hole and drill bit!	Apply wrench and rotate drill bit in both directions while drill bit is under tension. Disconnect drill bit from the drill motor and drill over with a larger sized drill bit.
Drill rig was displaced during drilling (loose fastening)!	Disconnect drill bit and remove. Break and pull the core. Start again with improved fastening of the drill rig. If drill hole is misaligned, drill over with a larger sized drill bit.
Misaligned drill hole guidance of drill rig has too much clearance!	Disconnect the drill rig, adjust guidance. Start with a new hole or wash over. Do not enter the old drill hole.

9. Spare parts list

9.1 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, see chapter 9.1.3 "Distribution agencies".

9.1.1 Safety regulation

⚠	***Danger: Mounting or dismounting assembly groups can give rise to risks which are not mentioned in the spare parts list!***

Using this spare parts list for mounting or dismounting purposes is not permitted. For assembly and disassembly work exclusively the corresponding descriptions in this operating manual are to be followed.

⚠	***Danger: Non-observance of this instruction can result in injury which, in the worst case, can result in death!***

9.1.2 Ordering information

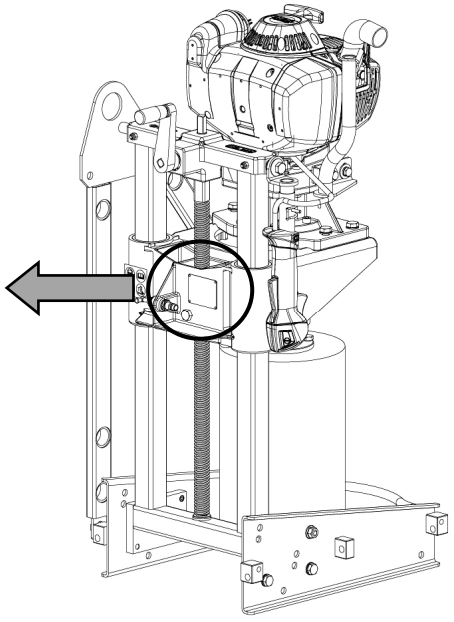
ℹ	***Note: In order to avoid wrong deliveries the information the ordering information should be checked for accuracy and completeness before sending it! Completely indicate the delivery address!***

GÖLZ® GmbH
D - 53940 Hellenthal Tel. (02482) 120

Typ
KB 300

Baujahr Maschinen-Nr.
20XX XXXXX

Gew. kg kW
XX XXXXX



		
So bekommen Sie schnell und richtig Ihr Ersatzteil	**Always indicate**	**Pour obtenir rapidement les pièces de rechange indiquer**
• Maschinentyp gemäß Typenschild • Baujahr gemäß Typenschild • Artikelnummer gemäß Ersatzteilliste • Maschinennummer gemäß Typenschild	• machine type according to nameplate • year of manufacture according to nameplate • order number according to spare part list • serial number according to nameplate	• 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
Für Bestellungen, Fragen und Informationen wenden Sie sich bitte an die zuständigen Stellen	For orders, questions and information, please contact the competent departments.	Pour les commandes, questions et informations, veuillez-vous adresser aux points de ventes correspondants.

9.1.3 Distribution agencies

Deutschland - Germany - Allemagne 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 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** 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 GÖLZ® (UK) Ltd. Unit A5, Springhead, Enterprise Park Northfleet Kent DA11 8HB Tel: +44 1 474321679 Fax: +44 1 474321477 E-Mail: info@goelz.co.uk / Internet: www.goelz.co.uk	**Benelux** GÖLZ® Benelux Eupener Straße 61 BE-4731 Raeren-Eynatten Tel: +49 (0)2482-12 200 Fax: +49 (0)2482-12 222 E-Mail: benelux@goelz.de / Internet: www.goelz-online.com
Australien - Australia - Australie GOLZ® Pty Ltd. 44 Stanley Street Peakhurst, NSW 2210 Tel: +61 (0) 2 9534 5599 Fax: +61 (0) 2 9534 5588 E-mail: info@golz.com.au / Internet: www.golz.com.au	**USA** GOLZ® L.L.C. 5860 East Osage Ridge Lane Columbia MO 65203-6018 Tel: +1 573 474 4961 E-Mail: info@golzusa.com / Internet: www.goelz-online.com

9.2 Wearing parts

Wearing parts for construction devices mentioned in the operating manual such as drilling and sawing machines.

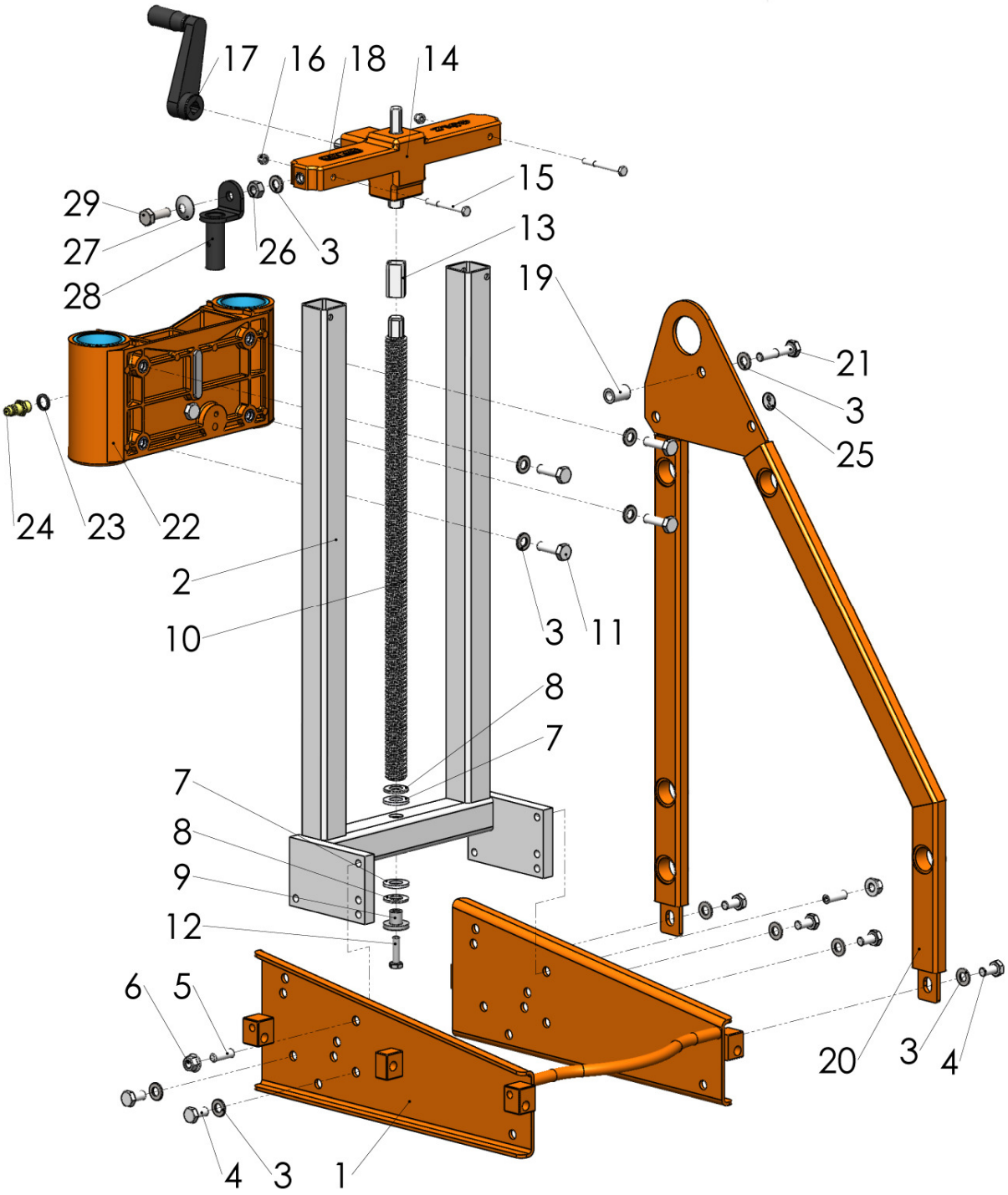
Wearing parts are the parts subject to operation-related (natural) wear during proper use of the device. The wearing time cannot be uniformly defined, and differs according to the intensity of use. The wearing parts must be adjusted, maintained and, if necessary, replaced for the specific device in accordance with the manufacturer's operating manual. Operation-related wear is not a reason for defect claims.

Wearing parts of this machine are grey marked in the spare parts list.

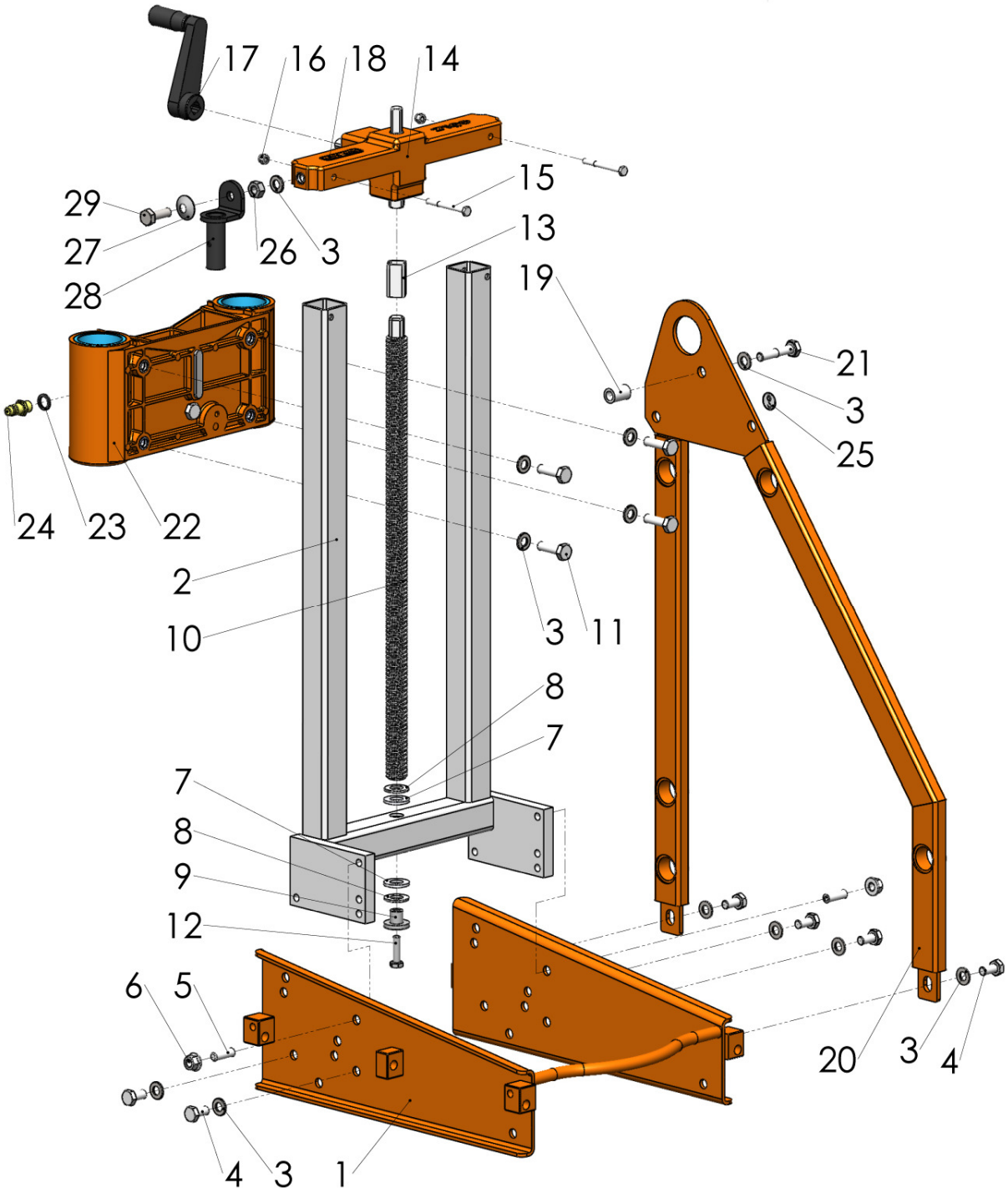
- Feed and drive elements such as toothed racks, gearwheels, pinions, spindles, spindle nuts, spindle bearings, cables, chains, sprockets, belts
- Seals, cables, hoses, packings, connectors, couplings and switches for pneumatic, hydraulic, water, electrical and fuel systems
- Guide elements such as guide strips, guide bushes, guide rails, rollers, bearings, sliding protection supports
- Clamping elements for quick-separating systems
- Flushing head seals
- Slide and roller bearings that do not run in an oil bath
- Shaft oil seals and sealing elements
- Friction and safety clutches, braking devices
- Carbon brushes, commutators / armatures
- Easy-release rings
- Control potentiometers and manual switching elements
- Securing elements such as plugs, anchors, screws and bolts
- Fuses and lamps
- Auxiliary and operating materials
- Bowden cables
- Discs
- Diaphragms
- Spark plugs, glow plugs
- Parts of the reversing starter such as the starting rope, starting pawl, starting roller and starting spring
- Sealing brushes, rubber seals, splash protection cloths
- Filters of all kinds
- Drive rollers, deflection rollers and bandages
- Cable anti-twist elements
- Running and drive wheels
- Water pumps
- Cut-material transport rollers
- Drilling, parting and cutting tools
- Energy storage

10. Exploded view and spare parts list

10.1 Drill rig KB300

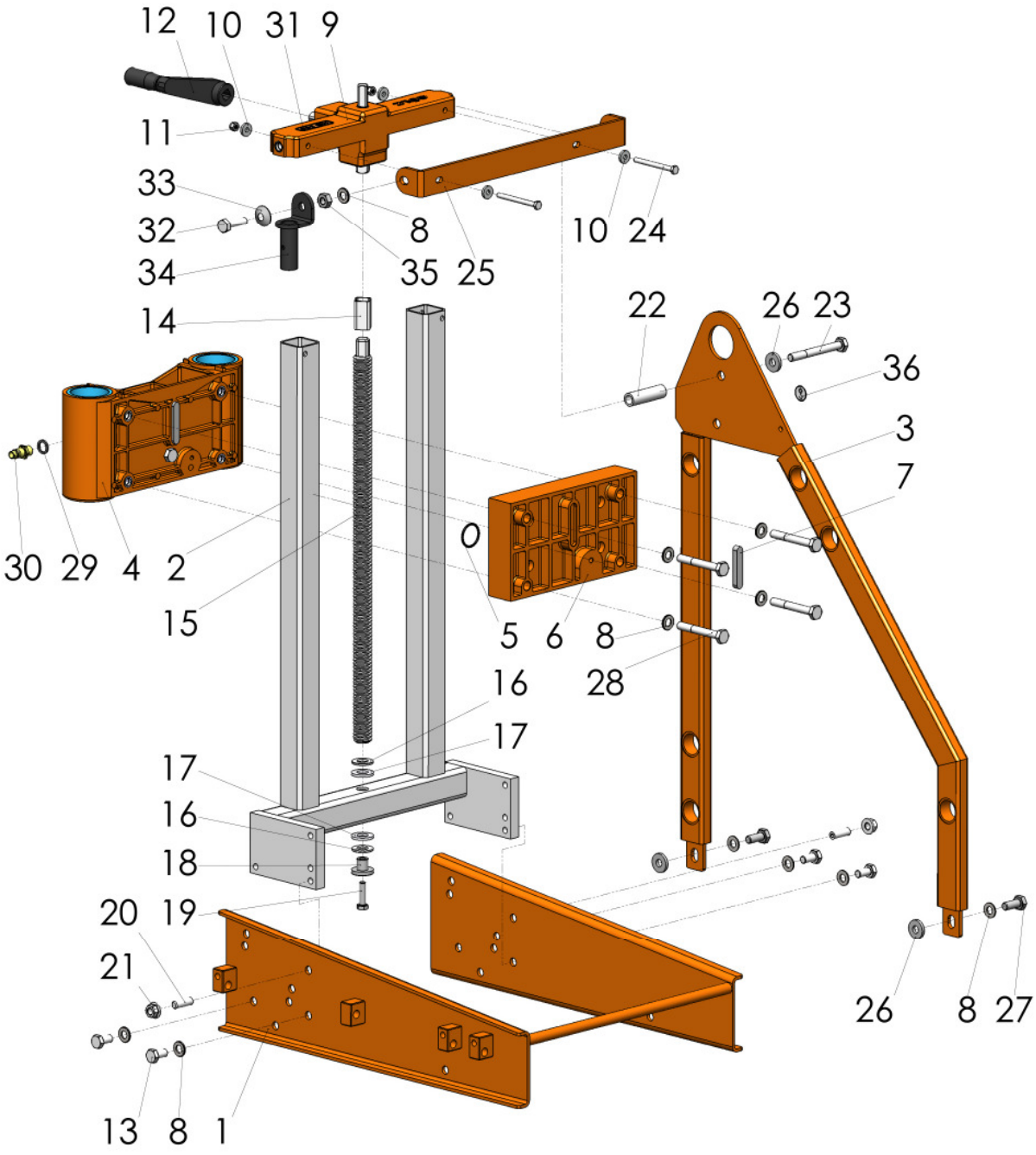


Pos.	Artikelnummer	Menge	Norm	Info	Bezeichnung	Description	Désignation
-	**0295 301 0001**	1		KB 300	Bohrständer kpl.	Drill rig assy.	Foreuse carotteuse compl.
1	**0295 000 0071**	1			Rohrfuss	Pipe base	Embase
2	**0295 000 0047**	1			Rohrführung	Column	Guide en fer carré
3	**0286 570 0047**	12	DIN EN ISO 7090	B 10,5	Scheibe	Washer	Rondelle
4	**0295 000 0187**	6	DIN EN ISO 4017	M 10 x 20	Schraube	Screw	Vis
5	**0295 000 0410**	2	DIN EN ISO 4026	M 10 x 30	Gewindestift	Set screw	Tige filetée
6	**0295 000 0175**	2	DIN EN ISO 4026	M 10	Mutter	Nut	Écrou
7	**0295 000 0745**	2		Ø 15,1	Scheibe	Washer	Rondelle
8	**0295 600 1043**	2	DIN EN ISO 7090	B 15	Scheibe	Washer	Rondelle
9	**0295 000 0742**	1			Buchse	Bushing	Douille
10	**0295 000 0081**	1			Spindel	Spindle	Arbre de transmission
11	**0295 000 0293**	4	DIN EN ISO 4017	M 10 x 35	Schraube	Screw	Vis
12	**0295 000 0074**	1	DIN EN ISO 4017	M 8 x 30	Schraube	Screw	Vis
13	**0295 000 0076**	1			Vierkantkupplung	Connection tube	Carré de manœuvre
14	**0295 000 0092**	1			Brücke kpl.	Crankcase assy.	Pond de commande complète
15	**0295 000 0411**	2	DIN EN ISO 4014	M 6 x 60	Schraube	Screw	Vis
16	**0281 045 0027**	2	DIN EN ISO 7040	M 6	Mutter	Nut	Écrou
17	**0295 000 0069**	1		SW 12	Handkurbel	Handle	Manivelle
18	**0295 899 0016**	1		„KB300“	Aufkleber	Label	Macaron
19	**0295 000 0072**	1		17 x 12 x 25,5	Buchse	Bushing	Douille
20	**0295 300 0015**	1			Bodenrahmen	Floor frame	Châssis
21	**0295 000 0061**	1	DIN EN ISO 4014	M 10 x 50	Schraube	Screw	Vis
22	**0295 000 0048**	1			Bohrschlitten kpl.	Carriage assy.	Chariot complète
23	**0295 000 0066**	1		1/4"	Dichtring	Seal	Joint
24	**0298 100 0130**	1		G 1/4" A	Stecknippel	Water coupler	Raccord rapide
25	**0295 300 0044**	1		„Hebepunkt“	Aufkleber	Label	Macaron
26	**0286 570 0046**	1	DIN EN ISO 4032	M 10	Mutter	Nut	Écrou
27	**0282 300 0528**	1	DIN 2093	28 x 10,2 x1	Tellerfeder	Disk spring	Ressort à disque
28	**0295 003 0023**	1			Halter Bediengriff	Control holder	Manche
29	**0295 000 0173**	1	DIN EN ISO 4017	M 10 x 30	Schraube	Screw	Vis
-	**0295 899 0033**	1		„Pikto“	Aufkleber	Label	Macaron
-	**0295 899 0051**	1			Typenschild	Type plate	Plaque d’identification
-	**0295 000 0825**	-	-	Pos. 16-19	Spindellager kpl.	Spindle bearing assy.	Roulement de vis de descente compl.
-	**0295 300 0051**	1			Spanratsche	Clamping ratchet	Cliquet

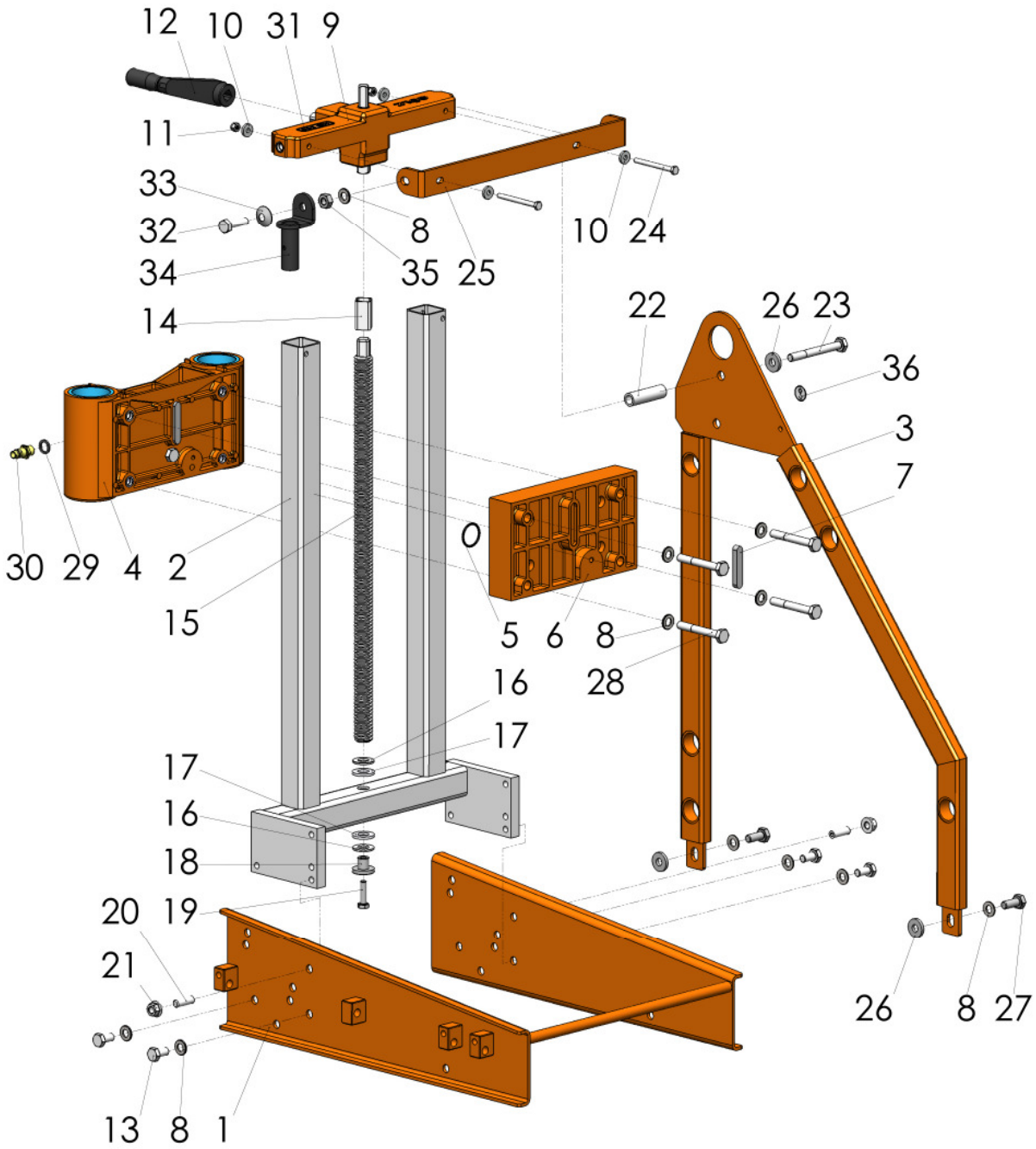

17
16
18
14
15
29
27
28
26
3
13
19
21
3
25
24
23
22
2
10
3
11
8
7
7
8
9
12
6
5
4
3
1
20
3
4

Pos.	Artikelnummer	Menge	Norm	Info	Bezeichnung	Description	Désignation
-	**0295 300 0053**	1			Spannband	Strap	Sangle
-	**0295 000 0190**	2			Erdnagel	Ground spike	Piquet de sol
-	**0295 000 0003**	1			Klappsplint	Linch pin	Esse d'essieu
-	**0295 000 2038**	1	DIN 894	SW17	Maulschlüssel	Wrench	Clé

10.2 Drill rig KB350

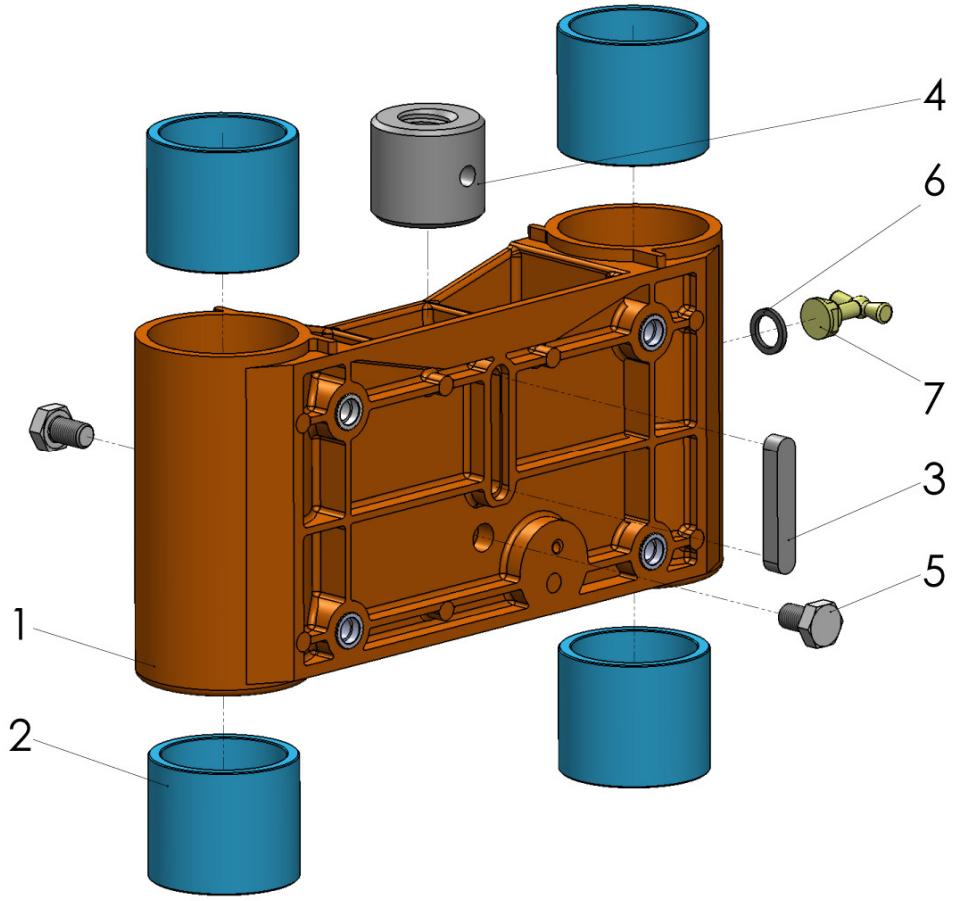


Pos.	Artikelnummer	Menge	Norm	Info	Bezeichnung	Description	Désignation
-	**0295 352 0001**	1		KB350	Bohrständer kpl.	Drill rig assy.	Foreuse carotteuse compl.
1	**0295 000 0350**	1			Rohrfuss	Pipe base	Embase
2	**0295 000 0351**	1			Rohrführung	Column	Guide en fer carré
3	**0295 350 0015**	1			Bodenrahmen	Floor frame	Châssis
4	**0295 000 0048**	1			Bohrschlitten kpl.	Carriage assy.	Chariot complète
5	**0295 000 0230**	1	DIN 3771	27 x 2,5	O-Ring	O-ring	Joint
6	**0295 351 0025**	1			Zwischenplatte	Inner plate	Platine intermédiaire
7	**0295 000 0206**	1	DIN 6885	10 x 8 x 56	Paßfeder	Key	Clavette
8	**0286 570 0047**	11	DIN EN ISO 7090	B 10,5	Scheibe	Washer	Rondelle
9	**0295 000 0092**	1			Brücke kpl.	Crankcase assy.	Pond de commande complète
10	**0295 000 0036**	4	DIN 7349	6,4	Scheibe	Washer	Rondelle
11	**0281 045 0027**	2	DIN EN ISO 7040	M 6	Mutter	Nut	Écrou
12	**0295 000 0069**	1		SW 12	Handkurbel	Handle	Manivelle
13	**0295 000 0187**	4	DIN EN ISO 4017	M 10 x 20	Schraube	Screw	Vis
14	**0295 000 0076**	1			Vierkantkupplung	Connection tube	Carré de manœuvre
15	**0295 000 0081**	1			Spindel	Spindle	Arbre de transmission
16	**0295 600 1043**	2	DIN EN ISO 7090	B 15	Scheibe	Washer	Rondelle
17	**0295 000 0745**	2		Ø 15,1	Scheibe	Washer	Rondelle
18	**0295 000 0742**	1			Buchse	Bushing	Douille
19	**0295 000 0074**	1	DIN EN ISO 4017	M 8 x 30	Schraube	Screw	Vis
20	**0295 000 0410**	2	DIN EN ISO 4026	M 10 x 30	Gewindestift	Set screw	Tige filetée
21	**0295 000 0175**	2	DIN EN ISO 4026	M 10	Mutter	Nut	Écrou
22	**0295 000 0360**	1		17 x 12 x 60	Buchse	Bushing	Douille
23	**0286 570 0044**	1	DIN EN ISO 4014	M 10 x 90	Schraube	Screw	Vis
24	**0282 250 0744**	2	DIN EN ISO 4017	M 6 x 70	Schraube	Screw	Vis
25	**0295 350 0024**	1			Brückenverstärkung	Reinforcement	Garniture
26	**0295 000 0216**	3	DIN 7349	A 10,5	Scheibe	Washer	Rondelle
27	**0295 000 0179**	2	DIN EN ISO 4017	M 10 x 25	Schraube	Screw	Vis
28	**0282 250 0128**	4	DIN EN ISO 4014	M 10 x 75	Schraube	Screw	Vis
29	**0295 000 0066**	1		1/4"	Dichtring	Seal	Joint
30	**0298 100 0130**	1		G 1/4" A	Stecknippel	Water coupler	Raccord rapide
31	**0295 899 0017**	1		„KB350“	Aufkleber	Label	Macaron
32	**0295 000 0293**	1	DIN EN ISO 4017	M 10 x 35	Schraube	Screw	Vis
33	**0282 300 0528**	1	DIN 2093	28 x 10,2 x 1	Tellerfeder	Disk spring	Ressort à disque


12
10
31
9
11
33
32
34
8
35
25
10
24
14
22
26
23
36
3
7
30
29
4
2
15
0
5
6
8
16
28
17
17
16
18
20
19
21
13
8
1
26
8
27

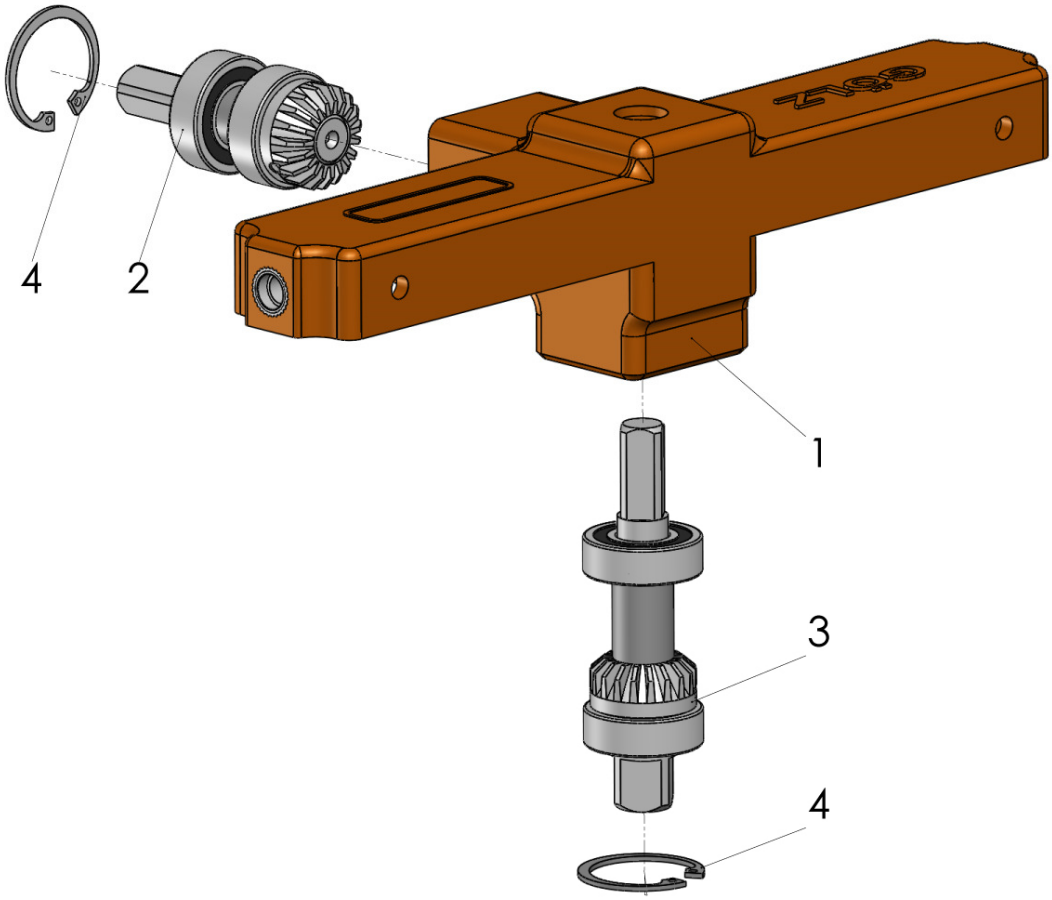
Pos.	Artikelnummer	Menge	Norm	Info	Bezeichnung	Description	Désignation
34	**0295 003 0023**	1			Halter Bediengriff	Control holder	Manche
35	**0286 570 0046**	1	DIN EN ISO 4032	M 10	Mutter	Nut	Écrou
36	**0295 300 0044**	1		„Hebepunkt“	Aufkleber	Label	Macaron
-	**0295 899 0033**	1		„Pikto“	Aufkleber	Label	Macaron
-	**0295 899 0051**	1			Typenschild	Type plate	Plaque d’identification
-	**0295 000 0825**	-	-	Pos. 16-19	Spindellager kpl.	Spindle bearing assy.	Roulement de vis de descente compl.
-	**0295 300 0051**	1			Spanratsche	Clamping ratchet	Cliquet
-	**0295 300 0053**	1			Spannband	Strap	Sangle
-	**0295 000 0190**	2			Erdnagel	Ground spike	Piquet de sol
-	**0295 000 0003**	1			Klappsplint	Linch pin	Esse d’essieu
-	**0295 000 2038**	1	DIN 894	SW17	Maulschlüssel	Wrench	Clé

10.3 Carriage



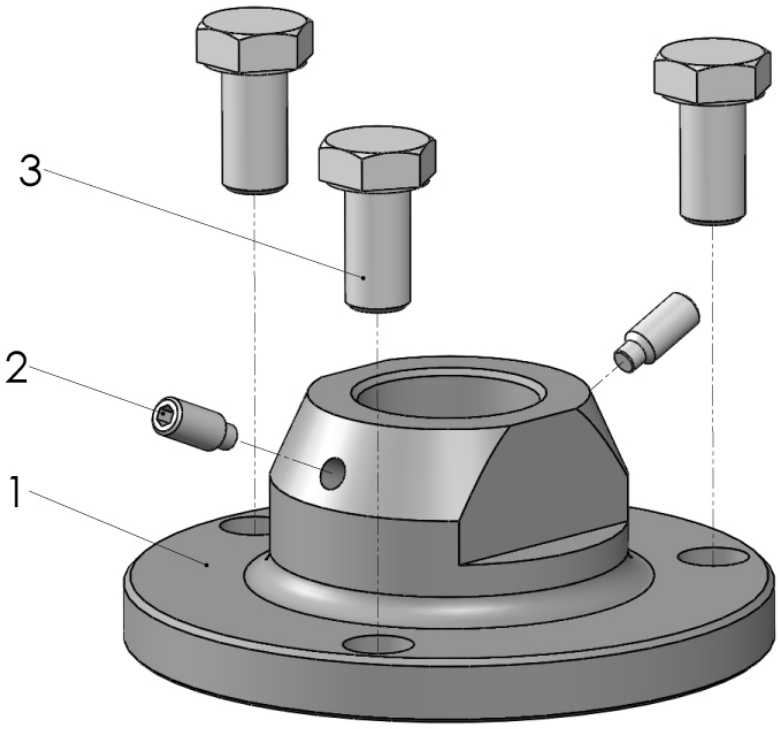
Pos.	Artikelnummer	Menge	Norm	Info	Bezeichnung	Description	Désignation
-	**0295 000 0048**	1		Pos. 1-7	Bohrschlitten kpl.	Carriage assy.	Chariot compl.
1	**0295 000 0093**	1			Bohrschlitten	Carriage	Chariot
2	**02950000231**	4			Kunststoffbuchse	Bushing	Douille
3	**0295 000 0206**	1	DIN EN ISO 6885	10 x 8 x 56	Passfeder	Key	Clavette
4	**0295 000 0077**	1			Spindelmutter	Spindle nut	Entretoise
5	**0295 000 0037**	2	DIN EN ISO 4017	M 10 x 16	Schraube	Screw	Vis
6	**0295 000 0066**	1			Dichtring	Seal	Joint
7	**0295 000 0063**	1		1/4"	Ventiloberteil	Water tap	Robinet

10.4 Crankcase

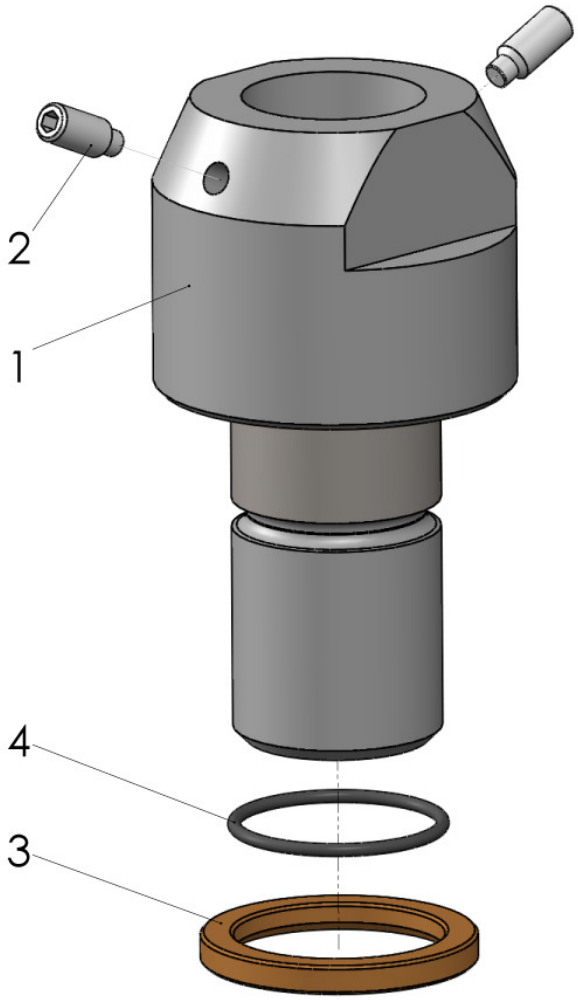


Pos.	Artikelnummer	Menge	Norm	Info	Bezeichnung	Description	Désignation
-	**0295 000 0092**	1		Pos. 1-4	Brücke kpl.	Crankcase assy.	Pond de commande compl.
1	**0295 000 0046**	1			Brückengehäuse	Crankcase	Pont de commande
2	**0295 300 0017**	1			Ritzelwelle	Feed shaft and bearing	Pignon et roulement
3	**0295 300 0018**	1			Ritzelwelle	Feed shaft and bearing	Pignon et roulement
4	**0295 000 0462**	2	DIN 472	35 x 1,5	Sicherungsring	Circlip	Circlip

10.5 Tool acceptance

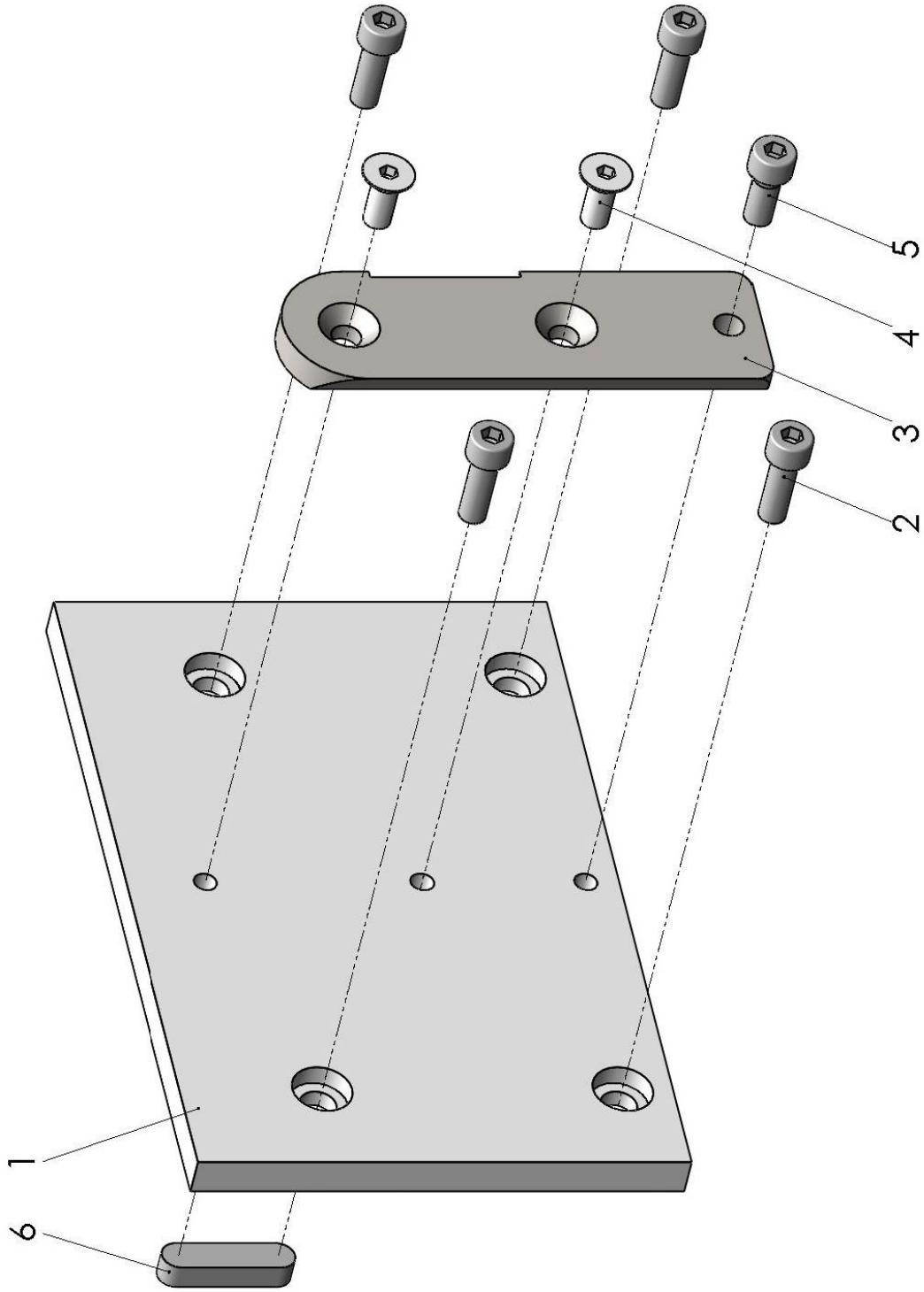


Pos	Artikelnummer	Menge	Norm	Info	Bezeichnung	Description	Désignation
-	**-**	1			Werkzeugaufnahme	Tool acceptance	Levé outillage
1	**0295 002 0000**	1			3-Loch-Flansch	Flange	Bride
2	**0285 300 0026**	2	DIN EN ISO 4028	M 6 x 14	Gewindestift	Grub screw	Goupille de fil
3	**0295 000 0187**	3	DIN EN ISO 4017	M 10 x 20	Schraube	Screw	Vis



Pos	Artikelnummer	Menge	Norm	Info	Bezeichnung	Description	Désignation
-	**-**	1			Werkzeugaufnahme	Tool acceptance	Levé outillage
1	**0295 002 0001**	1		5/4“ UNC	Adapter	Adapter	Adapter
2	**0285 300 0026**	2	DIN EN ISO 4028	M 6 x 14	Gewindestift	Grub screw	Goupille de fil
3	**0295 000 0277**	1			Zwischenscheibe	Washer	Rondelle
4	**0295 000 0278**	1	DIN 3771	26 x 1,9	O-Ring	O-ring	Joint

10.6 STS



Pos	Artikelnummer	Menge	Norm	Info	Bezeichnung	Description	Désignation
-	**0295 150 0401**	1		**Pos. 1-6**	STS Umrüstsatz	STS Conversion kit	STS jeu de remplacement
1	**0295 150 0402**	1			Aufnahmeplatte	Feeder plate	Panneau de réception
2	**0295 000 0228**	4	DIN EN ISO 4762	M 8 x 25	Schraube	Screw	Vis
3	**0295 110 0031**	1			Führungskeil	Guide wedge	Cale guide
4	**0282 240 0039**	2	DIN EN ISO 10642	M 8 x 20	Schraube	Screw	Vis
5	**0295 000 0466**	1	DIN EN ISO 4762	M 8 x 20	Schraube	Screw	Vis
6	**0295 610 0026**	1	DIN 6885	10 x 8 x 40	Paßfeder	Key	Clavette