

Grinding machine

SM 400



ZN der Bedienungsanleitung:

5009054-01

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**EU conformity declaration****GÖLZ® GmbH**Dommersbach 51
D-53940 Hellenthal
Deutschland

declares under sole responsibility that

Model:	Grinding machine
Make:	GÖLZ
Type:	SM400

comply with the relevant provisions of the Directives

2006/42/EG	Machinery directive
2014/30/EU	Electromagnetic compatibility
2014/35/EU	Low Voltage
2005/88/EG	Noise emission

and has been developed and fabricated in compliance with the following standards valid as at the production date:

DIN EN 13862:2022-07	Safety of floor cutting-off machines
DIN EN ISO 12100 Corrigendum to 1:2013-08	Safety of machinery - General principles for design
DIN EN 60034-1:2011-02; VDE 0530-1:2011-02	Rotating electrical machines - Part 1: Rating and performance
DIN EN 60335-1:2024-07; VDE 0700-1:2024-07	Safety of household and similar electrical appliances
DIN EN ISO 13849-1:2023-12	Safety of machinery - Safety-related parts of control systems
DIN EN IEC 61000-3-2:2023-10; VDE 0838-2:2023-10 DIN EN 61000-3-3:2023-02; VDE 0838-3:2023-02	Electromagnetic compatibility (EMC)
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	Electromagnetic Compatibility
DIN EN 62841-1:2023-03; VDE 0740-1:2023-03	Electric motor-operated hand-held tools
DIN EN 60204-1:2019-06; VDE 0113-1:2019-06	Safety of machinery - Electrical equipment of machines

Technical documentation kept by:

GÖLZ® GmbH

Development and design

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

Hellenthal, 11.03.2025
GÖLZ® GmbHManaging Director
Bernd Schmitz

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Preface

This operating instruction is designed to familiarize the user with the machine and its designated use. The operating instruction 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 life of the machine. The operating instruction is to be supplemented by the respective national rules and regulations for accident prevention and environmental protection. The operating instruction must always be available wherever the machine is in use. This operating instruction must 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, evacuation care and disposal of fuels and consumables.
- Maintenance (servicing, inspection, repair) and/or
- Transport

In addition to the operating instructions and to the mandatory rules and regulations for accident prevention and environment protection of the country and place of use of the machine, the generally recognized technical rules for safe and proper working conditions and procedures must also 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:

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Basic safety instructions



Wear safety glasses!



Wear ear muffs!



Wear hard hat!



Wear dust protection!



Wear safety boots!



Read owner's manual before first initiation!



Wear protective gloves!



Wear safety clothes!



Never touch!



Important advice!



General danger!



Danger exists to cut oneself!



Electrical hazard!



It is not allowed to move the machine with rotating grinding wheel outside of the area in which grinding works have to be performed.

1. Machine description

1.1 Intended use-description

The SM 400 is a floor grinding machine with a working width of 400 mm. With its extremely narrow design, its field of application lies mainly in the processing of concrete surfaces of small and medium sizes.

The floor grinder may only be operated with the grinding tools specified by the manufacturer with the required nominal characteristics. When using grinding tools that do not comply with the manufacturer's instructions, no liability is accepted for damage resulting therefrom. The SM 400 is equipped with a 230V / 50Hz AC-motor and may only be operated on a corresponding permissible and tested power supply.

1.2 Technical data

Working width	400 mm
Max. grinding wheel-Ø	400 mm
Grinding wheel holder	Quick changing system
Motor	Three-phase motor IE3, 230/400V V 50 Hz, 2,2 KW, IP55
Power input engine	I (max) = 9,4 A
Peripheral speed grinding wheel	20,5 m/s
Engine shaft speed	975 min ⁻¹
Feed	Manuel
Excavation	Manual via guide bar
Water supply	external water supply
Dust extraction	connecting piece Ø a 50 mm
Dimensions (LxWxH)	approx. 890 x 530 x 715 mm
Weight (without grinding wheel)	approx. 125 kg
Sound power level after DIN ISO 6393	No load = 75 dB (A) Full load = 76 dB (A)
Sound pressure level after DIN ISO 6393	No load = 77 dB (A) Full load = 78 dB (A)
Vibration ISO 5349 VDMA 03/2006	a = 5,1 m/s ²

1.3 Shipment and provided accessory

- Grinding machine SM 400
- Tool kit
- Operating instruction and spare parts list grinding machine

1.4 Optional accessory

- Watertank 25l

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 blades, please refer to the current **GÖLZ®** catalogue for diamond tools.

1.5 Main parts



1	Base frame / undercarriage	5	Control system	9	Motor
2	Transport wheel	6	Push bar	10	Grinding protection cover
3	Height locking	7	Support bar	11	Abrasion guard strip
4	Handle	8	Suction hose	12	

The base frame / undercarriage (1) is the basis for the grinding machine. All other components are built on the base frame.

The transport wheels (2) are used to move the grinding machine and to guide the grinding process.

The height locking (3) is used to bring the push bar height into transport or working position.

Thanks to the height-adjustable handle (4), you can adapt the optimal working height to the operator.

The control system (5) houses all electric components with their on and off switches, the closed-circuit tell-tale, the motor quick disconnector and the mains cable.

The push bar (6) supports the switch box and the handle.

The support bar (7) stabilizes the machine and houses the push bar.

The suction hose (8) extracts the grinding dust out of the protection cover with the external connected vacuum cleaner.

The grinding disc is moved by the drive engine (9).

The grinding protection cover (10) is used to protect the operating personnel during grinding and to trap the grinding dust.

Thanks to the abrasion guard strips (11), the grinding protection cover can be perfectly closed, even with grinding tools of different height.

1.6 Safety devices



Danger: During grinding or displacing the machine, all safety devices shown below must be mounted!



2. 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.

2.1 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 horizontal grinding. Using the machine for purposes other than mentioned above 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.

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!

2.2 Operating range

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**!

2.3 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.

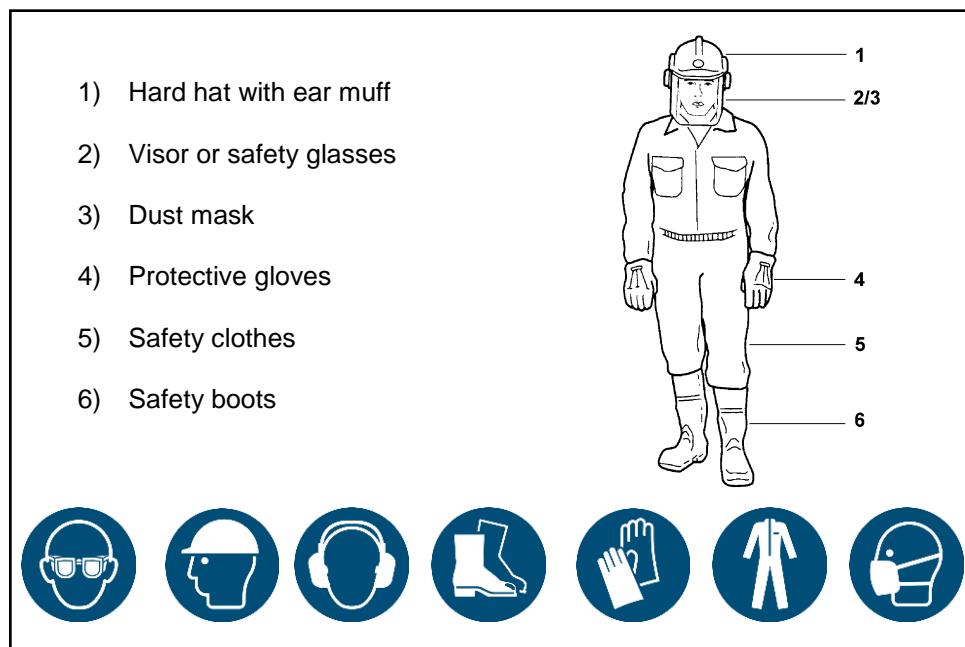
This operating manual must be supplemented by instructions covering the duties involved in supervising and notifying special organizational features, such as job organization, work flows or the person entrusted with the work. Person entrusted with work on the machine must have read the operating manual 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:



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 cutting 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 manufacturer/ distributor. 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 firefighting measures. The personnel must be made familiar with the location and handling of fire extinguishers!

2.4 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 responsibilities 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!

2.5 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 behavior) 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 grinding or dry grinding with dust extraction is to be accomplished while working. This prevents the appearance of particulate matter and increases the life-time of the grinding 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 stumbling! 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 machine before operating! Damaged grinding wheels have to be changed immediately. Use only recommended grinding wheels from the **GÖLZ® GmbH**.

Control the working area for water-, gas- and electrical lines!



Important! Always use the wet process or the dry process with dust extraction in order to prevent the occurrence of noxious fine dust and to enhance the grinding tool lifetime.

During work

Make sure, that the machine is well fastened before and while grinding!

Never touch rotating parts like grinding wheels!

After work

Before leaving the machine always secure it against unauthorized use!

2.6 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 its 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 if 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.

2.7 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.

2.8 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!

2.9 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.

2.10 Illumination

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

2.11 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.

2.12 Transport

The grinding machine can be disassembled into 2 components to make transport easier, e.g. on unsurfaced ground, over stairs or other obstacles.

These are on the one hand the chassis with the handle and on the other hand the motor with the grinding protection cover and the grinding disc.

Make sure the machine is disconnected from the mains and has stopped, then open the locking handle of the motor disconnector and pull the plug.

Remove the suction hose from the suction port and pull out the two locking bolts of the motor swivel holder. You can now lift the chassis out of the motor holder by pushing the handle downwards and thus separating it from the motor component.

Proceed in reverse order to reassemble it.

Place the motor together with the grinding disc and the protection cover on a flat surface. Move the chassis from behind to the motor and hang the bolts of the motor swivel holder onto the steering plates on the motor. The motor terminal block should point backwards to the chassis.

Then insert the two locking bolts from outside through the bearing bushes on the chassis and let them snap in. Subsequently slide the suction hose back onto the suction port, then plug in the motor disconnector on the bottom side of the switch box and secure it with the handle.



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!

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. For loading, only use lifting gear and tackle of sufficient capacity.



It is not allowed to move the machine with rotating grinding wheel outside of the area in which grinding works have to be performed.



Injury hazard: Down coming parts!

2.13 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 dismounted grinding wheels so, that the grinding wheels not exposed to mechanical damages and harmful environmental conditions (UV radiation, temperature, humidity, etc.).

3. Preparing for Operation

3.1 Export checking

Remove the transport packaging and dispose of it in an environmentally responsible way. Check the machine for completeness and intactness. For the scope of delivery, see "Scope of delivery and provided accessory". Secure the machine against accidental start-up and rolling away.



Attention: Read and observe all operating instructions which are relevant for the machine!

3.2 Installation

Place the machine on an even, firm and stable ground. Have the working area well lightened. Keep the working area clean, cluttered areas invite injuries.

Comply with the manufacturer's requirements for the electricity, the compressed air and the water supply. Lay the power cables and the water pipes in such a way that damage by the grinding disc is excluded.

3.3 Grinding wheel

The grinding wheels must meet the specification of **GÖLZ® GmbH**. Use the corresponding grinding wheels depending on the material to be processed, the machining process and the type of work to be performed! When not used properly, no liability is assumed for damages resulting therefrom.

All used grinding wheels must be designed, regarding their maximum admissible speed, for the max. drive speed of the machine. For machines with variable drive speed, use grinding wheels which, regarding their maximum admissible speed, correspond to the respective maximum drive speed of the machine. Never use faulty or damaged grinding wheels. Check the correct rotation of the grinding wheels on the protection guard!

Check the grinding wheel is well fastened before beginning to operate. Defective grinding wheels must be replaced immediately!

Cut off the engine or disconnect the power supply before mounting or changing grinding wheel. After mounting, do not leave any tools, such as open-end spanners, on the machine.

Use only grinding wheels suitable to the grinding wheel acceptance (arbor hole, flanges).



Danger: Faulty or damaged grinding wheels can cause injuries to the operator and other persons!



Information: Wrong rotation of the grinding wheel will result in more wear of the grinding wheel!



Danger: Wrong rotation of the grinding wheel may result in segments cracking off and can cause injuries to the operator or other persons!

3.3.1 Mounting the grinding wheel

Grinding wheel mounting:

- Mount the grinding wheel to the manufacturer's odds (Observe the min. flange-Ø; use only original screws or nuts).

- Use only grinding wheel diameters which are allowed by the manufacturer.



Note: carefully clean all housing and locking elements before mounting the grinding tools, e.g. the dovetail, the locking ring, the bolts and the nuts.



Danger! Always wear safety gloves for this operation to avoid hand injuries!

Make sure the machine is at a standstill and disconnected from the mains, then fold the push bar and bring the chassis backwards into vertical position. Subsequently loosen the hexagon screw of the locking ring with the provided tool and turn the latter counterclockwise to the stop to remove it.

Remove already mounted grinding plates. Carefully hit the synthetic or rubber hammer from the outside on the grinding discs to loosen them. To prevent the grinding plates from falling down and thereby causing accidental damage, grasp them with the other hand.

Drive the new grinding plates to be fitted from inside to the outside into the dovetail guides, using the synthetic or rubber hammer provided. Make sure that the grinding disc tool lodging and the grinding plates are perfectly clean and free from grinding residues in order to avoid subsequent imbalance of the grinding disc.

Then fix back the locking ring by sliding it with the bore over the hexagon screw and then turning it clockwise to the stop. Make sure in doing so that the locking rail's bended edges point outward and that the ring lies flat on the grinding disc. Finally retighten the hexagon screw with the provided tool.



Gefahr: Es ist nicht erlaubt, die Maschine ohne Schleifscheibenschutzhaube zu betreiben!

3.3.2 Height compensation of the grinding wheel

A manual height compensation is not necessary when grinding with grinding tools of different heights as it is carried out automatically through the oscillating motor lodging.

3.4 Water supply



Important! Always use the wet process or the dry process with dust extraction in order to prevent the occurrence of noxious fine dust or to contain its spread and to enhance the grinding tool lifetime.



Attention: Tools which are only designed for wet cutting technique, must never be used without water supply! Always make sure that there is enough water supply!

The supply of water at the grinding ensures that the tool is cooled and the dust of the material is bound.



Attention: Use only water for grinding which is free from coarse impurities! Do not use salt water!

3.5 Dust extraction



Attention: Tools designed for dry grinding must never be used without dust extraction. Grinding dusts are harmful to health.

Use only one powerful and suitable one in dry grinding operation Vacuum cleaner. You can ask the manufacturer of the floor grinding machine for information about the suitable suction pad selection.

Connect the vacuum cleaner to the suction connection of the grinding machine and switch it on. Then start the grinding machine as described and start the grinding process. Make sure that the filters of the vacuum cleaner do not become clogged during grinding operation so that sufficient dust extraction is ensured at all times.

A clogging of the filter can be done primarily when grinding floors with an increased moisture content.

When finishing the grinding process, first switch off the grinding machine and then the vacuum cleaner.



4. Operation



	Information: Unconditional observe the owner's manual of the engine manufacturer!
	Danger: Never touch rotating parts like motor shaft or grinding wheel!

4.1 Before starting the machine

Check the machine for safe operating condition.

- All components must be properly mounted.
- Do not make any changes on operating elements and safety devices.

The machine may only be operated in safe operating condition.

Lock the handlebar so that the machine can be operated in a favorable posture.

If work is carried out where harmful or explosive substances, such as dust, sludge occur, observe the applicable national regulations.

If there is a risk that, during the grinding process, material particles are accelerated outwards, wear safety goggles.

	Danger: Demolition parts can cause injuries to the operator while cutting!
--	---

When travelling on public roads, ways and places always observe the valid traffic regulations and, if necessary, make sure beforehand that the machine is in a condition compatible with these regulations.

After operating secure the machine against unintentional moving.

	Danger: The sound pressure may exceed 85 dB(A)!
--	--

Appropriate to the application of the machine it could be necessary to wear further protective equipment.

	Danger: Down coming parts at the building site can cause injuries to the operator!
--	---

The working area is reserved only for the operator. Keep unauthorized persons out of the working area. Make sure the operator always has well sight to the working area. He always has to intervene in the working process. Never operate the machine without mounted safety devices.

Careless handling can lead to life-threatening injuries caused by the rotating grinding wheel. Only operate the machine with fully mounted protection guard.

Nobody is allowed to remain in the working area nor in the area where falling segments of the grinding wheel can be accelerated outwards (minimum safety distance 10m). If this safety distance cannot be respected, the danger zone must be closed or be marked by warning signs.

Care for the whereabouts of cooling and rinsing water as well as of grinding sludge.
Grinding sludge must be collected, filtered and disposed of.

4.2 Grinding process



It is not allowed to move the machine with rotating grinding wheel outside of the area in which grinding works have to be performed.

In the dry grinding process, first switch on the dust extraction before switching on the grinder.

In the wet grinding process, before starting the grinder, open the shut-off valve of the water supply and regulate the desired amount of water.

Then push the handle on the push bar to lift the grinding disc from the floor and start the grinding machine's engine by pushing the green button on the machine switch box. Let the grinding machine slowly down again so that the grinding disc gets in contact with the floor and start grinding.

You can now grind either in a straight line or in the right / left pendulum method. The grinder can be pushed as well as pulled. Depending on the work experience and after the selection of the grinding tool, the grinding pattern changes.

The removal depth is determined by the feed rate that the operator specifies during grinding. A faster feed means less material removal and working depth, a lower feed means greater material removal or working depth.



Danger: When grinding, make sure that you do not drive the grinding wheel over the connecting cable and damage it. RISK OF DEATH!

4.3 Flush wall grinding

The protection cover can be partially opened on the right and on the left side of the grinding machine for flush wall grinding. To do this, loosen the two wing screws at the chosen side and take off the removable part of the protection cover. **Attention! Only one side of the protection cover may be opened at a time, otherwise there would be an acute risk of accidents, and an adequate dust extraction would no longer be possible.**



Subsequently turn the locking bout on the chassis with the handle into the upper position and then loosen the star grip screw. You can now move the machine to the right or the left using the handle so that the chassis shifts aside and you can grind flush wall. Then secure the chassis by engaging the locking bout in the desired position.

At the end of the flush wall grinding, the protection cover must immediately be locked completely and the chassis shifted into the middle position.

Attention! Switch off the machine and pull the mains plug before starting any mounting work on the protection cover. This warning applies to the disassembly as well as to the assembly of the partial protection. The chassis too may only be moved when the machine is not running.

4.4 Finish the grinding process

To finish the grinding process, lift the grinding plate with the handle and the push bar up from the ground, push the red off-button on the grinding machine's switch box and wait till the drive engine has stopped. Then return the machine to the working position and close the shut-off valve of the water supply or switch off the dust extraction.

5. Maintenance

5.1 General

	<i>Information: Clean the machine after every operation. Observe local environmental regulations!</i>
---	--

For maintenance jobs the machine has to be shut down. For maintenance jobs which must be done while the machine is running, the grinding wheel has to be dismounted before beginning the job.

In accordance to the given cycles, the subsequently described maintenance work has to be enforced. Also the wearing part subject to no certain maintenance-intervals has to be checked regularly for wear and to adjust if necessary or to exchange.

		Before starting work	After work	Weekly	Yearly	In the event of a malfunction
Complete machine	Visual inspection (condition)	X			X	X
	clean		X			
Grinding wheel holder	clean			X		
Fan cover motor	check	X		X		X
	clean		X			
Water nozzles	clean		X			
Tool	check	X				X
	clean		X			
	replace				X	

5.2 Machine

Clean the machine after each duty and check all functions. Replace all necessary parts that are out of order or worn out immediately.

5.3 Grinding wheel

When ending a grinding job - check grinding wheel 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 grinding wheel for repair.

6. Troubleshooting



Attention: In the event of changes in the behaviour of the machine during operation, stop the machine immediately and report the malfunction to the competent authority/person!

Problem	Cause	Remedy
Motor		
Engine does not start!	Faulty power supply	Have the power supply checked
	Connection cable damaged	Replace connecting cable
	Motor defekt	Replace the engine
Engine stops	Too high feed rate	Reduce feed rate
Grinding process		
No performance when grinding,	Wrong tool selection	Recommendation for use observe the grinding tools of the manufacturer
Grinding wheel runs out of round	Imbalance of the grinding wheel	Replace grinding wheel
Too much dust	No dust extraction	Use a suitable vacuum cleaner
	Filter of the vacuum cleaner dirty	Clean the filter of the vacuum cleaner
	Suction hood defective	Replace the suction hood
Wear of the grinding wheel too high	Wrong grinding wheel	Use a harder grinding wheel
	Insufficient cooling	Increase the amount of cooling water or use dust extraction
Segments come off No performance when grinding, grinding wheel is dull	Cutting disc overheated, not enough water	Reseal segments; Optimize cooling water supply
	overheated	Optimize cooling water supply
	wrong cutting wheel	Use the correct grinding wheel
Sanding is not optimal	Diamonds on the segments are dull	sharpen
	Wrong grinding tool selection	Recommended use observe the grinding tools of the manufacturer
	Feed motion too fast	Reduce feed rate

7. Spare parts list

7.1 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 7.1.3 "Distribution agencies".

7.1.1 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.



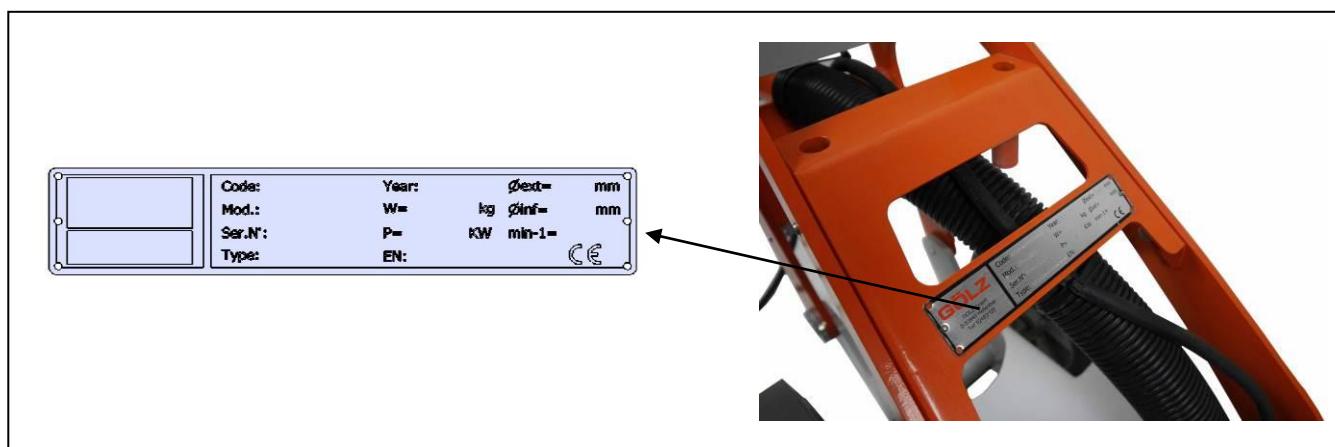
Danger: Non-observance of this instruction can result in injury which, in the worst case, can result in death!

7.1.2 Ordering information



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!

Always refer to the information on the nameplate when ordering spare parts, e.g. the machine type, the machine number and the construction year.



		
So bekommen Sie schnell und richtig Ihr Ersatzteil	Always indicate	Pour obtenir rapidement les pièces de rechange indiquer
<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 à la 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 à la 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.

7.1.3 Distribution agencies

Deutschland – Germany - Allemagne GÖLZ® GmbH Dommersbach 51 53940 Hellenthal Tel: +49 (0)2482-120 Fax: +49 (0)2482-12135 E-mail: info@gelz.de / Internet: www.gelz.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@gelz.at / Internet: www.gelz.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@gelz.co.uk / Internet: www.gelz.co.uk	Benelux GÖLZ® Benelux Eupener Straße 61 4731 Raeren-Eynatten Tel: +32 (0) 47 54 71 799 Fax: +32 (0) 13 78 33 28 E-mail: benelux@gelz.de / Internet: www.gelz-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.gelz-online.com

7.2 Wearing parts

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

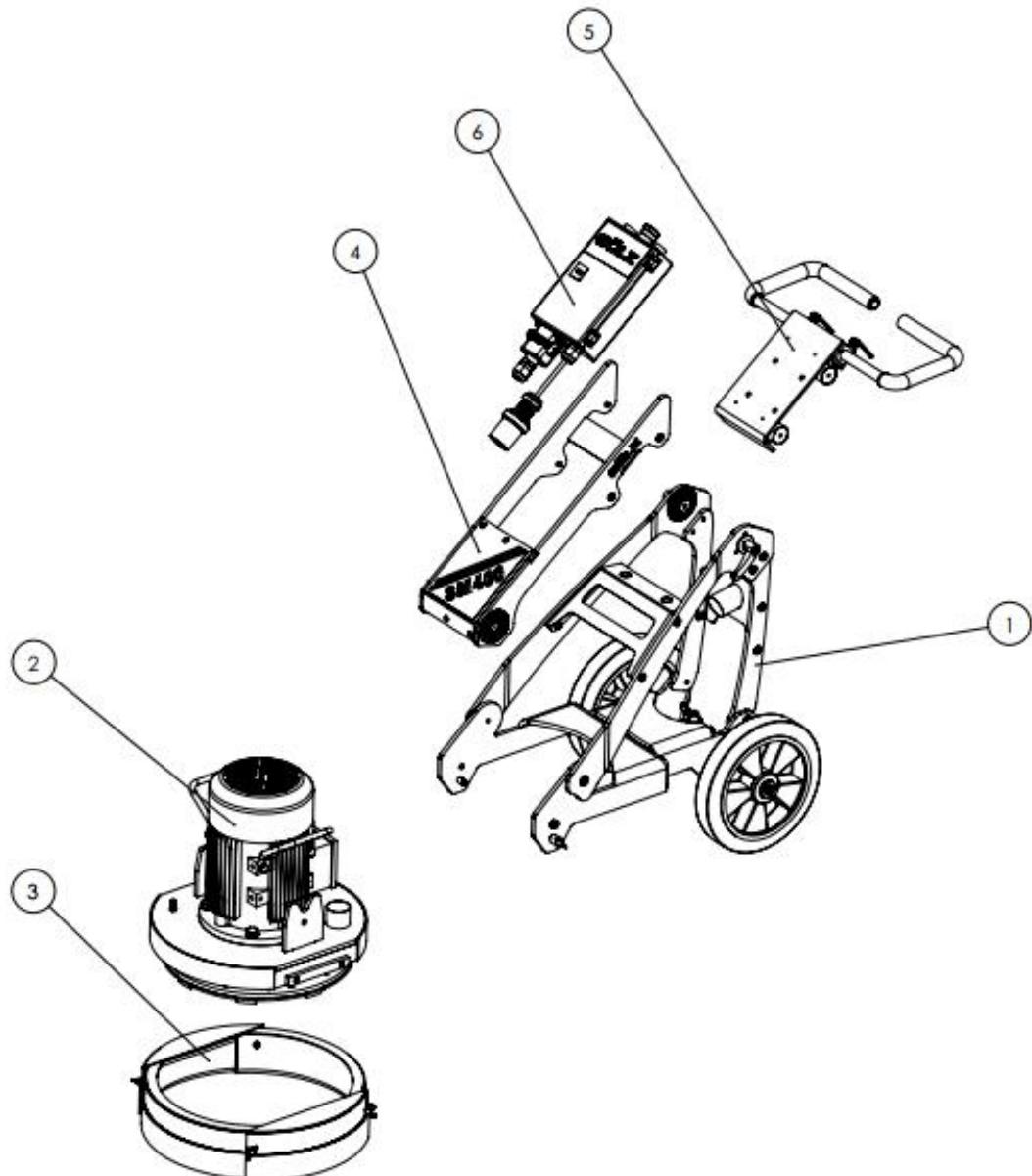
Wearing parts are the parts subject to operation-related (natural) wear during proper use of the device. The wearing time cannot be uniformly defined and differs according to the intensity of use. The wearing parts must be adjusted, maintained and, if necessary, replaced for the specific device in accordance 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

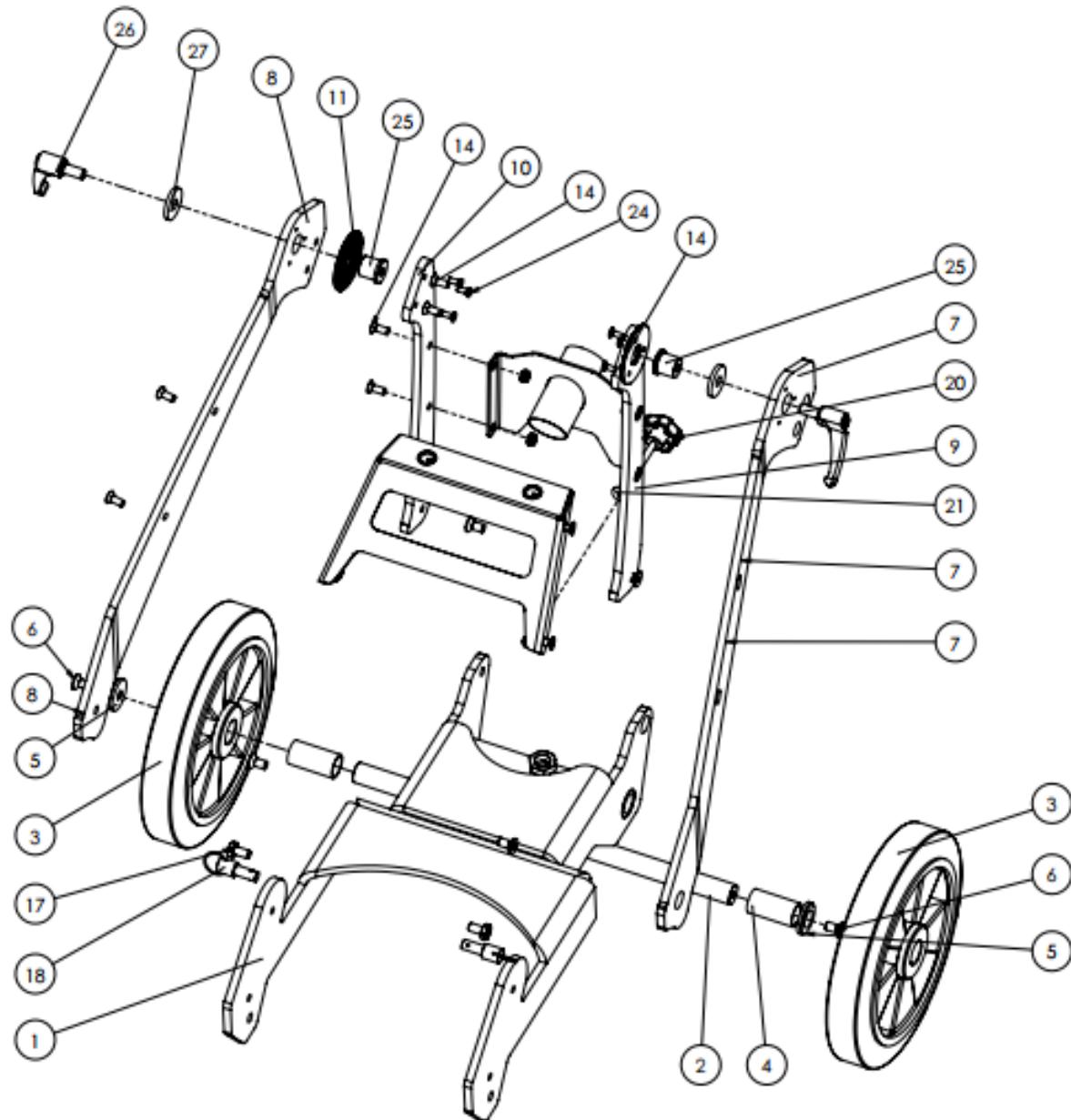
8. Exploded view and spare parts list

8.1 Machine



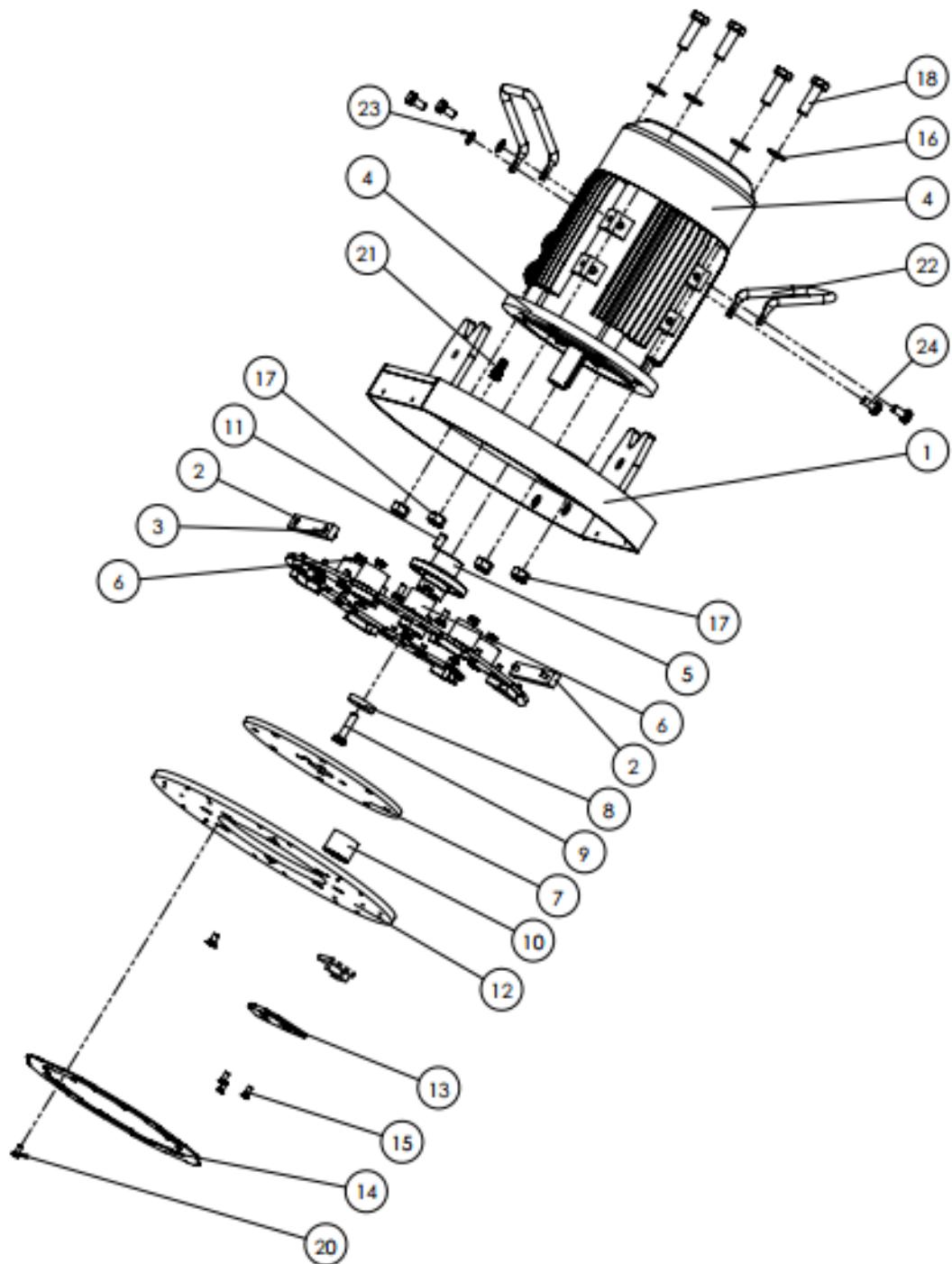
Pos.	Art.-Nr.	Qty.	Norm / Info	Inhalt	Bezeichnung	Description	Désignation
1	-	1			Grundgestell kpl.	Main frame complete	Châssis complète
2	-	1			Schleifkopf kpl.	Grinding head complete	Tête de ponçage complète
3	-	1	700x1,5x456	Schutzaube kpl.	Protection guard complete	Capot protecteur complete	
4	-	1		Schubholm kpl.	Arm complete	Guidon complet	
5	-	1		Schubbügel kpl.	Handle complete	Poignée complète	
6	-	1		Klemmkasten kpl.	Control system complete	Boîtier électrique complet	

8.2 Main frame



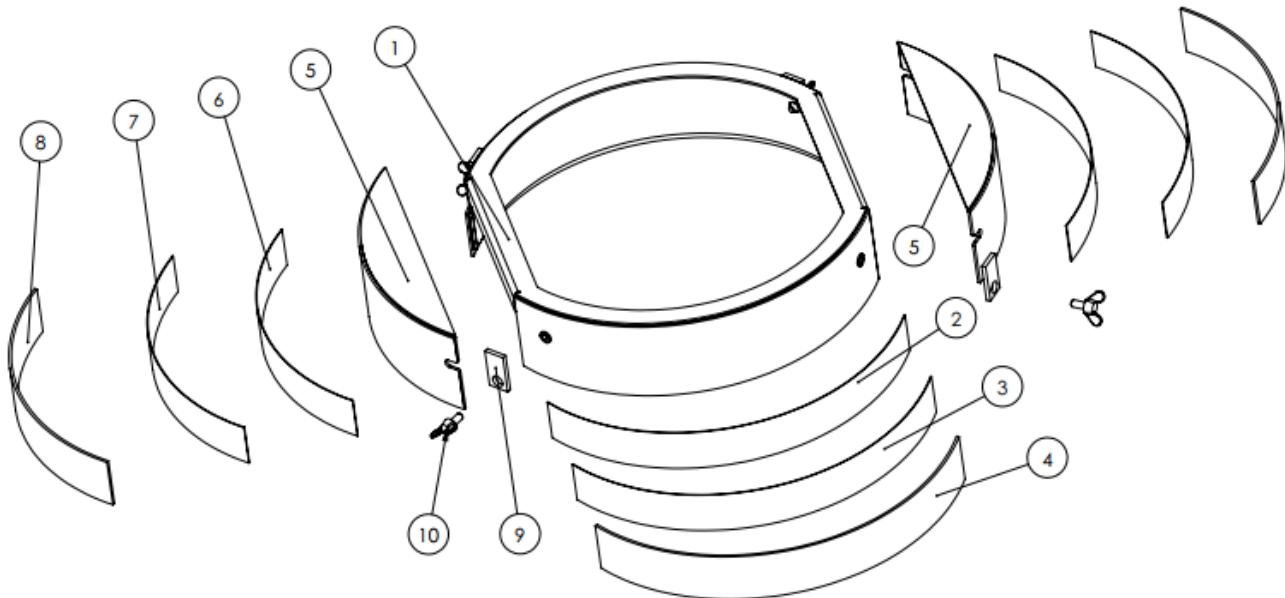
Pos.	Art.-Nr.	Qty.	Norm / Info	Inhalt	Bezeichnung	Description	Désignation
1	-	1			Grundgestell	Fixed frame	Châssis
2	-	1			Welle	Shaft	Arbre
3	-	2	Ø 300		Rad	Wheel	Roue
4	-	2			Buchse	Axle sleeve	Douille
5	-	2			Scheibe	Washer	Rondelle
6	-	6	M10x20 ISO 10642		Schraube	Screw	Vis
7	-	1			Linker Tragholmarm	Left arm	Longeron gauche
8	-	1			Rechter Tragholmarm	Right arm	Longeron droit
9	-	1			Linke Druckplatte	Left supported plate	Semelle gauche
10	-	1			Rechte Druckplatte	Right supported plate	Semelle droite
11	-	2			Sperrzahnkranz	Fluted disc	Disque à rochet
12	-	1			Halter Wassertank	Water tank holder	Support réservoir d'eau
13	-	1			Sauganschlußstutzen	Dust tube holder	Raccord aspirateur
14	-	12	M8x20 ISO 10642		Schraube	Screw	Vis
15	-	8	M8 ISO 10511		Mutter	Nut	Écrou
16	-	2	M10x25 ISO10642		Schraube	Washer	Rondelle
17	-	2	M10 ISO 4035		Mutter	Nut	Écrou
18	-	2			Rastbolzen	Index plunger	Verrou d'indexation
19	-	1			Sperrriegel	Cam plunger	Doigt d'indexage verrouillable
20	-	1	M8x50		Sterngriffschraube	Star grip screw	Poignée-étoile
21	-	1	8,4 ISO 7093		Scheibe	Washer	Rondelle
22	-	1	M8 ISO 7040		Mutter	Nut	Écrou
23	-	2	M5x6 ISO 4026		Gewindestift	Set screw	Tige filetée
24	-	6	M6x16 ISO 10642		Schraube	Screw	Vis
25	-	2			Axial-Klemm-Mutter	Axle sleeve	Ecrou de serrage
26	-	2	GN602-78- M12-25-SW		Klemmhebel	Adjustable handle	Levier de serrage
27	-	1	A8 DIN127		Federring	Spring washer	Rondelle-ressort
28	-	2			Dichtung	Heavy gasket	Joint

8.3 Grinding head



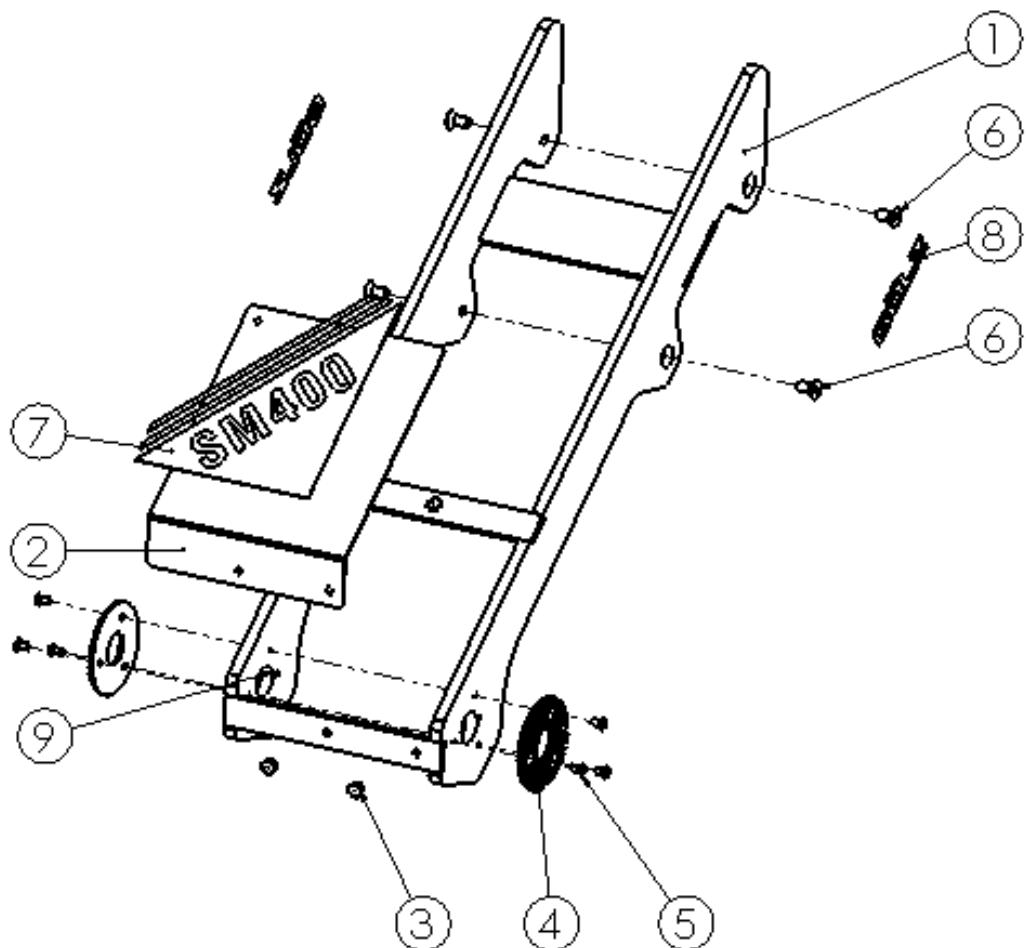
Pos.	Art.-Nr.	Qty.	Norm / Info	Inhalt	Bezeichnung	Description	Désignation
1	-	1			Motorträger	Motor frame	Châssis moteur
2	-	2			Endanschlag	Nylon limited block	Butée d'arrêt
3	-	4	M6x12 ISO 4762		Schraube	Screw	Vis
4	-	1	380V 2.2KW 960rpm B5		Motor	Motor	Moteur
5	-	1			Motoradapterplatte	Axle sleeve	Manchon d'essieu
6	-	12	M8x16 ISO 4017		Schraube	Screw	Vis
7	-	1			Zwischenplatte	Transmission plate	Plaque de transmission
8	-	1			Scheibe	Washer	Rondelle
9	-	1	M10x40 ISO 4017		Schraube	Screw	Vis
10	0284 730 1025	8			Gummipuffer	Cylindrical rubber block	Tampons caoutchouc
11	-	1			Zylinderstift	Cylindrical pin	Cheville cylindrique
12	0284 720 3004	1			Schleifteller	Blade plate	Plateau de ponçage
13	0284 400 1022	8			Segmenthalter	Blade frame	Support queue d'aronde
14	-	1			Sicherungsblech	Limited plate	Plaque de fixation
15	-	24	M6x16 ISO 10642		Schraube	Screw	Vis
16	-	4	A15 ISO 7089		Scheibe	Washer	Rondelle
17	-	4	M14 ISO 7040		Mutter	Nut	Écrou
18	-	4	M14x45 ISO 4017		Schraube	Screw	Vis
19	-	8	M8x16 ISO 10642		Schraube	Screw	Vis
20	-	2	M6x12 ISO 4017		Schraube	Screw	Vis
21	0295 000 0584	1	male		Schlauchtülle	Hose connector	Raccord à queue crantée
22		2			Griff	Motor handle	Poignée
23		4	A10 DIN127		Federring	Spring washer	Rondelle-ressort
24		4	M10x20 ISO 4017		Schraube	Screw	Vis

8.4 Protection guard



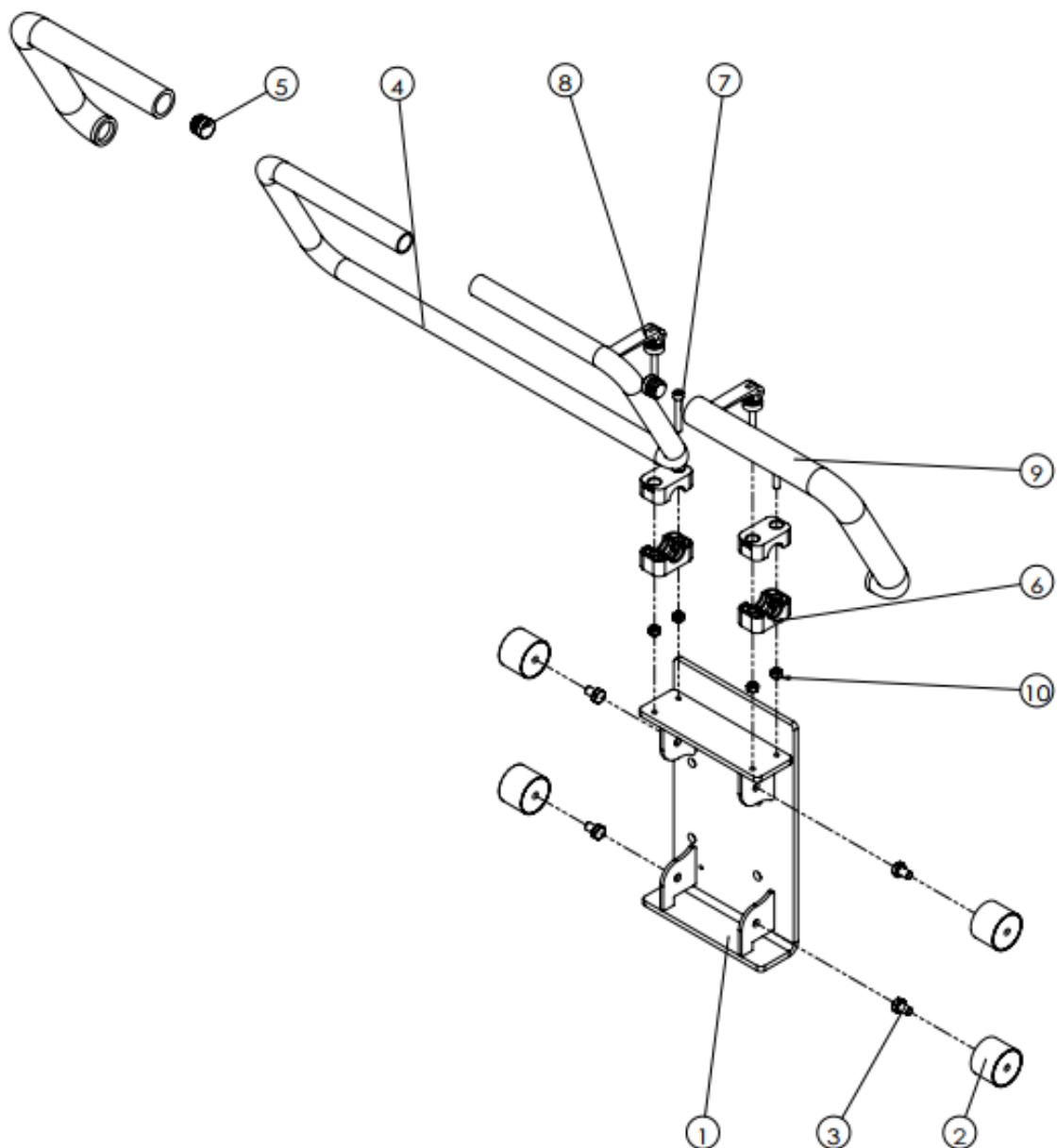
Pos.	Art.-Nr.	Qty.	Norm / Info	Inhalt	Bezeichnung	Description	Désignation
1	-	1			Schutzhaut	Protection guard	Capot protecteur
2	-	2	male		Klettband	Magic sticker	Bandes velcro
3	-	2	female		Klettband	Magic sticker	Bandes velcro
4	-	2			Gummistreifen	Rubber strip	Bandes d'usure en caoutchouc
5	-	2			Schutzhaut	Side protection guard	Capot protecteur
6	-	2	male		Klettband	Magic sticker	Bandes velcro
7	-	2	female		Klettband	Magic sticker	Bandes velcro
8	-	2			Gummi-Schürfleiste	Rubber strip	Bandes d'usure en caoutchouc
9	-	4			Gummimatte	Rubber mat	Tapis caoutchouc
10	-	4	M8x18 DIN316		Flügelschraube	Wing screw	Vis à ailettes

8.5 Push bar cpl.



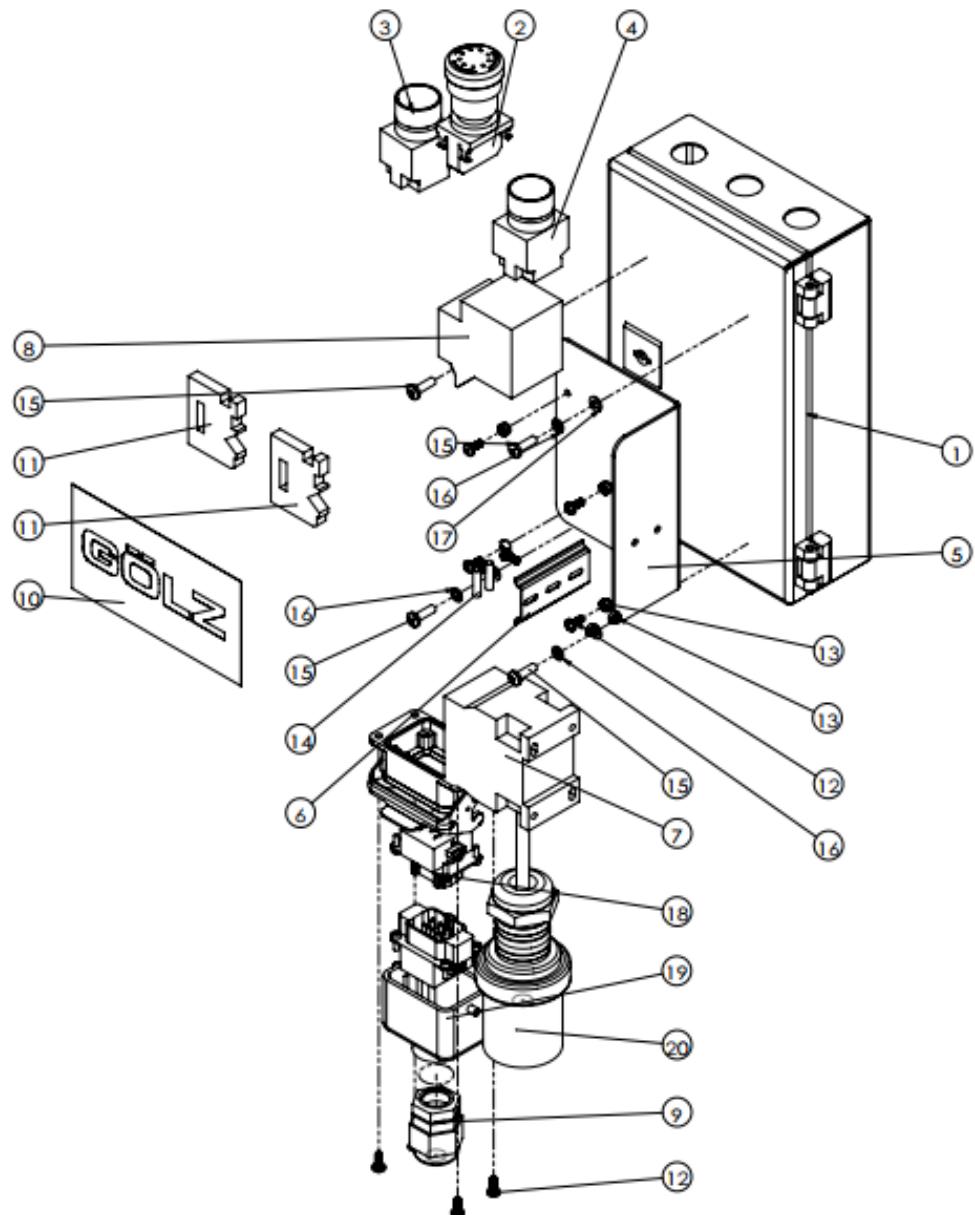
Pos.	Art.-Nr.	Qty.	Norm / Info	Inhalt	Bezeichnung	Description	Désignation
1	-	1			Schubholm	Holm	Guidon
2	-	1			Abdeckblech	Plate	Plaque de protection
3	-	4	d5x10 DIN7337		Blindniete	Blind rivet	Rivet aveugle
4	-	2			Sperrzahnkranz	Fluted disc	Disque à rochet
5	-	6	M6x16 ISO 10642		Schraube	Screw	Vis
6	-	4	M8x16 ISO 10642		Schraube	Screw	Vis
7	-	1			Aufkleber	Sticker	Autocollant
8	-	2			Aufkleber	Sticker	Autocollant
9	-	2	M5x12 ISO 4026		Gewindestift	Set screw	Tige filetée

8.6 Handle



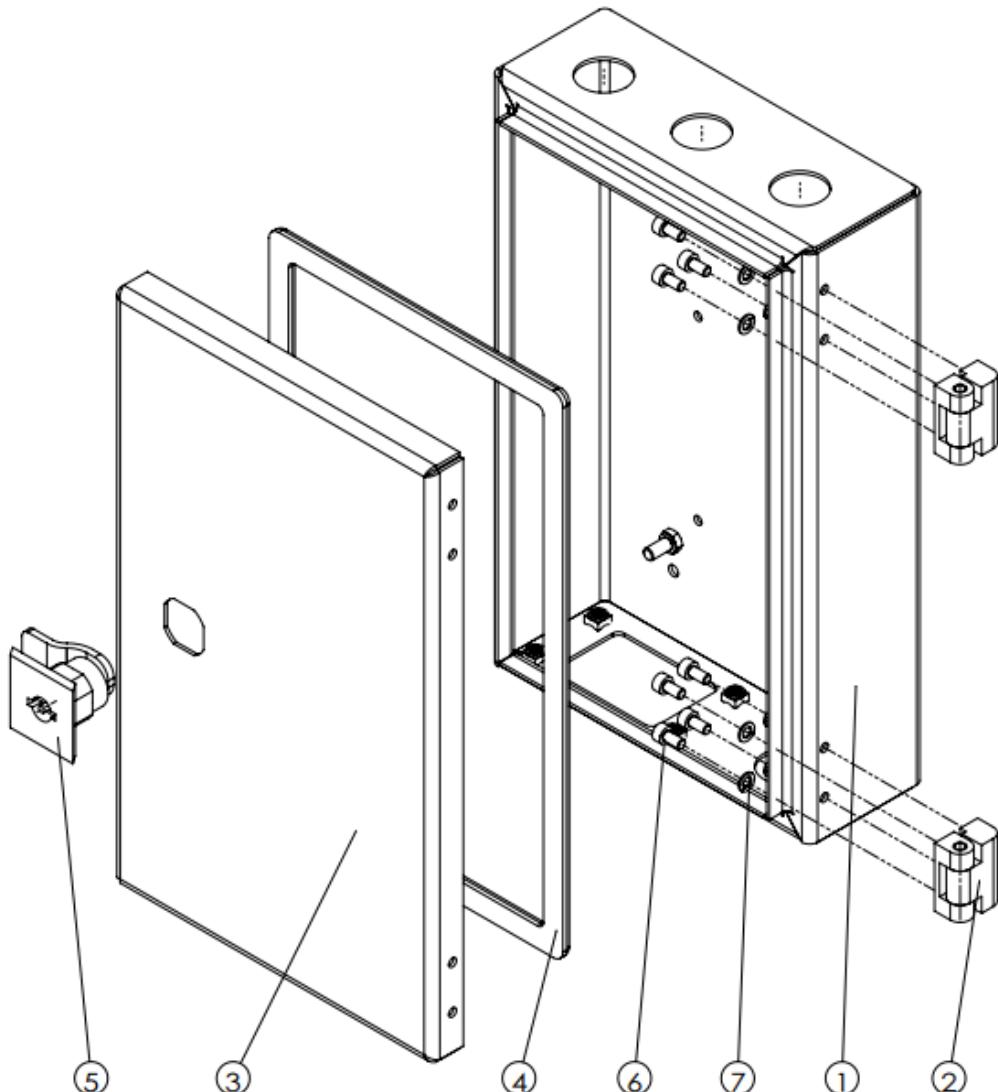
Pos.	Art.-Nr.	Qty.	Norm / Info	Inhalt	Bezeichnung	Description	Désignation
1	-	1			Klemmkasten-aufnahme	Electrical box mounting rock	Emplacement du boîtier électrique
2	-	4			Gummipuffer	Cylindrical rubber block	Tampons caoutchouc
3	-	4	M8x12 ISO 4017		Schraube	Screw	Vis
4	-	1			Schubbügel	Handle	Guidon à réglage
5	0282 170 6165	2	Ø20		Stopfen	Stopple	Bouchon
6	-	4			Kunststoff-Rohrschelle	Tube clip	Clip plastique
7		2	M6x40 x24 ISO 4762		Schraube	Screw	Vis
8	-	2			Exzenterspanner	Eccentric clamp lever	Dispositif de serrage
9	-	2	30x4x380		Gummihandgriff	Rubber pipe	Poignée caoutchouc
10	-	4	M6 ISO 7040		Mutter	Nut	Écrou

8.7 Switch box



Pos.	Art.-Nr.	Qty.	Norm / Info	Inhalt	Bezeichnung	Description	Désignation
1	-	1			Schaltkasten kpl.	Switch box complete	Armoire de commande complète
2	0282 175 9064	1			Nothalt-Taster	Emergency Stop	Bouton Arrêt d'urgence
3	-	1			Stop Taster	Stop button	Bouton arrêt
4	-	1			Start Taster	Start button	Bouton marche
5	-	1			Tragkonsole	Plate	Plaque de support
6	-	1			Klemmschiene	Fixed plate	Rail de serrage
7	-	1			Schütz	Contactor	Contacteur
8	-	1			Relais	Relay	Relais
9	-	2	PG16		Zugentlastung	Cord grip	Collier de fixation
10	-	1	Gölk		Aufkleber	Sticker	Autocollant
11	-	2			Leiterplatte	Wiring board	Fond de panier
12	-	10	M4x10 ISO 7045		Schraube	Screw	Vis
13	-	6	M4 ISO7040		Mutter	Nut	Écrou
14	-	2	2A		Sicherung	Fuse	Fusible
15	-	4	M5x16 ISO 7045		Schraube	Screw	Vis
16	-	4	A5 DIN127		Federring	Spring washer	Rondelle-ressort
17	-	4	A5,3 ISO 7089		Scheibe	Washer	Rondelle
18	-	1		female	Motortrennstecker	Motor isolation-plug	Connecteur moteur
19	-	1		male	Motortrennstecker	Motor isolation-plug	Connecteur moteur
20	-	1		380V	Stecker	Plug	Connecteur

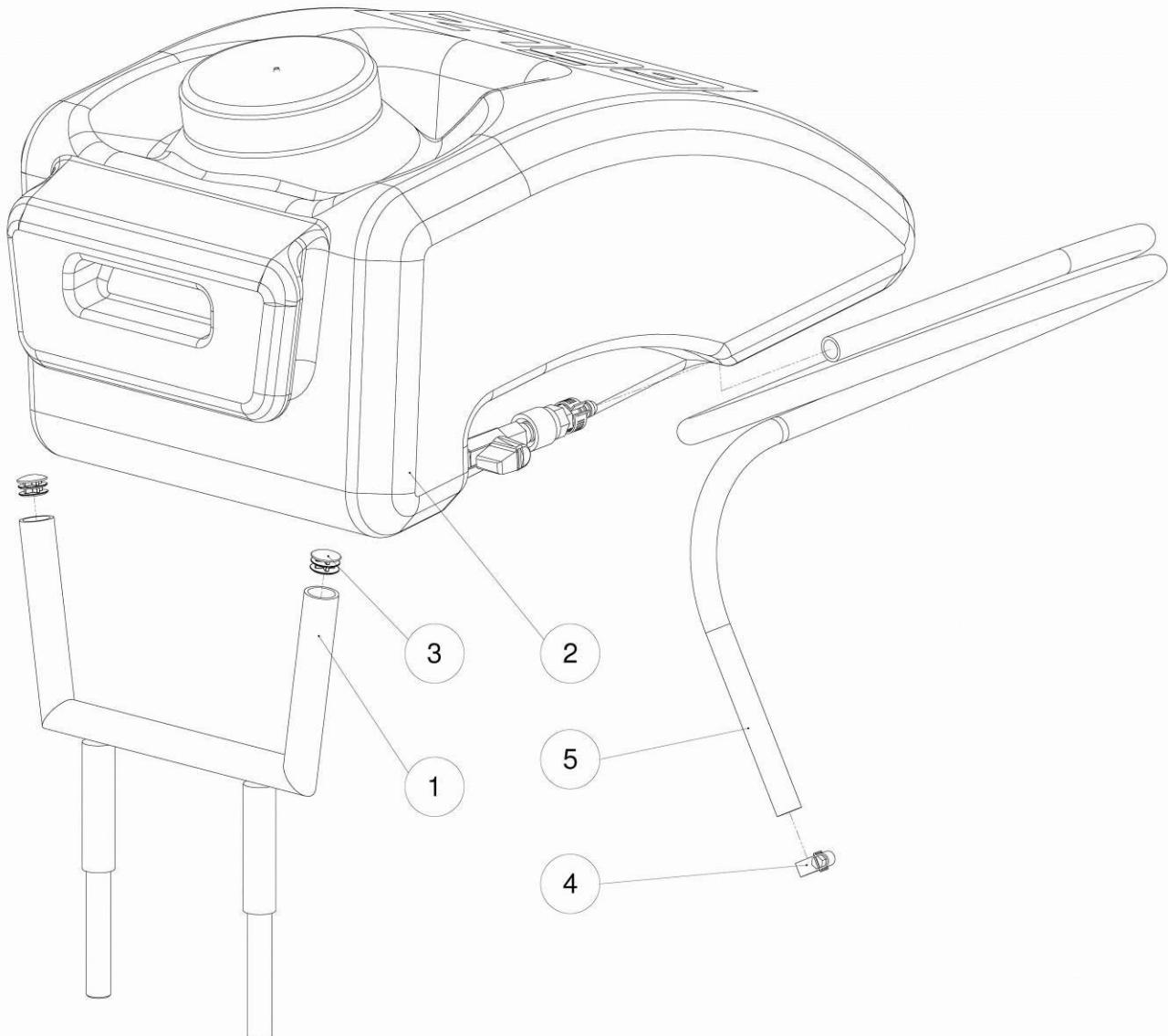
8.7.1 Switch box



Pos.	Art.-Nr.	Qty.	Norm / Info	Inhalt	Bezeichnung	Description	Désignation
1	-	1			Schaltkasten	Switch box	Armoire de commande
2	-	2			Scharnier	Hinge	Charnière
3	-	1			Deckel	Cover	Couvercle
4	-	1			Dichtstreifen	Sealing strip	Baguettes d'étanchéité
5	-	1			Schloss für Schaltkasten	Locker for switch box	Serrure pour boîtier de commande
6	-	8	M4x8 ISO 4762		Schraube	Screw	Vis
7	-	8	A4 DIN127		Federring	Spring washer	Rondelle-ressort

8.8 Optional accessory

8.8.1 Watertank 25L



Pos.	Art.-Nr.	Qty.	Norm / Info	Inhalt	Bezeichnung	Description	Désignation
1	0284 280 1011	1			Wassertankhalter	Support water tank	Support de bac à eau
2	0282 170 6161	1	25l		Wassertank	Watertank	Bac à eau
3	0281 045 0073	2	Ø 20		Stopfen	Plug	Bouchon
4	0295 000 0521	1	SGL 10-16		Schelle	Hose clamp	Collier
5	0298 100 0107	1	Ø12x2x1150		Schlauch	Hose	Tuyau

9. Wiring diagram

