

Operating instructions

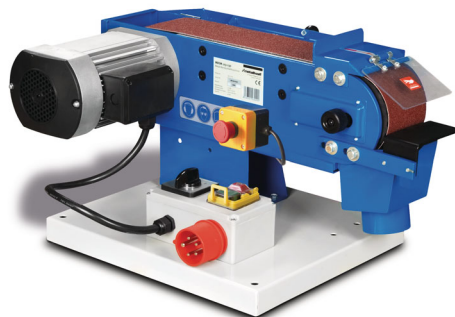
— Metal-belt sander

— MBSM 100-130

— MBSM 100-130-2



MBSM 100-130



MBSM 100-130-2

MBSM 100-130

Imprint

Product identification

Metal- belt sander

Model	Item number
MBSM 100-130 230V incl. substructure	3921221
MBSM 100-130-2 400V incl. substructure	3921220
MBSM 100-130 230V	3921226
MBSM 100-130-2 400V	3921225

Manufacturer

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Indications regarding the operating instructions

Original operating instructions

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Subject to technical modifications and error.

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1 Introduction

With the purchase of the device of METALLKRAFT you have made a good choice.

Thoroughly read the operating instructions before commissioning the machine.

It informs you about the proper commissioning, the intended use as well as the safe and efficient operation and maintenance of your device.

The operating instructions are part of the device. It must always be stored at the place of use of the device. In addition, the local accident prevention regulations and general safety regulations apply to the area of application of the device.

The illustrations in these operating instructions serve the general comprehension and may deviate from the actual type.

The term "machine" replaces the usual trade name of the device to which these operating instructions refer.

1.1 Copyright

The contents of these instructions are copyright. Their application is admissible in the frame the device utilisation. An application beyond the described application is not allowed without written approval of the manufacturer. For the protection of our products, we shall register trademark, patent and design rights, as this is possible in individual cases. We strongly oppose any infringement of our intellectual property.

1.2 Customer service

Please contact your dealer if you have any questions about your machine or technical information. There you will be happy to help with expert advice and information.

Germany:

Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Str. 26
D-96103 Hallstadt

Repair-Service:

Fax: 0049 (0) 951 96555-111
E-Mail: service@stuermer-maschinen.de

Spare part orders:

Fax: 0049 (0) 951 96555-119
E-Mail: ersatzteile@stuermer-maschinen.de

We are always interested in valuable experience and knowledge gained from using the application-which then could be shared and be valuable to develop our products even further.

1.3 Limitation of liability

All information and notes in these operating instructions were summarized taking the applicable standards and rules, the state-of-the-art and our long-term knowledge and experiences into consideration.

In the following cases the manufacturer is not liable for damages:

- Non-observance of the operating instructions,
- Inappropriate use,
- Use of untrained staff,
- Unauthorized modifications,
- Technical changes,
- Use of not allowed spare parts.

The actual scope of delivery may deviate from the explanations and presentations described here in case of special models, when using additional ordering options or due to latest technical modifications.

The obligations agreed in the delivery contract, the general terms and conditions as well as the delivery conditions of the manufacturer and the legal regulations at the time of the conclusion of the contract are applicable.

2 Safety

This paragraph will give you an overview of all important safety packages for the protection of persons as well as for the safe and undisturbed operation. Other task-based safety notes are included in the individual chapters.

2.1 Symbol explanation

Safety instructions

The safety notes in these operating instructions are highlighted by symbols. The safety notes are introduced by signal words which express the concern of the risk.



DANGER!

This combination of symbol and signal words indicate an imminently dangerous situation which may lead to death or severe injuries if they are not avoided.



WARNING!

This combination of symbol and signal words indicate a possibly dangerous situation which may lead to death or severe injuries if they are not avoided.



CAUTION!

This combination of symbol and signal words indicate a possibly dangerous situation which may lead to minor or light injuries if they are not avoided.



ATTENTION!

This combination of symbol and signal word indicates a potentially hazardous situation which, if not avoided, could result in property damage and environmental damage.



NOTE!

This combination of symbol and signal words indicate a possibly dangerous situation which may lead to property and environmental damages if they are not avoided.

Tips and recommendations



Tips and recommendations

This symbol highlights useful tips and recommendations as well as information for an efficient and trouble-free operation.

It is necessary to observe the safety notes quoted in these operating instructions in order to reduce the risks for personal injuries and damages to property.

2.2 Obligations of the operating company

The operating company is the person who operates the machine for business or commercial reasons by herself, or leaves it to a third party for use or application, and who bears the legal product responsibility for the protection of the user, the staff or for third parties.

Obligations of the operating company:

If the machine is used for commercial purposes, the operating company must comply with the legal working safety regulations. Therefore, the safety notes in this operating manual, as well as the safety, accident prevention and environment protection regulations applying for the area of application of the machine must be met. The following applies in particular:

- The operating company must be informed about the applying industrial safety regulations and further analyse hazards resulting from the special working conditions at the place of use the machine. She must implement these in form of operating manuals for the operation the machine.
- During the entire lifetime of the machine, the operating company must verify whether the operating manuals prepared by her correspond to the current status of the regulations, and must adapt these if necessary.
- The operating company must unambiguously regulate and determine the responsibilities for installation, operation, troubleshooting, maintenance and cleaning.
- The operating company must ensure that all persons who work with the machine, have read and understood this manual. Furthermore she must instruct the staff in regular intervals and inform them about the hazards.
- The operator must provide the necessary protective equipment to the staff and order the use of the necessary protective equipment in a binding way.

Furthermore the operating company is responsible to keep the machine always in a technically flawless state. Thus, the following applies:

- The operator must ensure that the maintenance intervals described in this manual are kept.
- The operator must have all safety devices checked regularly for their good working order and their integrity.

2.3 Requirements to staff

The different tasks described in this manual represent different requirements to the qualification of the persons entrusted with these tasks.



WARNING!

Danger in case of insufficient qualification of the staff!

Insufficiently qualified persons cannot estimate the risks while using the vacuum cleaner and expose themselves and others to the danger of severe or lethal injuries.

- Have all works only performed by qualified persons.
- Keep insufficiently qualified persons out of the working area.

Only persons reliable working procedures can be expected from, are allowed to perform all works. Persons the responsiveness of which is affected by e. g. drugs, alcohol or medication, are not allowed to work with the machine.

The qualifications of the personnel for the different tasks are mentioned below:

Operator:

The operator is instructed by the operating company about the assigned tasks and possible risks in case of improper behavior. Any tasks which need to be performed beyond the operation in the standard mode must only be performed by the operator if it is indicated in these instructions and if the operating company expressly commissioned the operator.

Electrically qualified person:

Electrically qualified person is due to their professional training, knowledge and experience as well as knowledge of the relevant standards and regulations, in a position to carry out work on the electrical systems and to independently recognize and avoid possible dangers.

Qualified personnel:

Due to their professional training, knowledge and experience as well as their knowledge of relevant regulations the specialist staff is able to perform the assigned tasks and to recognize and avoid any possible dangers themselves.

Manufacturer:

Certain works may only be performed by specialist personnel of the manufacturer. Other personnel is not authorized to perform these works. Please contact our customer service for the execution of all arising work.

2.4 Personal protective equipment

The personal protective equipment serves to protect persons against impairments of safety and health while working. The staff member has to wear personal protective equipment while performing different tasks on and with the machine which are indicated in the individual paragraphs of these instructions.

The personal protective equipment is explained in the following paragraph:



Eye Protection

The Eye protection protects the eyes from flying parts and liquid splashes.



Ear protection

The Hearing protection protects ears from hearing damage caused by noise.



Head protection

The industrial helmet protects the head against falling objects and knocking against fixed objects.



Protective gloves

The protective gloves serve to protect the hands against sharp components as well as against friction, abrasions or deep injuries.



Safety boots

Safety boots protect the feet from being crushed, falling parts and slipping over on slippery ground.



Protective clothes

Protective clothes are made of a tightly fitted fabric without the protruding parts of low tear strength.

2.5 Safety devices

To protect against flying sparks, a protective screen is attached to the housing above the contact wheel. The on-off switch unit is combined with an emergency stop switch.



WARNING!

Danger to life due to non-functioning safety devices!

In case of dysfunctional or overridden safety devices there is a danger of getting serious injuries or even danger to life.

- Before starting work, check that all safety equipment is in place and correctly installed.
- Never override or bypass safety devices.
- Ensure that all safety devices are always accessible.

When the machine is running, protective covers and guards must never be opened or removed.

EMERGENCY STOP - Button

Press the emergency stop button (Fig. 1) and the device will stop immediately. The power supply is switched off or the drives are mechanically disconnected. After the emergency stop button has been pressed, it must be unlocked by turning so that the machine can be switched on again.

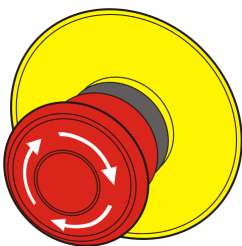


Fig. 1: EMERGENCY-STOP-Button



WARNING!

Danger to life due to unintentional restart!

In case of unintentional restart there is a danger of getting serious injuries or even danger to life.

- Before restarting, make sure that the cause of the emergency stop has been remedied and all safety devices are installed and functioning.
- Only unlock the emergency stop button when there is no longer any danger.

2.6 Safety identifications on the tubing sanding machine

There are safety markings and instructions attached to the pipe grinder (Fig. 2) which must be observed and followed.

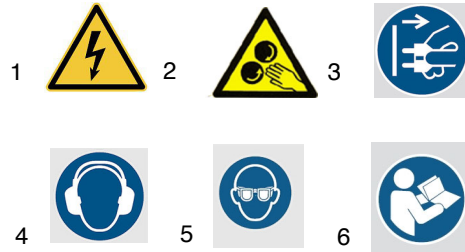


Fig. 2: Safety labels

- 1 Danger high voltage | 2 Warning about rotating machine parts, entanglement hazard | 3 Pull out the mains plug ! | 4 Wear ear protection ! | 5 wear safety glasses ! | 6 Read operating manual !

The safety markings and instructions attached to the workshop press must not be removed. Damaged or missing safety markings can lead to malfunctions, personal injury and material damage. They have to be replaced immediately.

If the safety markings are not immediately recognizable and comprehensible, the workshop press must be taken out of operation until new safety markings have been affixed.



NOTE!

The machines are designed to meet the general safety requirements. Please always observe the relevant accident prevention regulations. In case of doubt, ask the supervisor.



ATTENTION!

Before starting, using, servicing or otherwise intervening on the machine, read the instructions for use and maintenance carefully. Handling and working with the machine is only permitted for persons who are familiar with the handling and operation of the machine.

- Before switching on the machine, check the correct picking up of the workpiece!
- When working with the machine, never put your hands near rotating parts!
- Do not remove the sharp-edged chips by hand; Use hand brushes or chip hooks!

- Use the guards and fasten them securely. Never work without guards and get them working. Check the functionality before starting with the work.
- Keep the machine and its working environment always clean. Ensure adequate lighting.
- In principle, secure your workpiece when working with suitable clamping devices. Make sure there is sufficient support surface.
- The machine may not be modified in its design and may not be used for purposes other than those provided by the manufacturer.
- Never work under the influence of concentration disorders diseases, fatigue, drugs, alcohol or drugs.
- Remove tool wrench and other loose parts from the machine after installation or repair before turning on.
- Observe all safety and hazard warnings on the machine and keep them in perfect readable condition.
- Keep children and persons unfamiliar with the machine away from your work environment, machine and tools.
- The machine may only be used, equipped and maintained by persons who are familiar with it and have been informed about the dangers.
- During maintenance, armament and maintenance work, always switch off the machine! In addition, disconnect the power plug or disconnect the machine from the power supply!
- Do not pull on the power cord to pull the plug out of the socket. Protect the cable from heat, oil and sharp edges.
- Make sure that the main switch is in the "OFF" position when connecting the device to the power supply to prevent it from switching on accidentally.
- Wear tight-fitting work clothes, safety glasses, safety shoes and a hearing protection. Tie your long hair together. When working, do not wear watches, straps, chains, rings or gloves (rotating parts!).
- Eliminate disruptions that affect safety immediately.
- Never leave the machine unattended in operation and remain with the machine until the tool is completely stopped. Then remove the mains plug to protect against unintentional switching on.
- Protect the machine from wet (short circuit hazard).
- Never use power tools and machines near flammable liquids and gases (risk of explosion!).
- Before each use of the machine, make sure that no parts are damaged. Damaged parts must be replaced immediately to avoid any danger!
- Do not overload the machine! You work better and safer in the specified performance range. Use the

right tool! Make sure that the tools are not dull or damaged.

- Only use original spare parts and accessories in order to avoid possible danger and risks of accident.

2.7 Additional safety regulations

- The workpiece may only be brought into contact with it after the grinding belt has been switched on.
- Keep your hands away from rotating parts.
- This machine is not suitable for wet grinding. Never use water on the workpiece surface or on the sanding belt.

2.8 Residual risk

Even if all safety regulations are followed and the machine is used correctly, there are still residual risks listed below:

- Touching rotating parts or tools.
- Breakage / tear of the abrasives.
- Injuries due to flying workpieces or parts of workpieces.
- Fire hazard with insufficient ventilation of the engine.
- Touching of live parts.
- Impairment of hearing during prolonged work without hearing protection.



NOTE!

It should be noted that each machine has residual risks. When carrying out all operations (even the simplest ones), great care should be taken. Safe working depends on you!

3 Intended use

The belt sander must be mounted according to the instructions. Only the parts supplied may be used. The belt grinder is designed for grinding angular metal and metal - like workpieces.

The machine is universally applicable for schools, handicraft enterprises, workshops and for the do-it-yourselfers.

Proper use also includes compliance with all information in this manual. Any use beyond the intended use or otherwise is considered misuse.

Improper use:

The machine must not be used for grinding combustible materials (e.g. magnesium, wood or similar).



WARNING!

Danger in case of misuse!

Misuse of the device can lead to dangerous situations.

- Only operate the machine in the power range specified in the technical data.
- Never bypass or override the safety devices.
- Only operate the machine in a technically perfect condition.

For structural and technical changes to the device, the company Stürmer Maschinen GmbH assumes no liability.

Claims of any kind due to damage due to improper use are excluded.

4 Technical Data

4.1 Table

	MBSM 100-130	MBSM 100-130-2
engine power [kW]	1,5	1 / 1,5
electrical connection	230 Volt ~ 50 Hz	400 Volt ~ 50 Hz
Speed of sanding belt	19 m/sek.	9,5/19 m/sek.
Contact wheel dimensions	Ø 130 x 100 mm	
Sanding belt dimensions	1220 x 100 mm	1220 x 100 mm
Suction socket Ø outer	2 x 75 mm	
dimensions	690 x 390 x 360 mm	
Weight (without sub-construction)	37 kg	
sound pressure level	87 dB (A)	

4.2 Noise level

The noise level (sound pressure level) of this machine may exceed 87 dB (A) at the workplace. In this case, sound and hearing protection measures are required and have to be used by the operator.



WARNING!

It should be noted that the duration of the sound exposure, the nature and condition of the work area as well as other machines that are in operation at the same time influence the noise level in the workplace.

4.3 Type plate


Metall-Bandschleifmaschine Belt grinding machine		CE	
Typ Type	MBSM 100-130-2	Serien-Nr. Serial no.	
Artikel-Nr. Item no.	3921225	Baujahr Year of manufacture	
Motorleistung Motor power	1,5 kW	Netzanschluss Power connection	400 V
 www.metallkraft.de		Stürmer Maschinen GmbH Dr.-Robert-Pfleger-Str. 26, 96103 Hallstadt Deutschland / Germany	

Fig. 3: Type plate MBSM 100-130-2

5 Transport and packaging

5.1 Delivery and Transport

Check the belt sander on delivery for any visible transportation damage. If you notice any damage to the device please report this immediately to the carrier or dealer.

Transport

Improper transport is prone to accidents and can cause damage or malfunctions to the machine, for which we do not provide any liability or guarantee.

Transport the scope of delivery secured against shifting or tipping with a sufficiently dimensioned industrial truck or a crane to the installation site.



WARNING!

Serious to fatal injuries from falling over and fall down of machine parts from forklifts, pallet trucks or transport vehicles. Observe the instructions and information on the transport box.

Note the total weight of the machine. The weight of the machine is given in the "Technical data" of the machine. When the machine is unpacked, the weight of the machine can also be read on the nameplate. Only use means of transport and load attachment means that can take the total weight of the machine.



WARNING!

Serious to fatal injuries due to damaged or insufficiently stable lifting equipment and load attachment devices that tear under load. Check the lifting gear and load attachment devices for sufficient load-bearing capacity and perfect condition.

Observe the accident prevention regulations of the professional association responsible for your company or other supervisory authorities.

Fix the loads carefully.

General hazards during internal transport



WARNING DANGER OF TIPPING OVER

The machine may not be lifted more than 2cm unsecured.

Employees must be outside the danger zone, the reach of the load.

Warn employees and make employees aware of the risk.

Machines may only be transported by authorized and qualified persons. Act responsibly when transporting and

always consider the consequences. Refrain from daring and risky actions.

Inclines and slopes are particularly dangerous (e.g. driveways, ramps and the like). If it is unavoidable to drive on such passages, special care is required.

Before starting the transport, check the transport route for possible hazards, bumps and imperfections as well as sufficient strength and load-bearing capacity.

Hazardous areas, bumps and imperfections must be inspected prior to transport. The removal of hazardous areas, bumps and obstructions at the time of transport by other employees leads to considerable dangers.

Careful planning of internal transport is therefore essential.

Remove the machine from its packaging and remove all protective films. Make sure that the machine is not set up or put into operation in a damp or wet environment. The humidity should not exceed 60% and the measured room temperature should be between max. 0 ° C and 40 ° C amount.



NOTE!

For a safe stand, it is recommended that the machine be fixed on a stable, flat surface (preferably concrete) using the holes provided in the machine base.



WARNING!

Danger to life due to falling load!

If the weight of the device is not observed during transport, the machine may tip over or crash.



NOTE!

Protect the belt sander from moisture.

The machine may only be transported standing and with the engine switched off.

Transport with a forklift / lift truck:

For shipment, the unit is mounted on a pallet so that it can be transported by forklift or pallet truck.

5.2 Packaging

All used packaging materials and packaging aids are recyclable and should be taken to a materials recycling depot to be disposed of.

The delivery packaging is made of cardboard, so please dispose carefully by having it chopped up and given to the recycling collection

The film is made of polyethylene (PE) and the cushioned parts of polystyrene (PS). Deliver these substances to a collection point for recyclable materials or to the competent waste disposal company.

6 Description of the device

6.1 Illustration

Illustrations in this operating manual serve the general under-standing and may deviate from the actual design.

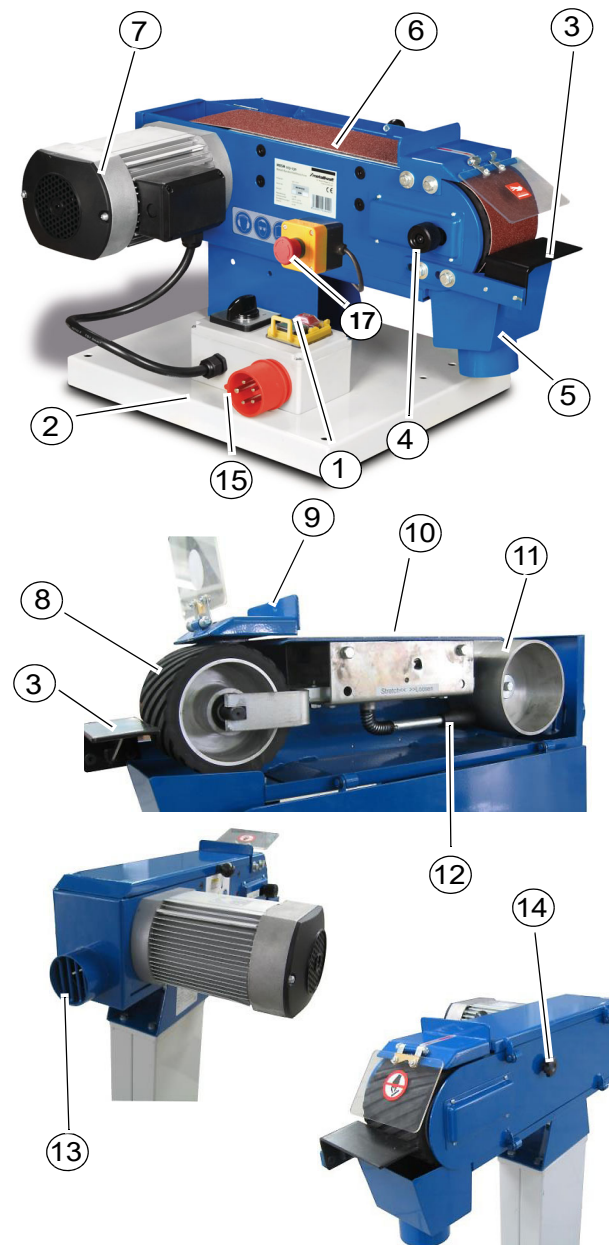


Fig. 4: Description of the device

- 1 ON-OFF-Switch
- 2 Machine foot
- 3 Workpiece support
- 4 Grinding belt adjustment screw with clamping screw.
- 5 Chips-Box suction socket
- 6 Sanding belt
- 7 Motor

- 8 Contact wheel
- 9 Workpiece stop
- 10 Surface grinding surface with graphite coating
- 11 Drive wheel
- 12 Tension lever
- 13 Suction socket at the back
- 14 Fixing screw side cover
- 15 Mains connection
- 17 EMERGENCY-STOP-Button

6.2 Optional accessory

We recommend only using high-quality original MET-TALKRAFT accessories. Only with original accessories, a flawless operation and optimal work results can be guaranteed.

Sanding belts for simple use

Sanding belt grain 40 (10er-Pack)	3726040
Sanding belt grain 60 (10er-Pack)	3726060
Sanding belt grain 80 (10er-Pack)	3726080
Sanding belt grain 120 (10er-Pack)	3721120

Sanding belts for extreme punctual load

Sanding belt grain 40 (10er-Pack)	3727040
Sanding belt grain 60 (10er-Pack)	3727060
Sanding belt grain 80 (10er-Pack)	3727080
Sanding belt grain 120 (10er-Pack)	3727120

7 Settings



ATTENTION!

Before intervening on the machine, it must be disconnected from the power supply. Handling and working with the machine is only permitted for persons who are familiar with the handling and operation of the machine.

To achieve good machine performance and a long service life, the site should meet the following criteria.

- The device may only be installed and operated in dry, ventilated rooms.
- Avoid places near chips or dust generating machines.
- The place of installation must be vibration-free, i.e. away from presses, planing machines, etc..

- Provide sufficient space for the performance of the work of set up men, the operating personnel and material transport.
- Also consider the accessibility for adjustment and maintenance work.
- Ensure adequate lighting (minimum value: 300 lux)

7.1 Sanding belt change

Loosen the fixing screw pos.14 on picture 4 and fold the side cover completely open. Loosen the tension of the sanding belt via the tension lever Pos.12 on figure 4. Carefully pull off the old sanding belt. Tighten the new sanding belt and align it. Finally, tighten the sanding belt over the tension lever and close the side cover.



ATTENTION!

When inserting the sanding belt, make sure that the running direction of the arrow (see sanding belt inside) matches the direction of the arrow on the housing.

7.2 Sanding belt run

The run of the sanding belt can be changed using the sanding belt adjustment screw (Item 1, Figure 5). Check the run of the sanding belt by gently moving it by hand. To change the running direction of the sanding belt loosen the hexagon head screw (item 2, Fig. 5) within the adjusting screw (item 1). Then you can change the tape running direction of the sanding belt by turning the adjustment screw (item 1, Fig. 5) in a clockwise or counterclockwise direction. Then move the sanding belt by hand again and check the correct run. If necessary, change the run again.



ATTENTION!

The grain size of the abrasives must be selected according to the requirements.

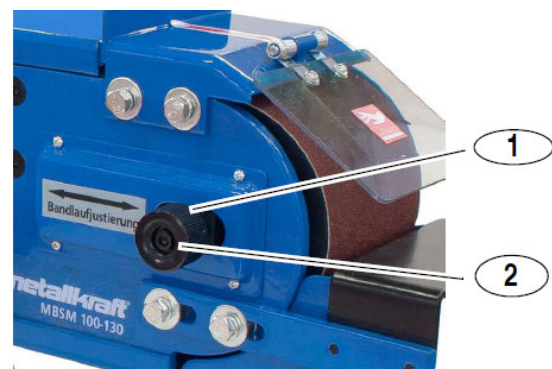


Fig. 5: Sanding belt run adjustment

Tighten the hexagon screw (item 2, Fig. 5) again.

8 Operation of the machine

8.1 General informations



ATTENTION!

Rotating parts! Get to work with reason. Pay attention to what you do. Pay special attention to the rotating parts. Wear tight-fitting clothing. Make sure that hair or clothing is not caught by rotating parts! Wear a hairnet. When working with the machine no jewelry may be worn.



ATTENTION!

Risk of injury!

Flying chips and slinging away parts! Be sure to wear safety glasses! Protect your eyes from flying chips and other splinters.

Before each start of work, the following tests must be carried out:

- Check all cables and plugs.
- Check that the workpiece supports are aligned and tightened.
- Note that there are different grit sizes for different jobs.
- Before starting the machine, make sure that the sanding belt is free to rotate and that it is not braked or blocked by any workpieces.
- Lubricate regularly according to item maintenance.
- **Before commissioning, the center run of the grinding belt must always be checked by manual feed!**

8.2 Surface-grinding on the sanding belt

Check that the workpiece stop Pos. 9 in figure 4 is correctly mounted and tightened. Open the hinged cover Pos. 6 on figure 4. Switch on the belt sander and carefully press the workpiece with both hands against the sanding belt and the safety stop. For better material removal and even belt wear, the workpiece can be easily moved back and forth.



ATTENTION!

Do not work with too much pressure, otherwise the sanding belt wears too fast. Do not put your fingers in contact with the sanding belt.

8.3 Grinding on the workpiece support

Hold the workpiece firmly with both hands. Grind internal curves only on the front workpiece support.



ATTENTION!

The edge of the workpiece supports must be positioned so that a distance of max. 1 mm is present to prevent jamming of workpieces or fingers between the table and the sanding belt.

8.4 Connection for connecting of an extraction system

On the chip box Pos. 5 (Figure 4) and the back of the belt grinder Pos. 13 (Figure 4) is 73 mm Ø connecting piece for connection to an extraction system.

9 Notes for the grinding process

- When grinding, pay attention to the safety instructions and use the protective devices on the machine as well as your personal protective equipment (protective goggles, ear protection, safety shoes, etc.).
- Special reference to situations that may cause damage to persons, the machine and / or the environment or may lead to financial loss.
- Make sure that the gap between the work table and the grinding wheel is not too large. Especially with thin workpieces, there is a risk that the workpiece will enter the gap!
- Since the machine does not have a clamping facility, it is important that your workpiece rest on the worktable over the entire surface and be held tight!
- Make sure the abrasives are in good condition and replace worn out abrasives in a timely manner. Only with perfect tools you can achieve a good grinding quality!

10 Cleaning, maintenance and service



WARNING!

Always disconnect the machine from the power supply before starting any cleaning, maintenance or servicing work!

Oil, grease and cleaning agents are hazardous to the environment and must not be disposed of in wastewater or normal household waste.



Dispose of these funds in an environmentally friendly way. The cleaning cloths soaked in oil, grease or detergent are easily combustible. Collect the cleaning rags or cleaning wool in a suitable, closed container and dispose of them in an environmentally friendly way - do not throw them in household waste!

10.1 Cleaning

Basically, the machine should be cleaned after each use. With the machine off, remove the chips and dust from the cooling openings of the motor with a hand brush or brush. Cleaning with compressed air is not allowed, as the fine chips can easily fly into the eyes and cause injuries.

For the disposal of the chips we refer to the local regulations.



ATTENTION!

Risk of injury!

Do not remove the chips with bare hands. There is a danger of cuts due to sharp-edged chips!

10.2 Maintenance

Empty the spark arrester regularly and check whether the suction channel has to be cleaned. If the edges of the contact wheel are rounded or the surface is damaged, replace the contact wheel immediately. Replace the graphite sanding pad Pos.10 (Figure 4) on the plant table depending on the degree of wear.

10.3 Service

As a result of wear and tear, it may happen that maintenance work must be carried out on the machine.



WARNING!

Repairs or maintenance work may only be carried out by qualified and trained specialist personnel.

10.4 Storage

Store the machine in a dry, clean, dust- and frost-free environment. It must not be placed in a room with highly oxidizing chemicals.

11 Disturbances, possible causes and measures



ATTENTION!

If one of the following errors occurs, stop working with the machine immediately. Before you begin troubleshooting, turn off the machine and unplug the power cord. It could lead to serious injuries. All repairs or replacement work may only be carried out by qualified and trained specialist personnel.

Disturbances	Possible causes	Measures
Engine does not start.	Damaged on / off switch. Damaged on / off switch line. Relay damaged. Engine defective. Fuses are defective.	Have the machine checked by an electrician and have replaced the damaged parts.
Machine slows down while working.	It is working with too much pressure.	Exert less pressure on the work-piece.
Low service life of the abrasives.	Abrasive (sanding belt or disk) with too fine grain.	Use a grinding wheel with a coarser grain size.
Bad grinding pattern	Abrasive with too coarse grain size	Use a grinding wheel with finer grain size
Grinding angle does not fit	Adjusted angles on the work table or on the stop bracket do not fit	Check the angle and readjust if necessary.
Grinding wheel runs optically non-circular	Sanding belt not properly attached	Installing the grinding wheel centrally
Sanding belt runs off the drive pulleys	Sanding belt not properly installed	Readjust the track of the sanding belt.



NOTES!

If you can not solve the problems with your machine yourself, then please contact your nearest METALLKRAFT working dealer. Please write down the following information from the machine or the operating instructions in advance to help you with your problem in the best possible way.

- Machine type
- Serial number of the machine
- Year of manufacture
- Error description in detail

12 Disposal, recycling of used devices

Please take care in your own interest and in the interest of the environment that all component parts of the machine are only disposed of in the intended and permitted way.

Please note that electrical appliances contain a variety of recyclable materials as well as environmentally harmful components. Make sure that these components are disposed of separately and properly. In case of doubt, please contact your municipal waste disposal. If necessary, the help of a specialized waste disposal company can be used for the treatment.

12.1 Decommission

Immediately decommission disused machines in order to avoid later misuse and endangering of the environment or personal safety.

- Unplug the power plug.
- Cut the connection cable.
- Remove all environmentally hazardous operating materials from the old appliance.
- If applicable, remove batteries and rechargeable batteries.
- If required, disassemble the machine into easy-to-handle and usable components and parts.
- Dispose of machine components and operating materials by the disposal channels provided.

12.2 Disposal of electrical devices

Please ensure that the electrical components are properly disposed of in accordance with legal regulations.

The device contains electrical and electronic components and must not be disposed of as household waste. According to European Directive 2012/19 / EC on waste electrical and electronic equipment and its transposition into national law, used electric tools and electrical machines must be collected separately and recycled in an environmentally sound manner.

As a machine operator, you should obtain information about the authorized collection or disposal system that is valid for you.

Please ensure that the batteries and / or rechargeable batteries are properly disposed of in accordance with legal regulations. Please throw only discharged batteries into the collection boxes at retailers or municipal waste disposal companies.

These components must be separated and properly disposed of. In case of doubt, contact municipal waste management.

If necessary, the help of a specialized waste disposal company can be used for the treatment.

12.3 Disposal of lubricants



ATTENTION!

Please pay attention to an environmentally friendly disposal of the used coolants and lubricants. Observe the disposal informations of your municipal disposal companies.

Spent coolant emulsions and oils should not be mixed with each other as only non-mixed waste oils are recyclable without pretreatment.

The disposal instructions for the lubricants used are provided by the lubricant manufacturer. If necessary, ask for the product-specific data sheets.

12.4 Disposal via municipal collecting points



Disposal of used electrical and electronic equipment (Applicable in the countries of the European Union and other European countries with a separate collection system for these appliances).

The symbol on the product or its packaging indicates that this product should not be treated as normal household waste, but must be returned to a collection point for the recycling of electrical and electronic equipment.

If one of the following errors occurs, stop working with the machine immediately. Before you begin troubleshooting, turn off the machine and unplug the power cord. If you don't follow this rule it could lead to serious injuries. All repairs or replacement work may only be carried out by qualified and trained specialist personnel.

13 Spare parts



DANGER!

Risk of injury caused by the use of incorrect spare parts!

The use of incorrect or faulty spare parts may cause risks for operating staff and damage as well as malfunctions.

- Exclusively genuine spare parts made by the manufacturer or spare parts authorized by the manufacturer shall be used.
- Always contact the manufacturer if you are unsure.



NOTE!

The manufacturer warranty shall be rendered void in the event of a use of unauthorized spare parts.

13.1 Spare parts order

Spare parts are available from authorised retailers or directly from the manufacturer.

Contact details:

Fax: 0049 (0) 951 96555-119
 email: ersatzteile@stuermer-maschinen.de

Always quote the following key data with your spare parts orders:

- Device type
- Article number
- Position number
- Year of manufacture
- Quantity
- Desired shipping type (post, freight, sea, air, express)
- Shipping address

Spare parts orders without the aforementioned data cannot be taken into account. The supplier shall determine the shipping type if no relevant data was provided. Information about the device type, article number and year of manufacture can be found on the type plate. The type plate is mounted on the device.

Example

The sanding belt for the belt sander MBSM 100-130 must be ordered. The sanding belt has the number 57 in the spare parts drawing 1.

By ordering spare parts, send a copy of the spare parts drawing (1) with the marked part (sanding belt) and marked position number (57) to the dealer or spare parts department and provide the following information:

Device type:	Belt sander MBSM 100-130
Article number:	3921226
Drawing number:	1
Position number:	57

Article number of your device type:

Metal- belt sander

MBSM 100-130	3921226
MBSM 100-130-2	3921225

13.2 Spare parts drawing

In case of service, the following drawing shall help to identify the necessary spare parts. If necessary, send a copy of the parts drawing with the marked components to your authorized dealer.

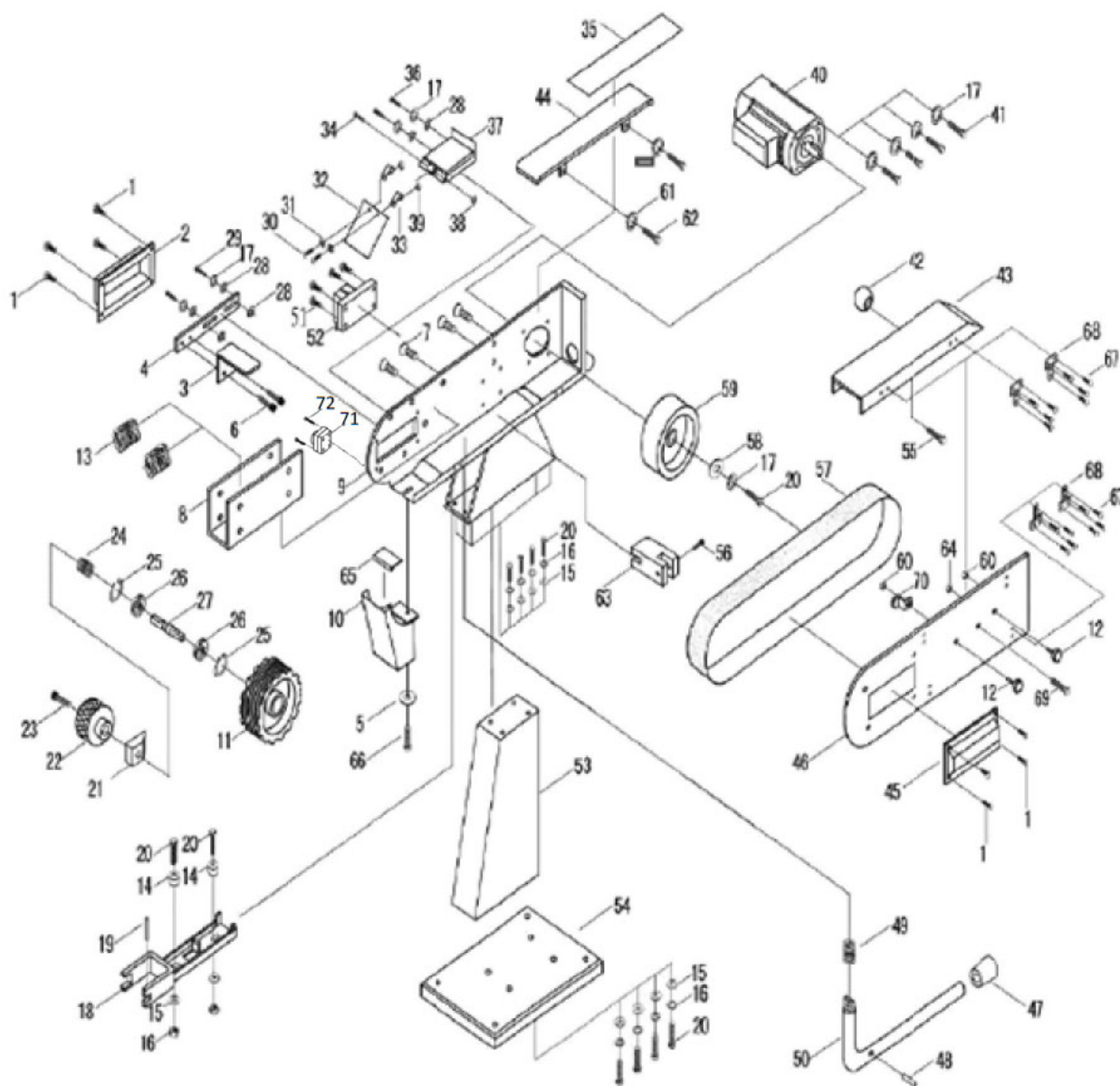


Fig. 6: Spare parts drawing 1 MBSM 100-130 and MBSM 100-130-2

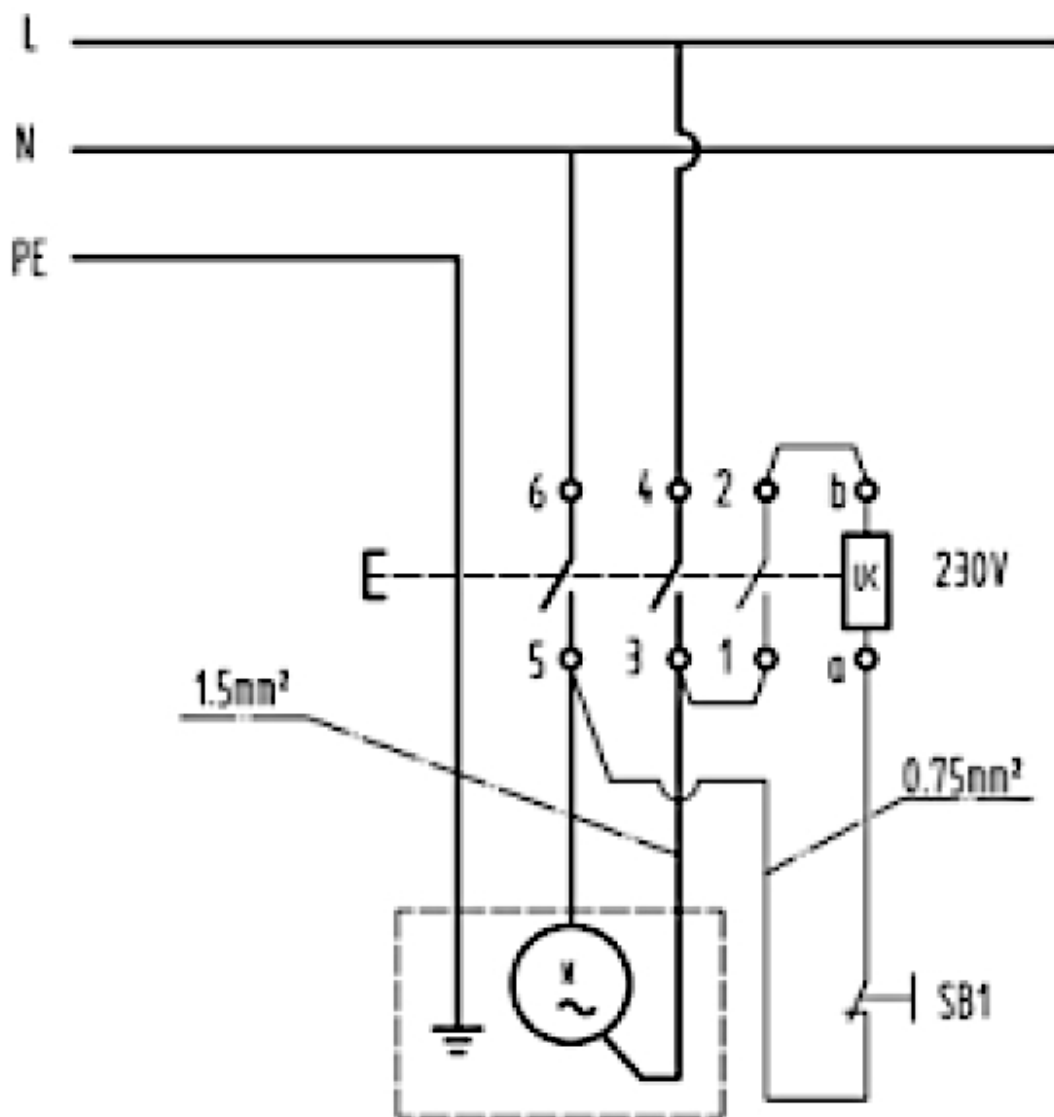
13.3 Spare parts list

Pos.	Bezeichnung	Description	Menge / Quantity	Größe / Size	Artikelnr. / Article no.
1	ZYLINDERKOPFSCHRAUBE	CUP HEAD SCREW	8	M4X6	039212251
2	ABDECKUNG, LINKS	LEFT COVER	1		039212252
3	WERKSTÜCKAUFLAGE	WORK TABLE	1		039212253
4	MONTAGEBLECH, WERKSTÜCKAUFLAGE	FIXATION BOARD OF WORK TABLE	1		039212254
5	UNTERLEGSCHNEIBE	FLAT WASHER	2	Ø8	039212255
6	SECHSKANTSCHRAUBE	HEX-HEAD SCREW	2	M8X10	039212256
7	SCHRAUBE	HEADING-EXTRUSION SCREW	4	M6X12	039212257
8	MONTAGEBLECH, BANDSPANNUNG	STOP BLOCK	1		039212258
9	GEHÄUSE	BODY	1		039212259
10	SPÄNEBOX / ABSAUGSTUTZEN	DUST RECEIVER	1		0392122510
11	KONTAKTRAD	DRIVEN WHEEL	1		0392122511
12	SCHRAUBE	SCREW	2	M6X16	0392122512
13	FEDER	SPRING	2		0392122513
14	ABSTANDSRING	POSITION TUBE	2		0392122514
15	UNTERLEGSCHNEIBE	FLAT FASHER	11	Ø8	0392122515
16	MUTTER	NUT	11	M8	0392122516
17	KUNSTSTOFFSCHEIBE	ELASTIC WASHER	14	Ø8	0392122517
18	GABEL	DRIVEN WHEEL GUIDE	1		0392122518
19	STIFT	COLUMNAR PIN	1	Ø5X35	0392122519
20	SCHRAUBE	BOLT	7	M8X25	0392122520
21	JUSIERBLOCK, BANDLAUF	SHAFT BLOCK	1		0392122521
22	HANDRAD	HAND WHEEL	1		0392122522
23	SECHSKANTSCHRAUBE	HEX-HEAD SCREW	1	M6X30	0392122523
24	FEDER	SPRING	1		0392122524
25	DICHTRING	RETAINING RING	2	Ø47	0392122525
26	LAGER	BEARING	2	204	0392122526
27	RADACHSE	DRIVEN WHEEL SHAFT	1		0392122527
28	UNTERLEGSCHNEIBE; GROß	BIG FLAT WASHER	5	Ø8	0392122528
29	SCHRAUBE	BOLT	2	M8X25	0392122529
30	ZYLINDERKOPFSCHRAUBE	CUP HEAD SCREW	2	M4X10	0392122530
31	UNTERLEGSCHNEIBE	FLAT WASHER	2	Ø4	0392122531
32	SCHUTZGLAS	PERSPECTIVE PLATE	1		0392122532
33	SCHARNIER	COLLECTING BOARD	2		0392122533
34	ZYLINDERKOPFSCHRAUBE	CUP HEAD SCREW	1	M6X50	0392122534
35	GRAPHITAUFPLAGE	BLACK LEAD PLATE	1		0392122535
36	SCHRAUBE	BOLT	2	M8X12	0392122536

Pos.	Bezeichnung	Description	Menge / Quantity	Größe / Size	Artikelnr. / Article no.
37	ABDECKBLECH MIT MATERIALANSCHLAG	FENCE EXTENSIONS	1	M6	0392122537
38	SICHERUNGSMUTTER	SELF-LOCKINGNUT	1		0392122538
39	MUTTER	NUT	2	M4	0392122539
40	MOTOR	MOTOR	1	400 V	0392122540
				230 V	0392122640
401	LÜFTERDECKEL (KUNSTOFF)		1		03921225401
402	LÜFTERDECKEL (ALU)		1		03921225402
41	SCHRAUBE	BOLT	4	M8X25	0392122541
42	KROPF	HAND BALL	1		0392122542
43	SCHUTZABDECKUNG	SAFETY Guard	1		0392122543
44	SCHUTZPLATTE	SAFTEY PLATE	2		0392122544
45	ABDECKUNG, RECHTS	RIGHT COVER	1		0392122545
46	SEITENDECKEL	SIDE FENCE	1		0392122546
47	KNOPF	PROPECT TUBE	1		0392122547
48	STIFT	PIN	1	3X20	0392122548
49	FEDER	SPRING	1		0392122549
50	HANDGRIFF	HAND BAR	1		0392122550
51	SCHRAUBE	SREW	1		0392122551
52	SCHALTER	SWITCH	1		0392122552
53	UNTERBAU	STAND	1		0392122553
54	STANDFUß	STAND PLATE	4		0392122554
55	SCHRAUBE	SCREW	1	6x16	0392122555
56	SECHSKANTSCHRAUBE	HEX-HEAD SCREW	1	M5X20	0392122556
57	SCHLEIFBAND	SAND BELT	2		0392122557
58	UNTERLEGSCHIEBE, GROß	BIG WASHER	1	Φ32	0392122558
59	TREIBRAD	DRIVE WHEEL	1		0392122559
60	MUTTER	NUT	1	M6	0392122560
61	SCHEIBE	ELASTIC WASHER	1	M4x16	0392122561
62	SCHRAUBE	BOLT	1	M8x12	0392122562
63	MONTAGEBLOCK, SPANNGRIF	HAND BAR COLLECTING ROD	1		0392122563
64	SICHERUNGSMUTTER	SELF- LOCK NUT	1	M6	0392122564
65	BLECH	SHEET PLATE	1		0392122565
66	SCHRAUBE	BOLT	1	M6X12	0392122566
67	ZYLINDERKOPFSCHRAUBE	CUP HEAD SCREW	1	M4X6	0392122567
68	SCHARNIER	HINGE	1		0392122568
69	SCHRAUBE	BOLT	1	M6X18	0392122569
70	FEDERBLECH	SPRING PLATE	1		0392122570

14 Circuit diagram

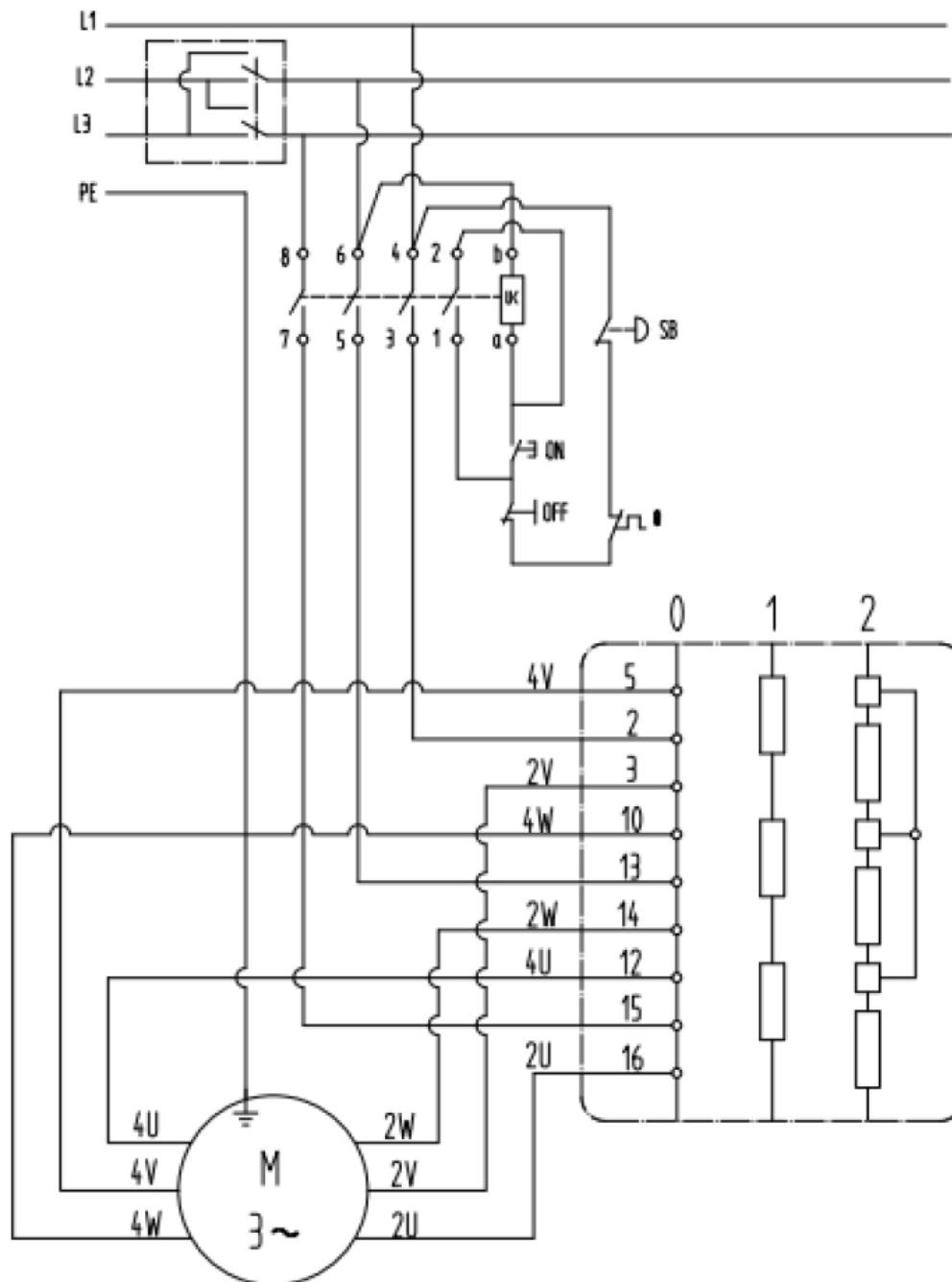
14.1 MBSM 100-130



Description	Type	Specification	Manufacturer	Acceptance
Cable	H07RN-F	4*1.5 mm²	Helukabel	TUV
Socket metric	HSK-Flex	PG9 M16X1.5	Hummel	VDE
Internal wiring	AVLV8		Wuxi Baiyun Wire&Cable Co., Ltd.	UL

Fig. 7: Circuit diagram MBSM 100-130

14.2 MBSM 100-130-2



Description	Type	Specification	Manufacturer	Acceptance
Cable	H07RN-F	4*1.5 mm²	Helukabel	TUV
Socket metric	HSK-Flex	PG9 M16X1.5	Hummel	VDE
Internal wiring	AVLV8		Wuxi Baiyun Wire & Cable Co., Ltd.	UL

Fig. 8: Circuit diagram MBSM 100-130-2

15 EC-Declaration of conformity

According to Machinery Directive 2006/42/EC Annex II 1.A

Manufacturer / distributor: Stürmer Maschinen GmbH
Dr.-Robert-Pfleger-Str. 26
D-96103 Hallstadt

hereby declares that the following product

Product Group: Metallkraft® Metallbearbeitungsmaschinen

Machine type: Metal- belt sander

Description of the machine*: **Item number:**

☐ MBSM 100-130 3921226
☐ MBSM 100-130-2 3921225

Serial number*: _____

Year of manufacture*: 20____

* fill in these fields using the information on the type plate

corresponds to all the relevant provisions of the abovementioned Directive and other Directives applied (below) - including their amendments valid at the time of the declaration.

Relevant EU Directives: 2014 / 30/ EU EMC Directive

The following harmonized standards have been applied:

DIN EN ISO 12100:2011-03 Safety of machinery - General principles for design - Risk assessment and risk reduction

DIN EN 60204-1:2019-06 Safety of machinery - Electrical equipment of machines - Part 1: General requirements

Responsible for documentation: Kilian Stürmer, Stürmer Maschinen GmbH,
Dr.-Robert-Pfleger-Str. 26, D-96103 Hallstadt

Hallstadt, 30.10.2023



Kilian Stürmer
Manager



16 Notes

