

Dusty Evo

EN – Operating Manual

Typenschild einkleben

1	General	- 6 -
1.1	Introduction.....	- 6 -
1.2	References to copyright and industrial property rights.....	- 6 -
1.3	Notes for the operating company	- 6 -
2	Safety.....	- 8 -
2.1	General information	- 8 -
2.2	Information on signs and symbols.....	- 8 -
2.3	Markings/signs to be affixed by the operating company	- 9 -
2.4	Safety instructions for operating staff	- 9 -
2.5	Safety instructions for maintenance/troubleshooting.....	- 10 -
2.6	Notes regarding special types of hazard	- 10 -
3	Product information.....	- 13 -
3.1	Functional description.....	- 13 -
3.2	Intended use.....	- 14 -
3.3	General requirements in accordance with DIN EN ISO 21904	- 15 -
3.4	Ambient conditions	- 16 -
3.5	Reasonably foreseeable misuse	- 16 -
3.6	Markings and signs on the product.....	- 17 -
3.7	Residual Risk	- 17 -
4	Transport and Storage	- 19 -
4.1	Transport	- 19 -
4.2	Storage	- 19 -
5	Assembly.....	- 20 -
5.1	Mounting the rear wheels.....	- 21 -
5.2	Mounting the push handle.....	- 22 -
6	Use	- 23 -
6.1	Qualification of the operating personnel	- 23 -
6.2	Operating elements.....	- 23 -
6.2.1	Automatic start/stop (optional)	- 25 -
6.3	Commissioning.....	- 25 -
7	Maintenance	- 27 -
7.1	Care.....	- 27 -
7.2	Maintenance.....	- 28 -

7.2.1	Checking/changing the dust collection container.....	- 28 -
7.2.2	Cleaning the filter cartridge	- 31 -
7.2.3	Main filter change	- 33 -
7.3	Troubleshooting	- 36 -
7.4	Emergency measures	- 37 -
8	Disposal	- 39 -
8.1	Plastics	- 39 -
8.2	Metals.....	- 39 -
8.3	Filter elements.....	- 39 -
9	Annex	- 40 -
9.1	EC compliance statement.....	- 40 -
9.2	UKCA Declaration of Conformity	- 41 -
9.3	Technical data.....	- 42 -
9.4	Dimensions sheet.....	- 43 -
9.5	Spare parts and accessories	- 44 -

1 General

1.1 Introduction

This manual is an essential aid for the proper and safe operation of the product.

These operating instructions contain important information to ensure safe, proper and efficient operation of the product. Observing these instructions helps avoiding danger, reducing repair costs and downtimes and increasing the reliability and service life of the product. The operating instructions must be kept available at all times and have to be read and applied by every person who is assigned to work on or with the product.

These include amongst others:

- the operation and troubleshooting during operation
- the maintenance (care, maintenance, repair)
- the transport
- the assembly
- the disposal

Technical modifications and errors expected.

1.2 References to copyright and industrial property rights

These Operating Instructions should be kept confidential. They should be made accessible only to authorised persons. They may be passed on to third parties only with the written consent from KEMPER GmbH, referred to as manufacturer in the following.

All documents are protected under the Copyright Act. The reproduction and distribution of documents, including excerpts, as well as re-use and passing on of their contents is not permitted. Unless this is expressly permitted in writing.

Violations are liable to prosecution and liable for damages. The manufacturer reserves the right to exercise all intellectual property rights.

1.3 Notes for the operating company

The operating instructions are an essential part of the product.

The operating company must ensure that the operating personnel is aware of the contents of this manual.

Based on national regulations for accident prevention and environmental protection, the operating instructions are to be supplemented by the operating company's own operating instructions, including information on regulatory and reporting requirements to meet specific operating requirements, such as work organisation, work flow and staff employed. In addition to the operating instructions and the relevant obligatory

regulations for accident prevention applicable in the country of use, it is also imperative to comply with the recognised technical rules for safe and professional handling.

Without prior consent from the manufacturer, the operating company may not carry out any changes, conversions or additions to the product which may impair safety. Spare parts used must comply with the manufacturer's specified technical requirements. This is always the case with original replacement parts.

Only use trained and instructed staff for the operation, maintenance, repair and transport of the product. Clearly define for staff who is responsible for operation, maintenance and transport.

2 Safety

2.1 General information

The product is designed and built according to state-of-the-art technology and the recognised safety rules and regulations. When operating the product, technical hazards for the operator or impairment of the product as well as other property may occur, if:

- it is not operated by trained or instructed personnel
- it is not used for the purpose intended and/or
- it is improperly maintained

2.2 Information on signs and symbols

⚠ DANGER

This symbol in conjunction with the signal word "Danger" indicates imminent danger. Non-adherence of the safety note leads to death or serious injuries.

⚠ WARNING

The symbol in conjunction with the signal word "Warning" indicates a potentially dangerous situation. Non-adherence to the safety notice may lead to death or serious injuries.

⚠ CAUTION

The symbol in conjunction with the signal word "Caution" indicates a potentially dangerous situation. Non-adherence of the safety note may lead to slight or negligible injuries.

May also be used for warnings against property damage.

NOTE

The general information is simple additional information which does not warn about personal injury or property damage.

1. Enumerations of action steps are marked as numbers with a dot, where the order is important.
- Bullet points indicate lists of parts in a legend or instructions for which the sequence is unimportant

2.3 Markings/signs to be affixed by the operating company

The operating company is obliged to post further markings and signs on the product and the surrounding area if necessary.

Such markings and signs might be related, for example, to the requirement for wearing personal protective equipment.

2.4 Safety instructions for operating staff

Before use, the operator of the product must be instructed through information, instructions and training on the handling of the product and the materials and aids to be used.

The product system may only be used in technically perfect condition, for its intended purpose, in full awareness of the safety aspects and potential dangers and in accordance with these instructions. All errors, especially those that may affect safety, must be removed immediately.

Every person who is charged with commissioning, operation or maintenance must have fully read and understood these operating instructions. This specifically applies to staff who only operate the product occasionally.

The operating instructions must always be within reach of the product.

We accept no liability for any damages or injuries caused by failure to observe these operating instructions.

The relevant accident prevention regulations and other generally recognised safety and occupational health regulations must be observed.

The responsibilities for the various activities included in maintenance and repair must be clearly defined and adhered to. Only then will human error - especially in dangerous situations - be avoided.

The operating company is to enforce wearing of personal protective equipment by operating and maintenance staff. These include in particular safety shoes, safety glasses and gloves.

Do not wear loose, long hair, loose clothing or jewellery. In theory, there is a risk of getting caught on something, or being pulled in or dragged along by moving parts.

If there are any safety-related changes to the product, immediately halt the process, secure it and report the occurrence to the relevant authority/person!

Work on the product may only be carried out by reliable, trained staff. Observe the minimum legal age.

Staff who require training, teaching or instructing or staff who undergo a general apprenticeship may only operate the product under the supervision of an experienced member of staff.

2.5 Safety instructions for maintenance/troubleshooting

Service and maintenance doors must be freely accessible at all times.

Setting up, maintenance and repair work and troubleshooting must only be performed when the product is switched off.

Always tighten bolt connections that have been loosened during repair work. If specified, tighten the relevant bolts with a torque wrench.

In particular, protect connections and screw connections from dirt or care products at the beginning of maintenance/repair/care

The time frames for periodic testing/inspections stipulated or specified in the operating instructions must be observed.

Before disassembling, mark the parts that belong together.

2.6 Notes regarding special types of hazard

⚠ DANGER

Danger of electric shock!

Any work on the electrical equipment of the product must only be performed by a qualified electrician or by operating personnel under the direction and supervision of a qualified electrician in accordance with electronic regulations.

Before opening the product, pull the plug, if available, and secure it against accidental switch-on.

For faults with the product's electrical energy supply, immediately switch the product off at the on/off switch and if available, also pull the plug.

Use only original fuses with the prescribed amperage.

Electrical components, on which inspection, maintenance and repair work must be carried out, must be disconnected from the power supply. Secure equipment that has been used for disconnection against unintentional or automatic reconnection. Firstly check that no voltage is present in activated, electrical components, then isolate adjacent components under voltage. When making repairs, ensure that constructive characteristics are not altered in a way that reduces safety.

Check cables regularly for damage and replace if necessary.



CAUTION: Automatically Operated Device – To Reduce The Risk Of Injury Disconnect From Power Supply Before Servicing.

WARNING: To Reduce The Risk Of Electric Shock, Do Not Expose to Water or Rain.

ATTENTION: Appareil fonctionnant automatiquement – afin de réduire les risques de blessure, débrancher l'alimentation électrique de procéder à l'entretien.

AVERTISSEMENT: Pour réduire le risque de choc électrique, ne pas exposer à l'eau ou à la pluie.

⚠ WARNING**Electric shock if earthing is missing!**

If the protective earth connection of devices is missing or incorrectly executed, high voltages may be present on exposed parts or housing parts which, if touched, can lead to serious injury or death.

⚠ WARNING**Electric shock if an unsuitable power supply is connected!**

The connection of an unsuitable power supply can cause parts that can be touched to be under dangerous voltage. Contact with dangerous voltage can lead to serious or fatal injury.

For electrical connection data, see the name plate of the product

Power supply

The product is designed for the mains voltage indicated on the name plate. If mains cables or mains plugs are not fitted to the product, they must be fitted in accordance with national standards.

⚠ CAUTION**Insufficiently dimensioned electrical installation can lead to serious damage to property.**

The mains supply line and its fuse protection must be designed in accordance with the existing power supply. Observe the technical data on the name plate.

The mains fuse should be equipped with at least a **category C** circuit breaker.

⚠ WARNING

Danger from toppling over during transport!

The product may tilt and topple over when moved. People can be injured due to the high dead weight.

- Before moving, release the brakes on the castors.
- Move and set down the product only on flat, smooth floor coverings.
- Only move the product with the push handle.
- Do not use the push handle to lift the product.
- Do not sit or climb on the product.
- Before moving; if present, fold in suction arm / wind up or dismantle suction hoses

⚠ WARNING**Health hazards caused by welding fume particles**

Do not inhale welding dust / smoke! Serious injury to the lungs and respiratory tract is possible!

Sweat smoke contains substances that can cause cancer!

Skin contact with cutting and welding fumes etc. can cause skin irritation in sensitive persons!

Repair and maintenance work on the product may only be carried out by trained and authorised personnel while complying with the safety rules and the applicable accident prevention regulations.

To avoid contact with and inhalation of the dust particles, wear disposable overalls, protective goggles, gloves and a suitable Class FFP2 respiratory protection filter mask in accordance with EN 149.

The release of hazardous dust particles during repair and maintenance is to be avoided to ensure that persons not charged with the task are not affected.

⚠ CAUTION**Health hazard due to noise!**

The product can produce noise, please refer to information in the technical data. In connection with other machines and/or local conditions, a higher noise level can occur at the operation site of the product. In this case, the operating company is obliged to provide the operating personnel with the appropriate protective equipment.

3 Product information

3.1 Functional description

The product is a compact welding fume filter unit that extracts the welding fumes generated during welding and separates them with a filter efficiency of more than 99%.

The extracted contaminated air is cleaned using a 1-stage filter method and then fed back into the workspace.

The product can be operated with suitable welding fume extraction torches or with funnel nozzles.

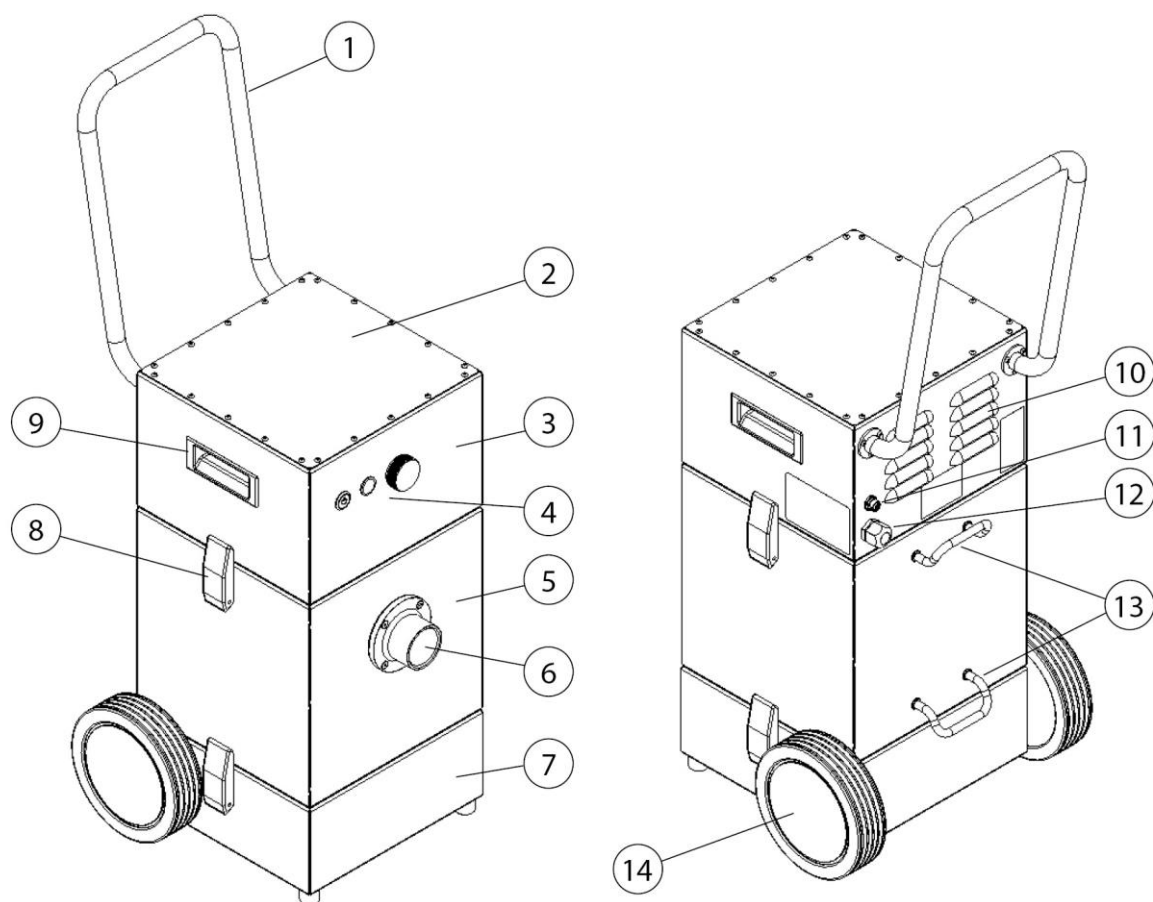


Fig. 1: Functional description – Product

Pos.	Description	Pos.	Description
1	Push handle	8	Clamp fasteners
2	Cover plate	9	Grip tray
3	Fan unit	10	Air outlet grille

4	Operating elements	11	Connector socket for start-stop sensor
5	Filter unit	12	Connection cable
6	Connection for extraction hose NW 45/ NW 63	13	Cable holder
7	Lower part with dust collection container	14	Rear wheel

Tab. 1: Positions on the product

3.2 Intended use

The product is designed to extract and filter out the welding fumes produced when welding metallic materials at the point of origin. In general, the product can be used for all work processes in which welding fumes are released. However, care must be taken that no glowing sparks are drawn into the product.

Dimensions and further product details that must be observed can be found in the technical data.

NOTE



Only products labelled with the W3 sticker have been tested and certified accordingly. See also chapter Technical data: Welding fume class and test standard.

NOTE

When welding alloyed or high-alloy steels with filler metals above 5% chromium/nickel, carcinogenic CMR substances (carcinogenic, mutagenic, reprotoxic) are released. In accordance with official regulations, only tested and approved products may be operated in Germany to extract these harmful smoke particles using the so-called recirculation method.

Only products that meet the requirements of welding fume separation class W3/IFA certified may be operated for the aforementioned welding processes using the recirculation method.

When extracting welding fumes with carcinogenic components (e.g. chromates, nickel oxides, etc.), the requirements of TRGS 560 (technical rules for HAZMAT) and TRGS 528 (welding work) must be obeyed.

NOTE

The information in the "Technical data" chapter must be observed and strictly adhered to.

Intended use also includes observation of the instructions and information on

- safety
- operation and control
- maintenance and servicing

contained in this manual.

Any other use or use going beyond this is considered improper use. The company operating the product is solely responsible for any damage resulting from it. This also applies to unauthorised modifications to the product.

3.3 General requirements in accordance with DIN EN ISO 21904

NOTE

Connection of ducting systems, extraction arms and hoses.

Ducting systems, extraction arms and hoses connected to the product can lead to a pressure drop and must be taken into account by the system designer or user.

The connected components must be suitable for the product and ensure the required minimum volume flow (extraction capacity).

A possible design of the ducting can be requested from the manufacturer.

The connected components must be checked regularly for proper seating, leaks and blockages.

The required extraction capacity must be checked at the central extraction element.

NOTE

Returning the air to the workplace atmosphere

In some Federal States, recirculation of air into the workplace atmosphere is not recommended or is prohibited. It may be necessary to conduct the exhaust air to the outside via a duct.

3.4 Ambient conditions

Operation or storage of the appliance outside the specified area is considered improper use. The manufacturer is not liable for any resulting damage.

Ambient air temperature range:

- during operation: -10 °C to + 40 °C (14 °F to 104 °F)
- during transport and storage: -20 °C to +55 °C (-4 °F to 131 °F)

Relative humidity:

- up to 50 % at 40 °C (104 °F)
- up to 90 % at 20 °C (68 °F)

Ambient air: free of dust, acids, corrosive gases or substances, etc.

Altitude above sea level: up to 2000 m (6561 ft. 8.16 in.)

3.5 Reasonably foreseeable misuse

No reasonable, foreseeable misuse is possible that could lead to dangerous situations with personal injury when working with the product whilst adhering to its intended use.

The operation of the product in industrial areas that do not comply with the requirements for explosion protection is not permissible.

Furthermore, the operation is prohibited for:

1. Processes that are not in the intended use list and in which the extracted air is:
 - is mixed with sparks, e.g. from grinding processes, which due to their size and quantity might lead to damage to the filter media or even to a fire;
 - mixed with liquids and the resulting contamination of the air flow with vapours containing aerosols and oils;
 - mixed with highly flammable, combustible dust and/or with substances that can form explosive mixtures or atmospheres;
 - is mixed with other aggressive or abrasive dust that could damage the product and the filter elements employed;
 - is mixed with organic, toxic substances or a proportion of substances that are released when cutting the material.
2. Outdoor locations where the product is exposed to weather conditions because the product must only be installed in closed buildings.

If there is an outdoor variant of the product available, this may be installed outside. Please note that additional accessories may be required for the outdoor installation.

3.6 Markings and signs on the product

Various markings and signs are affixed to the product. If these are damaged or removed, please replace them immediately with new ones in the same location.

The operating company is obliged to post further markings and signs on the product and the surrounding area if necessary.

Such notes and signs might be related, for example, to the requirement for wearing personal protective equipment.

In the country of use, additional required safety instructions and pictograms can be provided by the manufacturer in accordance with applicable law.

3.7 Residual Risk

Even when all safety rules are observed, when operating the product a residual risk remains, as described below.

All persons working on and with the product must be aware of these residual risks and follow the instructions that prevent these residual risks from causing accidents or damages.

⚠ WARNING

Danger of serious injury to the lungs and respiratory tract – always wear respiratory protection, Class FFP2 or higher.

Skin contact with welding fume particles may cause skin irritation in sensitive persons – wear protective clothing.

Before starting the welding process, ensure that the product is properly adjusted and in operation. The filter elements must be complete and in undamaged condition.

The connected detection element must reliably detect the welding fumes. For the correct positioning, refer to the documentation of the detection element.

When changing the filter inserts, skin contact with the separated dust particles may occur and parts of the dust particles may also be stirred up by the work. Respiratory protection and protective clothing must be worn.

Embers in the filter elements may cause smouldering fires – switch off the product, close the damper flap in the collection element if fitted and let the device cool down in a controlled manner.

4 Transport and Storage

4.1 Transport

⚠ DANGER

Life-threatening crushing possible when loading and transporting the product!

Improper lifting and transporting may cause the pallet (if present) to tilt and fall!

- Never stand under suspended loads.
- Observe the permissible loads of the transport and lifting aids.
- Observe the applicable accident prevention and occupational safety regulations.

For transporting products with a pallet, use a suitable pallet truck or forklift. The weight of the product can be found on the name plate.

4.2 Storage

The product must be stored in its original packaging at an ambient temperature of 20 °C to +50 °C in a dry and clean place. The packaging must not be loaded by other objects.

The storage duration is not critical for all products.

5 Assembly

Instructions for safe installation of the product

NOTE

The operating company of the product may only assign specialists to carry out independent assembly.

- At least two people are needed to assemble the product.
 - It must be ensured that the installation location and point of use of the product provides sufficient load-bearing capacity and good stability.
-

⚠ DANGER

Falling or tipping parts may cause life-threatening injuries!

Tipping or falling loads lead to severe to fatal injuries.

- Observe the total weight, attachment points and centre of gravity of the load.
 - Observe the transport instructions and symbols on the transported goods.
-

⚠ WARNING

Incorrect connections may cause serious injuries!

Please note the necessary safeguards and only have the product connected by trained specialists.

NOTE

Ensure that the welding current return line between the workpiece and the welding machine has a low ohmic resistance and that connections between the workpiece and the product are avoided so that the welding current cannot flow back to the welding machine via the product's protective conductor.

NOTE

If add-on products are also present, follow the appropriate manuals when assembling them.

The product is delivered on a pallet with an outer packaging.

Remove the outer packaging and the tension straps of the product at the place of installation.

5.1 Mounting the rear wheels

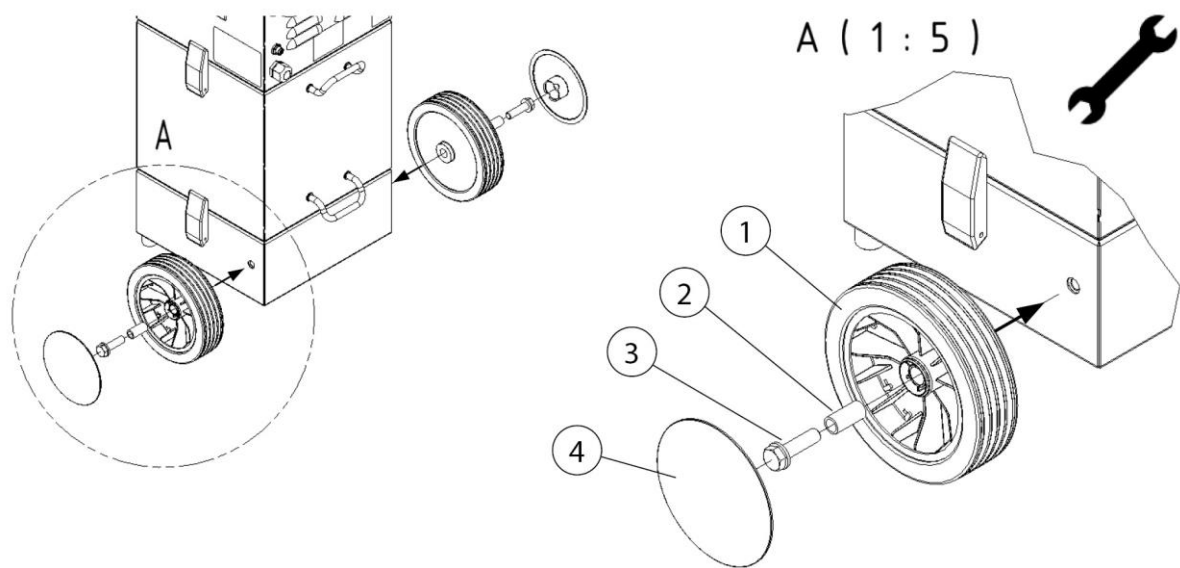


Fig. 2: Mounting the rear wheels

Pos.	Description	Pos.	Description
1	Rear wheel (2x)	3	Hex bolts + U washer (2 x)
2	Steel sleeve (2 x)	4	Wheel cover (2 x)

Tab. 2: Mounting the rear wheel

Mount the rear wheels on both sides as follows:

1. As shown in the illustration, fix the rear wheel (Pos. 1) to the product with the hex bolt + washer (Pos. 3) and metal sleeve (Pos. 2) using a suitable tool. For permanent fixing, apply a drop of screw locking adhesive to the thread of the screw.
2. Then, fit the wheel cover on the rear wheel.

5.2 Mounting the push handle

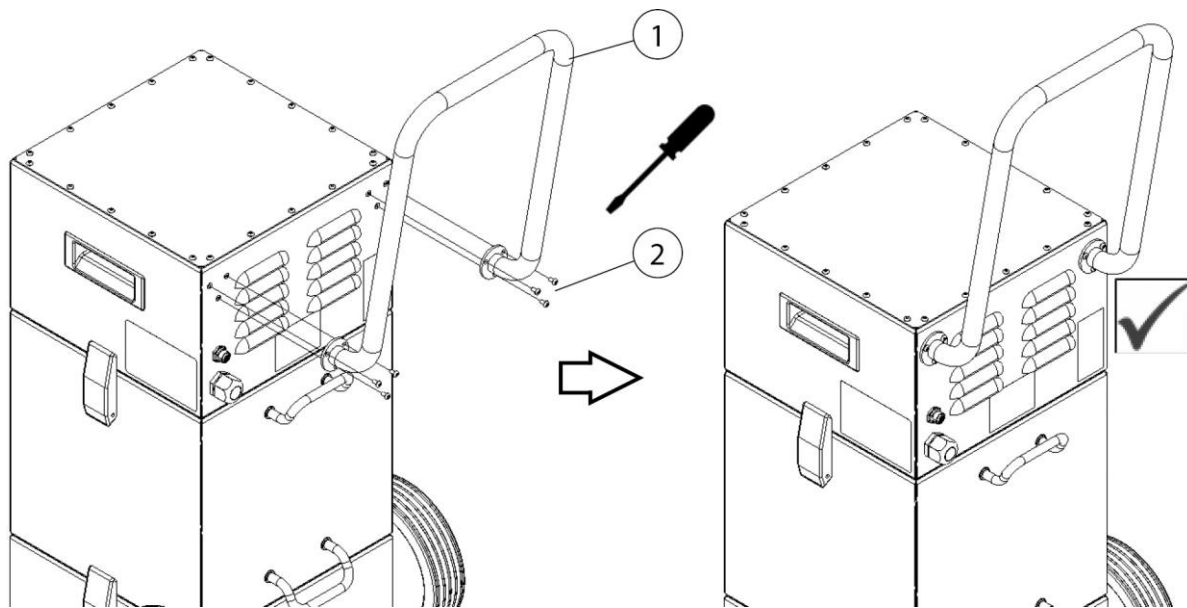


Fig. 3: Mounting the push handle

Pos.	Description	Pos.	Description
1	Push handle	2	Fixing screws (6 x)

Tab. 3: Mounting the push handle

Mount the push handle as follows:

1. Screw the push handle (Pos. 1) tightly to the threaded holes provided on the product with the six fixing screws (Pos. 2) using a suitable tool.

⚠ DANGER

Danger of falling or damage to the product!

The push handle (Pos. 1) is only used to push/pull the product.

- Never lift the product by the push handle!

6 Use

Every person who deals with use, maintenance and repair of the product must have thoroughly read these operating instructions as well as the instructions for any attachment and accessory products and have understood them.

6.1 Qualification of the operating personnel

The operating company of the product may only commission persons to use the product independently if they are well-versed in this task.

Those familiar with this task includes those who have been instructed appropriately in the task and know the operating instructions as well as the operational issues in question.

The product should only be used by trained or instructed personnel. This is the only way to ensure safety and hazard awareness of all personnel during work.

6.2 Operating elements

Operating controls are located on the front of the product.

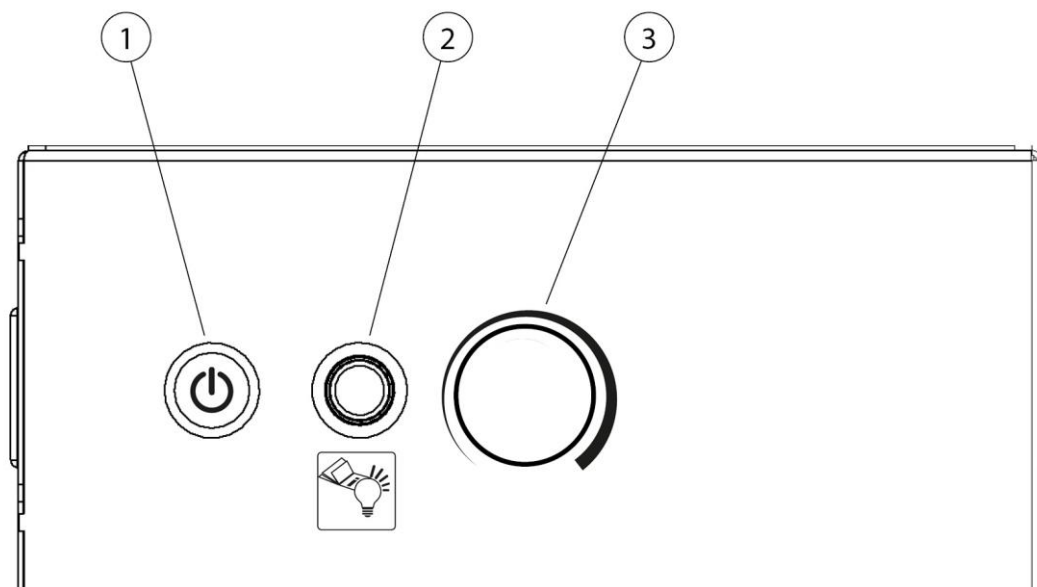


Fig. 4: Operating elements

Pos.	Description	Note
1	On / Off switch with signal lamp	Switches the product on or off The signal lamp indicates the operation of the product
2	Signal lamp for filter saturation	See “Maintenance” chapter
3	Extraction capacity regulation	For stepless adjustment of the desired extraction capacity

Tab. 4: Operating elements

Signal lamp for filter saturation (Pos. 2)

The control constantly checks the degree of contamination of the filter cartridge.

If the signal lamp (Pos. 2) lights up, the filter cartridge needs to be cleaned.

If the signal lamp lights up again after a short time after cleaning the filter cartridge, a filter change is necessary.

6.2.1 Automatic start/stop (optional)

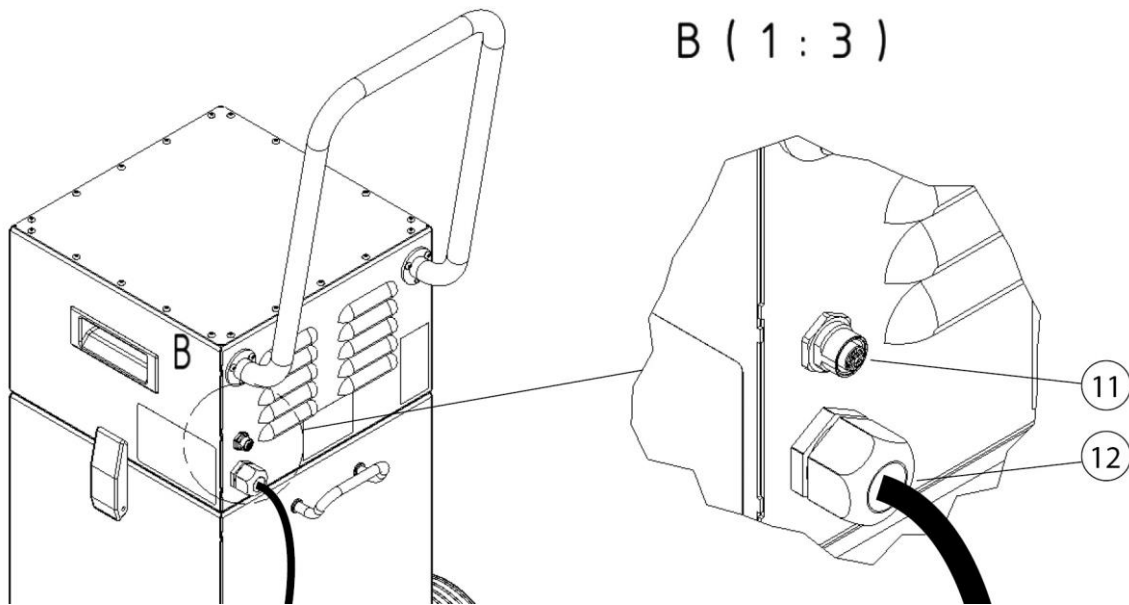


Fig. 5: Automatic start/stop

Pos.	Description	Pos.	Description
11	Start/stop module connection socket	12	Connection cable

Tab. 5: Automatic start/stop

The connection socket for the optionally available start/stop module (Pos. 11) is located on the back of the product.

As soon as the start/stop module is connected to the connection socket (Pos. 11), the start/stop mode is activated.

When the start/stop module is activated by a welding process, the product starts. After the welding process is finished, the product switches off again after a set run-on time. (45 seconds)

6.3 Commissioning

⚠ WARNING

Danger due to faulty product condition.

The product must be fully installed before commissioning begins. All doors must be closed and the necessary connections must have been made.

1. Connect the power supply connection cable of the product to the on-site power supply.
2. Switch the product on using the pushbutton marked "0" and "I".
3. The fan starts and the green indicator lamp on the device switch indicates error-free operation.

If there is a fault, please refer to the "Troubleshooting" chapter.

7 Maintenance

The instructions in this chapter are intended as minimum requirements. Depending on the operating conditions, further instructions may be required to keep the product in optimal condition.

The maintenance and repair work described in this chapter must only be performed by specially trained repair personnel of the operating company.

Spare parts used must comply with the manufacturer's specified technical requirements.

This is guaranteed if original spare parts are used.

The safe and environmentally friendly disposal of operating materials and replacement parts must be ensured.

The safety instructions in these operating instructions must be observed during maintenance work.

7.1 Care

The care of the product is essentially limited to cleaning all surfaces of the product and – if present – checking the filter inserts.

The warning notices listed in the chapter "Safety notes for maintenance and fault removal" must be observed.

NOTE

The product may not be cleaned with compressed air. This may result in dust and/or dirt particles getting into the ambient air.

Proper care helps to maintain the product in a continuous functional state.

For optimum care and cleaning of the powder-coated surfaces, the following must be observed:

- Thoroughly clean the product monthly or as needed.
- Clean the exterior areas of the product with a suitable industrial vacuum cleaner of dust classification H or with damp soft cloths/industrial cotton wool.
- For stubborn dirt, use commercially available household cleaners. Avoid vigorous rubbing.
- Do not use any abrasive agents that scratch.
- Do not use any acidic or strongly alkaline cleaning agents.
- Do not use organic solvents containing esters, ketones, alcohols, hydrocarbons or similar.

7.2 Maintenance

Regular inspection and servicing have a positive effect on the reliable functioning of the product and should be carried out at least once a year.

Except for the necessary filter replacements, the product operates maintenance-free.

Observe the warning notices for servicing and troubleshooting in the "Safety" chapter.

Regular inspection and servicing have a positive effect on the reliable functioning of the product.

Observe the warning notices for servicing and troubleshooting in the "Safety" chapter.

Maintenance of the product is essentially limited to visual inspection and checking for damage, signs of wear and leaks.

▲ WARNING

Skin contact with dust particles, etc. may cause skin irritation in sensitive persons.

Serious injury to the lungs and respiratory tract is possible!

To avoid contact with and inhalation of dust particles, wear disposable gloves and disposable respiratory protection, Class FFP2 or higher.

When cleaning, the release of dangerous dust particles must be avoided, so that bystanders are not injured.

NOTE

Do not clean the product with compressed air. This may result in dust particles getting into the ambient air.

Always ensure there is adequate lighting and ventilation for maintenance tasks.

7.2.1 Checking/changing the dust collection container

According to the use, but at least once a month, the fill level of the dust collection container must be checked and changed if necessary (approx. 2/3 filled).

The time until dust collection container must be replaced depends on the type and quantity of the dust particles that occur. The operator must check the level by hand at regular intervals to avoid the dust collection container becoming overfull.

The dust collection container must always be exchanged in good time to avoid contamination of the surroundings.

The product must be switched off during a change or when checking the fill level.

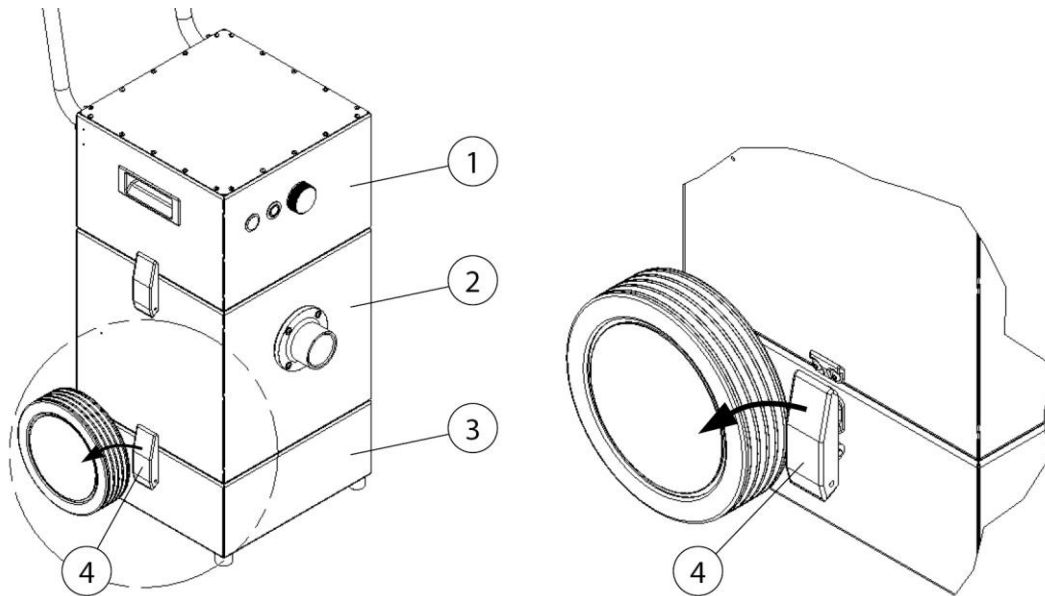


Fig. 6: Changing the dust collection container

Pos.	Description	Pos.	Description
1	Fan unit	3	Lower part with dust collection container
2	Filter unit	4	Clamp fasteners

Tab. 6: Positions on the product

To replace the dust collection container, please proceed as follows:

1. Switch off the product and disconnect it from the power supply by unplugging.
2. Provide a new dust collection container.
3. Detach the filter unit (Pos. 2) from the lower part (Pos. 3) by opening the two clamp fasteners (Pos. 4).

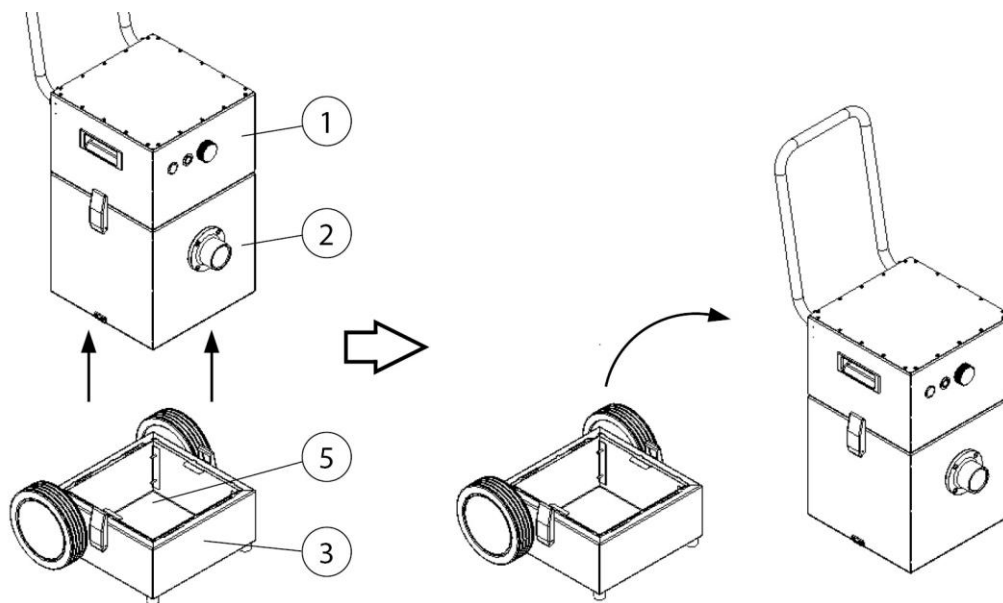


Fig. 7: Lift off filter unit

4. Carefully lift off the filter unit + fan unit (Pos. 1+2) without stirring up dust particles and place it next to the lower part (Pos. 3). Ensure that the seal is not damaged.

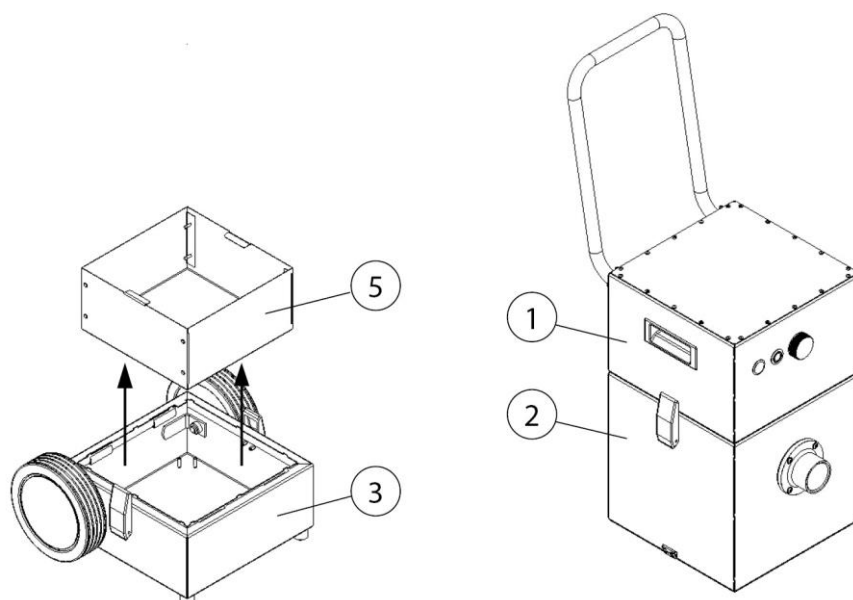


Fig. 8: Remove dust collection container

5. Remove the dust collection container (Pos. 5) from the lower part (Pos. 3) and dispose of it according to the regulations.
6. Insert the new dust collection container (Pos. 5).

7. The product is assembled in reverse order. To do this, place the filter unit + fan unit (Pos. 1+2) on the lower part (Pos. 3) and close the two clamp fasteners (Pos. 4), making sure that the seal is correctly seated.
8. Connect the product to the power supply and put it back into operation. (see also “Commissioning” chapter)

7.2.2 Cleaning the filter cartridge

If the signal lamp for filter saturation lights up, the filter cartridge needs to be cleaned.

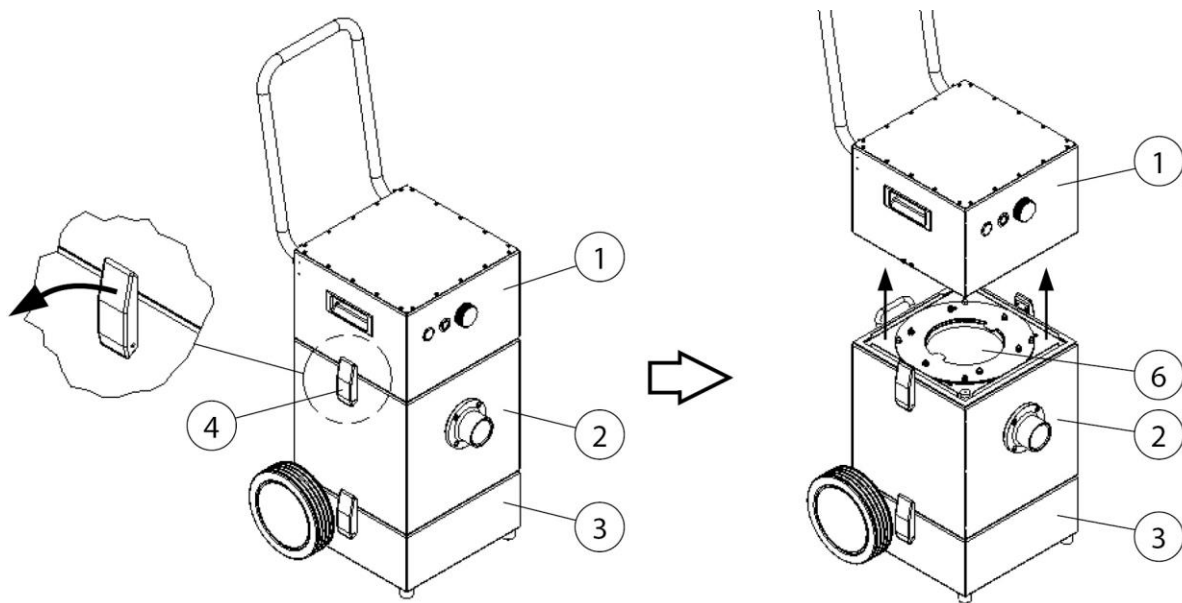


Fig. 9: Cleaning the filter cartridge

Pos.	Description	Pos.	Description
1	Fan unit	3	Lower part
2	Filter unit	4	Clamp fasteners
		6	Filter cartridge

Tab. 7: Cleaning the filter cartridge

Clean the filter cartridge as follows:

1. Switch off the product and disconnect it from the power supply by unplugging.
2. Release the fan unit (Pos. 1) from the filter unit (Pos. 2) by opening the two clamp fasteners (Pos. 4).

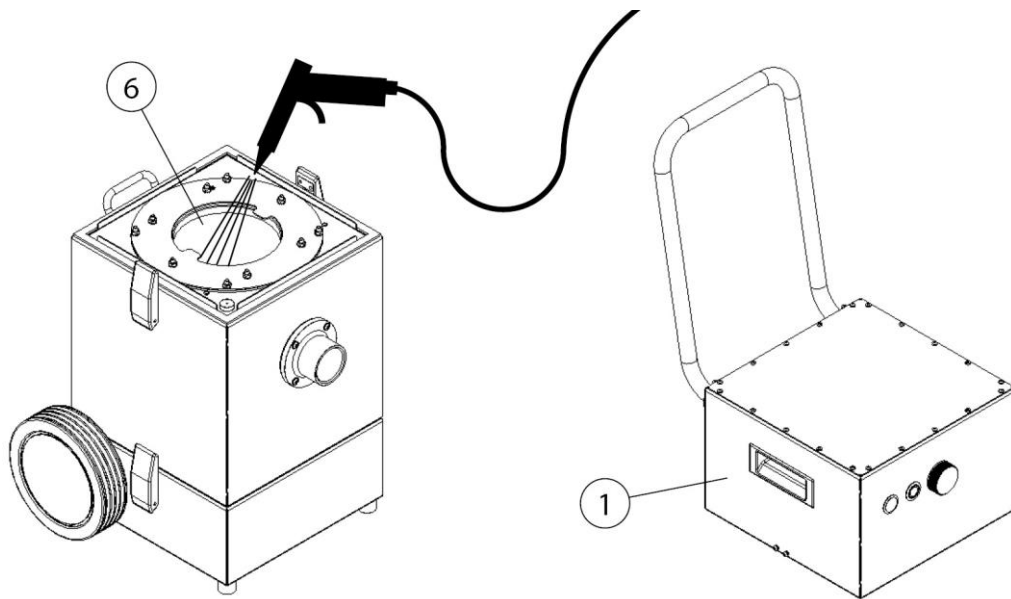


Fig. 10: Cleaning the filter cartridge

3. Lift off the fan unit (Pos. 1) and place it next to the filter unit (Pos. 2). Ensure that the seal is not damaged.
4. Using a compressed air gun, blow off the entire filter cartridge (Pos. 6) from top to bottom at a distance of approx. 5 cm. The dust deposits on the untreated air side are blown off and fall into the dust collection container.
5. Reassemble the product in reverse order, placing the fan unit (Pos. 1) on the filter unit (Pos. 2) and closing the two clamp fasteners (Pos. 4), making sure that the seal is correctly seated.
6. Connect the product to the power supply and put it back into operation. (see also "Commissioning" chapter)

NOTE

Damage to the filter cartridge

The filter cartridge may only be cleaned with clean, dry and oil-free compressed air at a maximum pressure of 3 bar.

Too much pressure and insufficient distance (less than 5 cm) can damage the filter cartridge.

NOTE

If necessary, it is also useful to change the dust collection container during this procedure.

7.2.3 Main filter change

The life of the filter inserts depends on the type and amount of deposited particles.

As the dust accumulation in the filter increases, its flow resistance increases and the extraction capacity of the product decreases.

Even in the case of products with an automatic filter cleaning system (if present), deposits can reduce the flow resistance.

A filter change is required.

⚠ WARNING

Health hazards caused by welding fume particles

Inhalation of welding fume particles, especially welding fume particles from welding processes on alloyed steels, can damage your health as they are 'respirable'. Skin contact with welding fume particles can cause skin irritation in sensitive individuals.

To avoid contact with and inhalation of these dust particles, wear disposable overalls, protective goggles, gloves and a suitable Class FFP2 respiratory protection filter mask in accordance with EN 149.

NOTE

During the work described in the following section, pay particular attention to the seal on the main filter. Only an undamaged seal allows the product to achieve a high filter efficiency. Main filters with a damaged seal must therefore be replaced every time.

NOTE

Please also refer to the "Installation" and "Use" chapters for the following stages.

- Only original replacement filters, because they guarantee the necessary filter efficiency and are matched to the product and its performance characteristics.
-

Carry out the main filter replacement as follows:

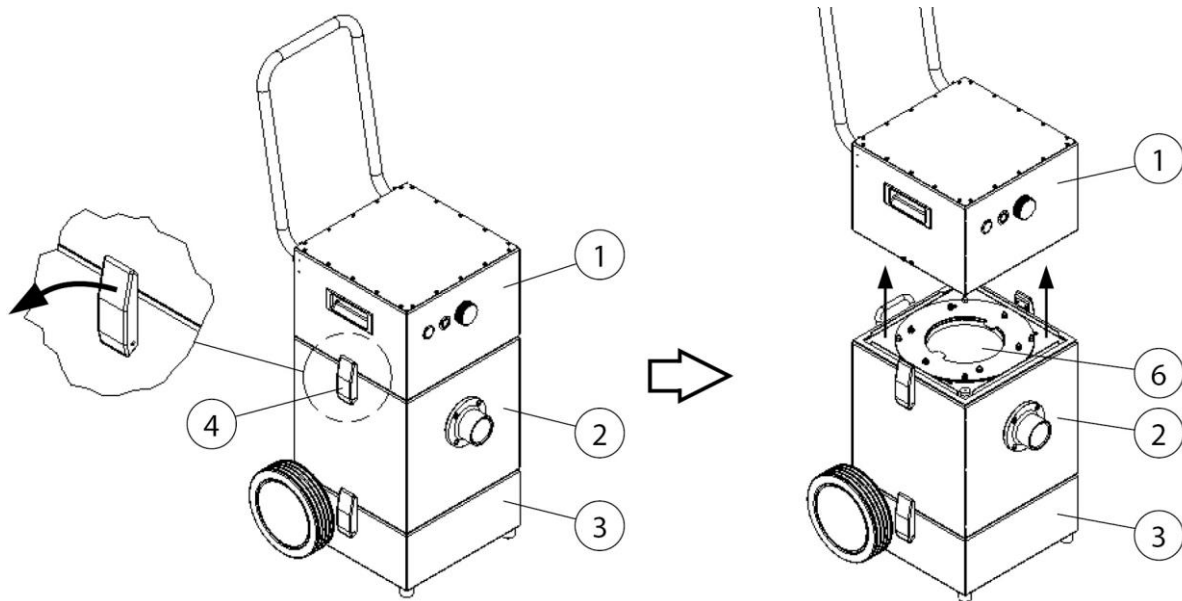


Fig. 11: Access to the main filter

Pos.	Description	Pos.	Description
1	Fan unit	4	Clamp fasteners
2	Filter unit		
3	Lower part with dust collection container	6	Filter cartridge

Tab. 8: Access to the main filter

1. Switch off the product and disconnect it from the power supply by unplugging.
2. Make sure the replacement filter cartridge and the enclosed disposal bag are available.
3. Open the two upper clamp fasteners (Pos. 4).
4. Lift off the fan unit (Pos. 1) and place it next to the product. Ensure that the seal is not damaged.

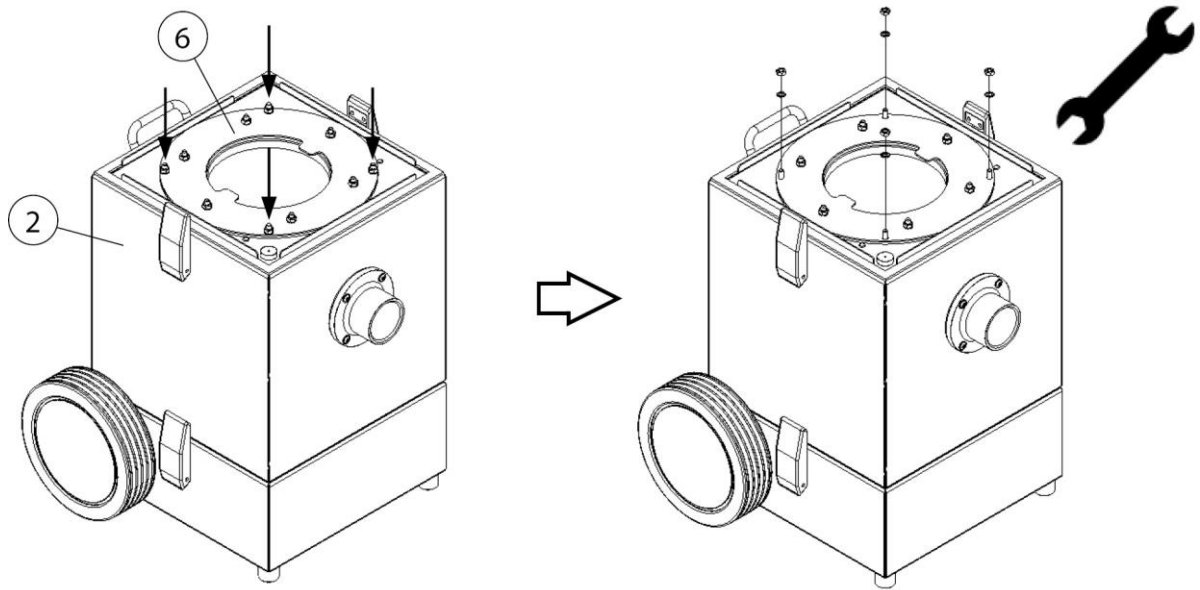


Fig. 12: Loosening the filter cartridge

5. Remove the four external hex bolts + serrated lock washers.

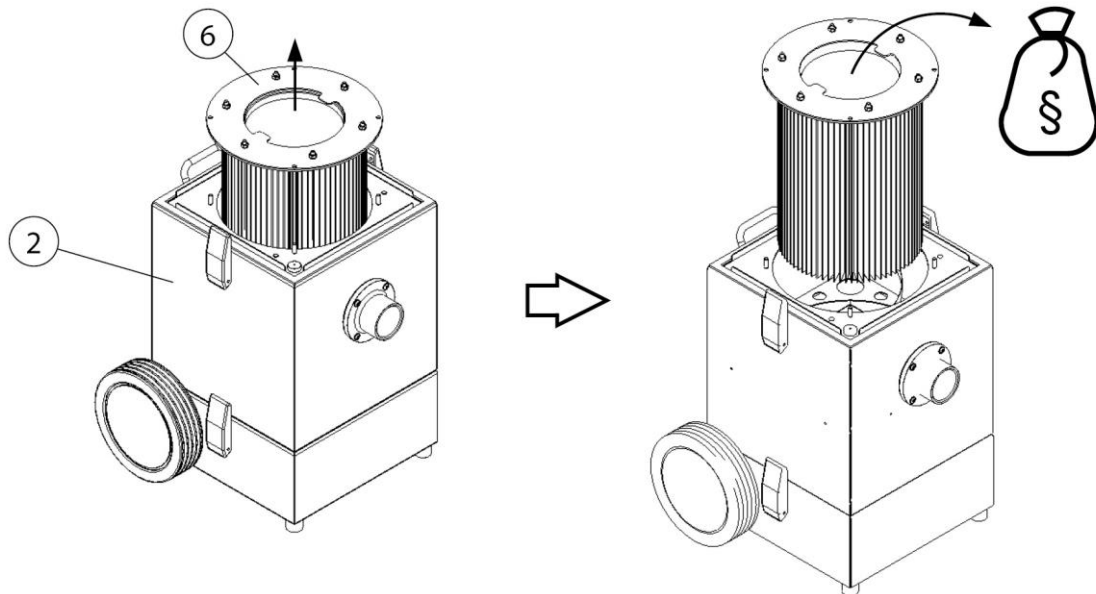


Fig. 13: Changing filters

6. Carefully pull the saturated filter cartridge (Pos. 6) out of the filter unit (Pos. 2) without raising dust.
7. Place the saturated filter cartridge (Pos. 6) in the disposal bag, seal it airtight and dispose of it according to the regulations.
8. The replacement filter cartridge is installed in reverse order.

7.3 Troubleshooting

Fault	Cause	Note
Product will not start up	No mains voltage	Have this checked by a qualified electrician
	Start/stop sensor (optional fitting) connected but no welding current detected. Welding process not yet started	Start welding process
	Fuse in the product has tripped	Have the fuse checked/replaced by a qualified electrician
Not all fumes are being captured	Draught	Avoid draughts
	Incorrect extraction capacity set	Check and correct required extraction capacity
Extraction capacity too low/non-existent	Filter inserts saturated	Replace filter inserts
	Welding burner clogged	Clean the welding burner
Dust escapes on the clean air side	Filter inserts damaged	Replace filter inserts
Signal lamp for filter saturation lights up	Filter cartridge saturated	Cleaning of the filter cartridge required, see "Maintenance" chapter

Tab. 9: Troubleshooting

NOTE

If the fault cannot be corrected by the customer, please contact the manufacturer's service department.

Access to the fuses in the product

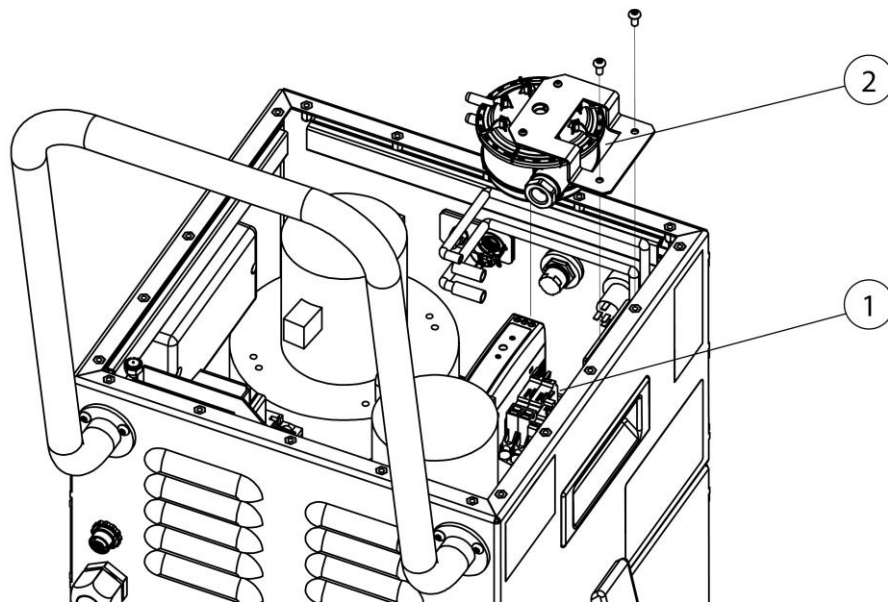


Fig. 14: Access to the fuses

To gain access to the fuses (Pos. 1) please proceed as follows:

1. Switch off the product and disconnect it from the power supply by unplugging.
2. Remove the cover plate of the product.
3. Remove the power socket (Pos. 2) as shown in the illustration. Connecting hoses and cables can remain attached.
4. Have the two fuses (Pos. 1) checked by a qualified electrician. If the fuse is defective, use fuses of the same type.

7.4 Emergency measures

In case of fire of the product or its detection elements, the following steps should be taken if necessary:

1. Disconnect the product from the mains! If present; pull out mains plug; set main switch to 0-position; disconnect supply fuses.
2. If present, disconnect the compressed air supply.
3. Fight fire with a commercially available dry powder extinguisher.
4. Notify local fire brigade if necessary.

⚠ WARNING

Do not open products with maintenance door. Flash flame formation!
In the event of a fire, do not touch the product under any circumstances without proper protective gloves. Risk of burns!

8 Disposal

▲ WARNING

Skin contact with welding fumes, etc. can cause skin irritation in susceptible individuals.

Disassembly work on the product may only be carried out by trained and authorised personnel while complying with the safety rules and the applicable accident prevention regulations.

Serious injury to the lungs and respiratory tract is possible!

In order to avoid contact with and inhalation of dust particles, use protective clothing, gloves and a blower respirator system.

The release of hazardous dust particles must be avoided during dismantling work so that persons in the vicinity are not harmed.

▲ CAUTION

All work on and with the product must comply with the legal obligations for waste avoidance and proper recycling/disposal.

8.1 Plastics

Plastics, if present, must be sorted as far as possible. Plastics must be disposed of in compliance with the legal requirements.

8.2 Metals

Metals, if present, must be separated and disposed of. Disposal must be carried out by an authorised company.

8.3 Filter elements

Filter elements, if present, must be disposed of in compliance with the legal requirements.

9 Annex

9.1 EC compliance statement

Designation:	Welding fume filter unit
Series:	Dusty Evo
Type:	63200, 63202, 63204 (if necessary, different item numbers for other product variants)
Machine ID:	See name plate in front section of this operating manual This product is developed, designed and manufactured in accordance with EC directives 2006/42/EC – Machinery Directive The product continues to comply with the provisions of the 2014/30/EU – EMC Directive 2014/35/EU – Low Voltage Directive 2011/65EU – RoHS Directive
Company:	At the sole responsibility of KEMPER GmbH Von-Siemens-Str. 20, D-48691 Vreden

The following harmonised standards are used:

- EN ISO 12100:2010 Safety of machinery - General principles for design
- EN ISO 13857:2019 Safety of machinery - Safety distances
- EN ISO 13854:2019 Safety of machinery - Minimum gaps
- EN ISO 21904-1:2020 Health and safety in welding and allied processes
- EN IEC 61000-6-2:2019 Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity standard for industrial environments
- EN IEC 61000-6-4:2019 Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments
- EN 60204-1:2018 Safety of machinery - Electrical equipment of machines
- EN ISO 13849-1:2015 Safety of machinery - Safety-related parts of control systems

A complete list of standards, directives and specifications applied is available from the manufacturer. The operating manual belonging to the product is available.

Additional information:

If it is not used for as intended or the design is altered, the Declaration of Conformity expires, unless confirmed in writing by us as manufacturers.

Mr Marcel Kusche is authorised to compile the technical documentation. Kemper GmbH, Von-Siemens-Str. 20, 48691 Vreden, Germany

Vreden, 17.03.2025

Place, date



B. KEMPER

CEO

Identification of the signatory

9.2 UKCA Declaration of Conformity

Designation: Welding fume filter unit
 Series: Dusty Evo
 Type: **63200, 63202, 63204** (possibly different article numbers for other product variants)
 Machine ID: See name plate in front section of this operating manual
 This product is developed, designed and manufactured in accordance with the UKCA directives
 Supply of Machinery (safety) Regulations 2008

 The product continues to comply with the provisions of the
 Electromagnetic Compatibility Regulations 2016
 Electrical Equipment (Safety) Regulations 2016

 At the sole responsibility of
 Company: **KEMPER GmbH**
 Von-Siemens-Str. 20, D-48691 Vreden

The following designated standards and technical specifications have been applied:

- BS EN ISO 12100:2010 Safety of machinery - General principles for design
- BS EN ISO 13857:2019 Safety of machinery - Safety distances
- BS EN ISO 13854:2019 Safety of machinery
- BS EN ISO 21904-1:2020 Health and safety in welding and allied processes
- BS EN IEC 61000-6-2:2019 Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity standard for industrial environments
- BS EN IEC 61000-6-4:2019 Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments
- BS EN 60204-1:2018 Safety of machinery - Electrical equipment of machines
- BS EN ISO 13849-1:2016 Safety of machinery - Safety-related parts of control systems
- BS EN IEC 63000:2018 Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

A complete list of standards, directives and specifications applied is available from the manufacturer. The operating manual belonging to the product is available.

Additional information:

If it is not used for as intended or the design is altered, the Declaration of Conformity expires, unless confirmed in writing by us as manufacturers.

UK Authorised Representative (for authorities only): Mr. Marc Crawford
 United Kingdom KEMPER (U.K.) Ltd.
 Venture Court, 2 Debdale Road, Wellingborough, Northamptonshire NN8 5AA

Vreden, 17.03.2025
 Place, date

B. Kemper

CEO
 Identification of the signatory

9.3 Technical data

Designation	Type	
Filter	63200	63202
Filter stages	1	
Filter method	Cleanable filter	
Cleaning method	Manual	
Filter surface m ² [ft ²]	1.35 [15]	
Number of filter elements	1	
Total filter surface m ² [ft ²]	1.35 [15]	
Type of filter	Filter cartridge	
Filter material	PTFE	
Filter efficiency ≥ %	99.9	
Welding fumes class	--	
Test standard	--	
Filter class/Dust classification	M	
Basic data		
Maximum fan capacity m ³ /h [CFM]	2 x 180 [2 x 106]	
Extraction capacity m ³ /h [CFM]	260 [153]	
Vacuum Pa [inch WC]	18100 [73]	
Motor power kW [hp]	1.6 [2.15]	
Power supply/rated current/protection type/ISO class	See name plate	
Permissible ambient temperature °C [°F]	-10 to + 40 [+14 to +104]	
Duty cycle %	100	
Noise level dB(A)	74	
Compressed air supply bar [PSI]	--	
Compressed air requirement/compressed air class	--	
Basic product dimensions WxHxD	See dimension sheet	
Basic product weight kg [lbs]	30 [67]	
Additional information		
Fan type	Suction turbine	

Tab. 10: Technical data

9.4 Dimensions sheet

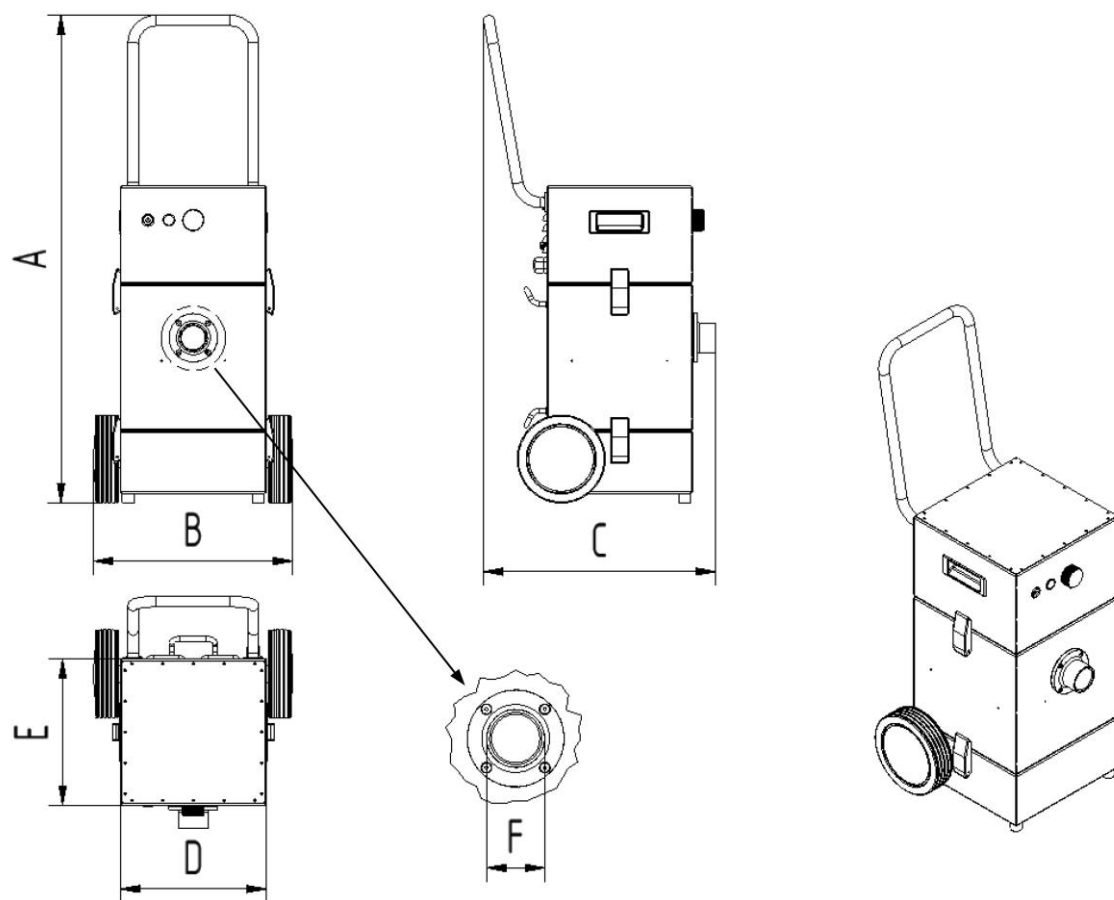


Fig. 15: Dimensions sheet

Symbol	Dimensions mm [in]	Symbol	Dimensions mm [in]
A	1004 [39.5]	D	300 [11.8]
B	410 [16.1]	E	300 [11.8]
C	472 [18.6]	F	Ø 45 [Ø 1.8]/ Ø 63 [Ø 2.5]

Tab. 11: Dimensions table

9.5 Spare parts and accessories

Consec. no.	Description	Part no.
1	Main filter PTFE filter cartridge	1090432
2	Disposable disposal container	1490781
3	Automatic start/stop system including sensor with 5 m connection cable	94102702
4	Tool tray with cup holder	1490783
5	Wheel set	6320005
6	Connection for extraction hose NW 45/NW 63	1061188
7	Turbine with seal and screws – 230V	1990031
7 a	Turbine with seal and screws – 110V	1990034
8	Push handle	1317477
9	Sealing kit - filter cartridge + housing separation points	1400266
10	Clamp closure for housing separation points (4 pieces)	1990010
11	Extraction hose 2.5 m Ø45 mm	93070004
12	Extraction hose 5.0 m Ø45 mm	93070005
13	Extraction hose 10.0 m Ø45 mm	93070006
14	Extraction hose 5.0 m Ø63 mm	1140864
15	Extraction hose 7.5 m Ø63 mm	1140865
16	Extraction hose 10.0 m Ø63 mm	1140866

Tab. 12: Spare parts and accessories

Deutschland (HQ)**KEMPER GmbH**

Von-Siemens-Str. 20
D-48691 Vreden
Tel. +49 2564 68-0
Fax +49 2564 68-120
mail@kemper.eu
www.kemper.eu

United Kingdom**KEMPER (U.K.) Ltd.**

Venture Court
2 Debdale Road
Wellingborough
Northamptonshire NN8 5AA
Tel. +44 1327 872 909
Fax +44 1327 872 181
mail@kemper.co.uk
www.kemper.co.uk

France**KEMPER sàrl**

7 Avenue de l'Europe
F-67300 Schiltigheim
Si vous appelez de France
Tél. +33 800 91 18 32
Fax +33 800 91 90 89
De Belgique ou de l'étranger
Tél. +492564 68-135
Fax +492564 68-40135
mail@kemper.fr
www.kemper.fr

China**KEMPER China**

Floor 2, Building 6
No. 500 Huapu Road
Shanghai 201799
P.R. of China
Tel. +86 (21) 5924-0978
Fax +86 1852-1069-401
info@kemper-china.com.cn
www.kemper.cn.com

Česká Republika**KEMPER spol. s r.o.**

Pyšelská 393
CZ-257 21 Poříčí nad Sázavou
Tel. +420 317 798-000
Fax +420 317 798-888
mail@kemper.cz
www.kemper.cz

United States**KEMPER America, Inc.**

2460 Industrial Park BLVD.
Cumming, GA 30041
Tel. +1 770 416 7070
Fax +1 770 828 0643
info@kemperamerica.com
www.kemperamerica.com

Nederland**KEMPER B.V.**

Demmersweg 92
Begane grond
7556 BN Hengelo
Tel. +492564 68-137
Fax +492564 68-120
mail@kemper.eu
www.kemper.eu

España**KEMPER IBÉRICA, S.L.**

Avda Diagonal, 421 3º
E-08008 Barcelona
Tel. +34 902 109-454
Fax +34 902 109-456
mail@kemper.es
www.kemper.es

India**KEMPER India**

55, Ground Floor, MP Mall
MP Block, Pitam Pura
New Delhi -110034
Tel. +91.11.42651472
mail@kemper-india.com
www.kemper-india.com

Polska**Kemper Sp. z o.o.**

ul. Grzybowska 87
00-844 Warszawa
Tel. +48 22 5310 681
Faks +48 22 5310 682
info@kemper.pl
www.kemper.pl

