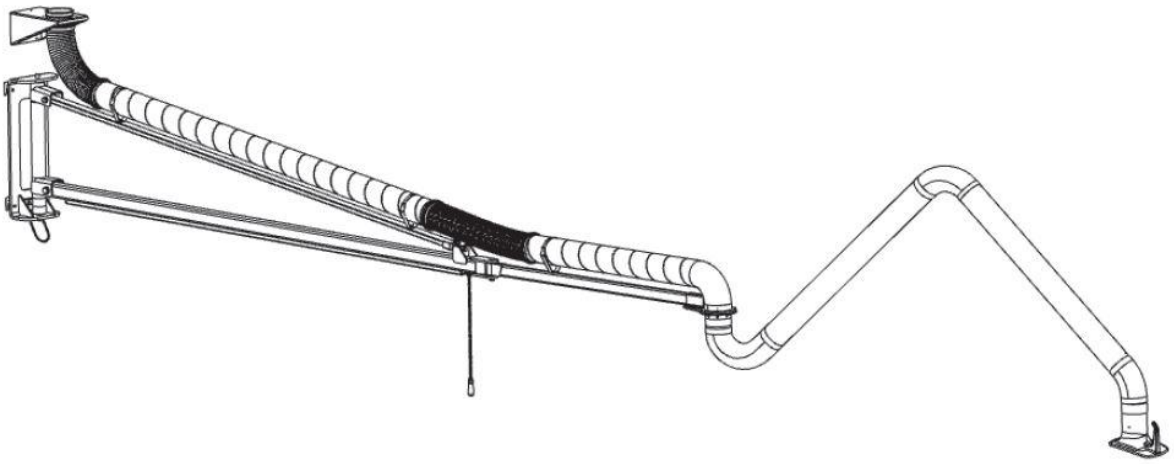


**EN – Operating Manual Extraction Arm 6-10 m**

# 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 are to be kept confidential and made accessible only to authorised persons. Disclosure to third parties is only permitted with the prior written consent of the manufacturer KEMPER GmbH.

All documents are protected under the Copyright Act. Any form of disclosure, reproduction, or partial use, as well as the communication of its content, is prohibited without express written permission.

Violations will be prosecuted under criminal law and will incur liability for any resulting damages.

Industrial property rights such as patents, trademarks, or designs are exclusively held by the manufacturer.

## 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.


**⚠ 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 designed and built to extract welding fumes locally. The product must not be used in an explosive atmosphere and not for the extraction of an explosive atmosphere. It is not suitable for the extraction of acid and alkali vapours.

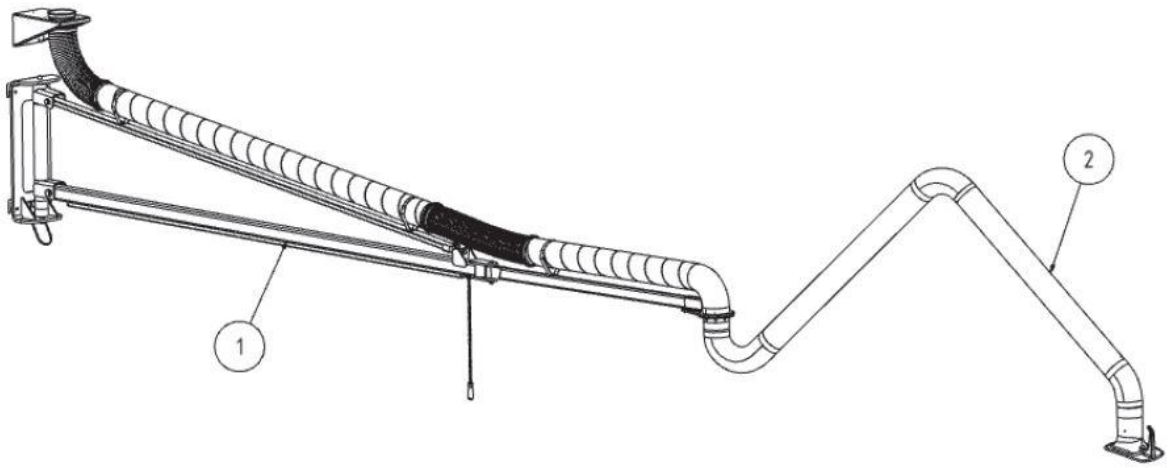



*Fig. 1: Extraction arm with hinged cantilever arm*

| Item | Description |
|---|---|
| 1 | Hinged cantilever arm |
| 2 | Extraction arm |

*Tab. 1: Position on the product*

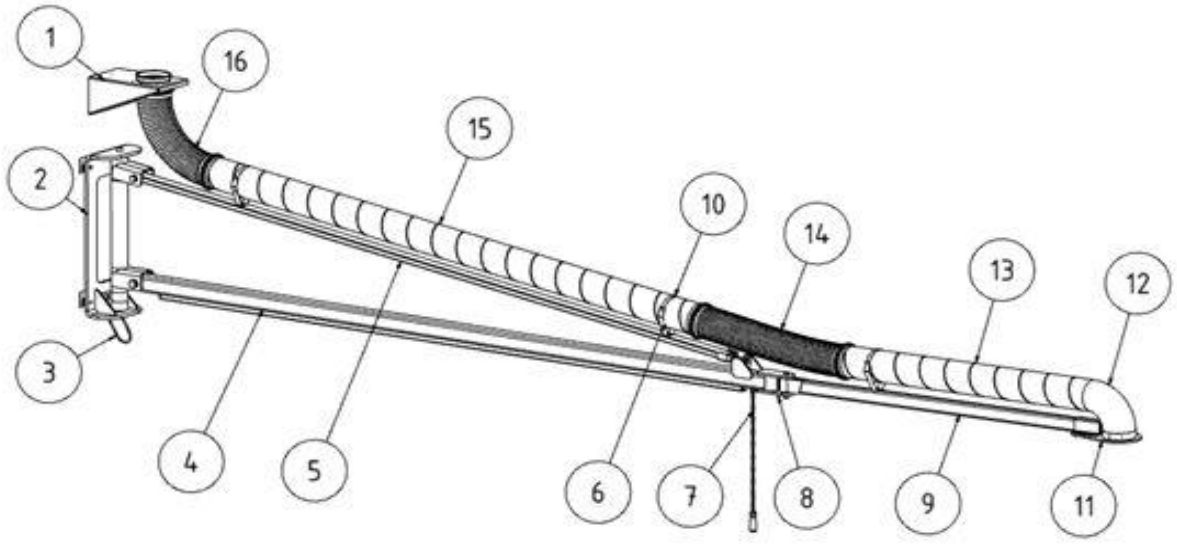



*Fig. 2: Cantilever arm*

| Item | Description | Item | Description |
|---|---|---|---|
| 1 | Wall mount bracket with extraction opening | 9 | Cantilever arm |
| 2 | Wall console | 10 | Velcro tape |
| 3 | Bracket | 11 | Extraction arm holder |
| 4 | Hinged cantilever arm | 12 | Pipe bend |
| 5 | Hinged tie bar | 13 | Suction pipe |
| 6 | Pipe bracket | 14 | Tube with 2x clamps |
| 7 | Hoist chain | 15 | Suction pipe |
| 8 | Cantilever arm connection | 16 | Hose with 2x clamps |

*Tab. 2: Positions on the product*

## 3.2 Intended use

The product is designed to extract welding fumes generated during E-welding from their point of origin. In general, the product can be used for all work processes in which welding fumes are released. However, it is important to ensure that no "sparks" are drawn into the product from, e.g. a grinding process.
The product must not be used in an explosive atmosphere and not for the extraction of an explosive atmosphere.

The product is not suitable for the extraction of acid or caustic vapors.

The technical data includes the dimensions and further details for the product which have to be observed.

**NOTE**

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

Intended use also includes the 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 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.

## 3.4 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.

## 3.5 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 fumes, etc. can cause skin irritation in susceptible individuals – wear protective clothing.

During setup and preparation work, it may be necessary to dismantle on-site safety devices. This creates various residual risks and potential hazards that the operating personnel must be aware of.

The welding process may only be performed if the product has been set to match the extraction of welding fumes.

# 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.
- Only use suitable transport and lifting equipment.
- It must be ensured that the assembly location provides sufficient load-bearing capacity.
- Only use suitable fixing material.
- The fixing material must be selected according to the local conditions.
- The product must not obstruct anyone in their working area.
- Existing air outlet grilles must not be covered.
- Existing maintenance doors and covers must be freely accessible.

**⚠ DANGER**

**Falling parts may cause life-threatening injuries!**

Tipping or falling loads lead to severe to fatal injuries.

- Never step under suspended loads.
- Always remain outside the danger zone.
- 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**

The product operator may only assign the independent assembly of the product to personnel who are familiar with this task.

Two people are needed to assemble the product.

**NOTE**

For assembly of the available attachments, please follow the instructions provided.

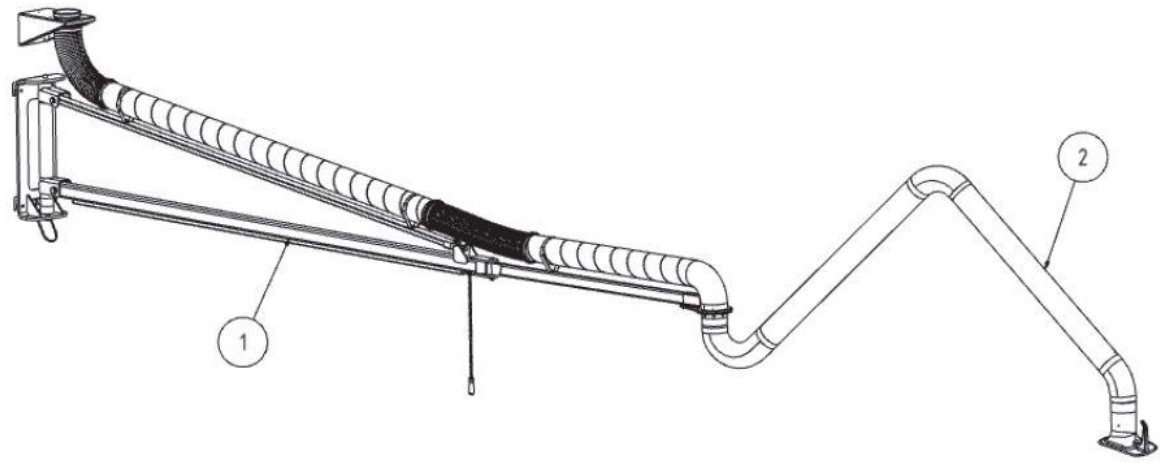



*Fig. 3: Cantilever arm with extraction arm*

| Pos. | Description | Pos. | Description |
|---|---|---|---|
| 1 | Cantilever arm | 2 | Extraction arm |

*Tab. 3: Positions on the product*

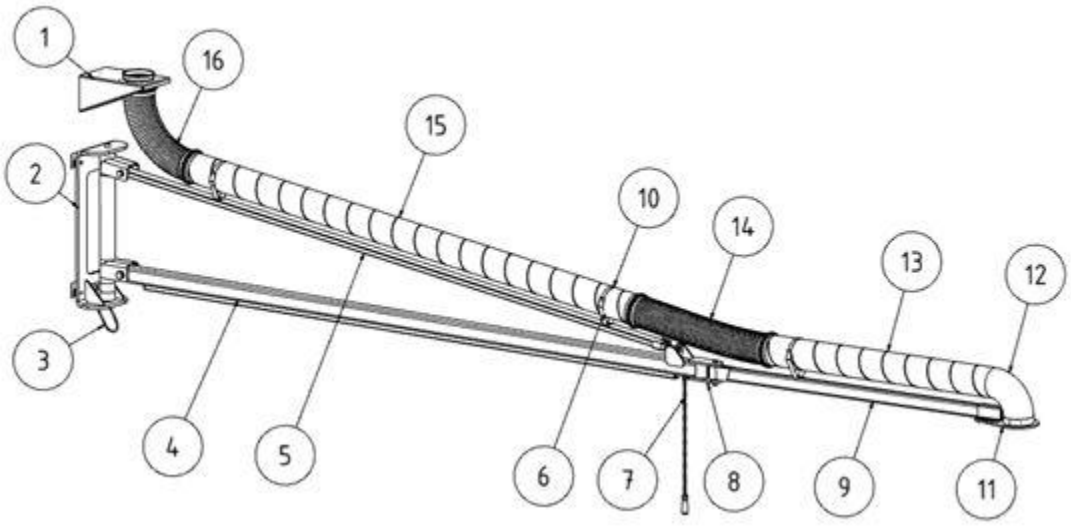



*Fig. 4: Positions on the product*

| Pos. | Description | Pos. | Description |
|---|---|---|---|
| 1 | Wall mount bracket | 9 | Cantilever arm 2 |
| 2 | Cantilever arm wall mount bracket | 10 | Velcro tape |
| 3 | Bracket | 11 | Extraction arm holder |
| 4 | Cantilever arm 1 | 12 | Pipe bend |
| 5 | Hinged tie bar | 13 | Spiral pipe |
| 6 | Pipe bracket | 14 | Extraction hose with 2x clamps |
| 7 | Pull chain | 15 | Spiral pipe |
| 8 | Cantilever arm connection | 16 | Extraction hose with 2x clamps |

*Tab. 4: Positions on the product*

**⚠ WARNING**

Falls and falling components cause serious injuries.

Only use standard ladders, e.g. working platforms.

Only use suitable lifting equipment.

Never stand under suspended loads.

The assembly must only be carried out by two persons.

## 5.1 Assembly requirements

- Mount the cantilever arm for the product only on suitable walls and columns.
- Only use the supplied mounting material and recommended fixings.
- Observe the tightening torques of the screws.

## 5.2 Load-bearing capacity of the wall mount bracket due to the extraction arms

| Extraction arm length<br>Hose version/pipe version | Note | Torque on the wall mount bracket<br>(rounded values) | Tensile force per upper fastening screw<br>(rounded values) |
|---|---|---|---|
| 6 metres | 4 m cantilever arm + 2 m extraction arm | 5430 Nm | 5325 N |
| 7 metres | 4 m cantilever arm + 3 m extraction arm | 5565 Nm | 5455 N |
| 8 metres | 4 m cantilever arm + 4 m extraction arm | 5760 Nm | 5650 N |
| 8 metres | 4 m cantilever arm + 4 m extraction arm | 9350 Nm | 6620 N |
| 9 metres | 6 m cantilever arm + 3 m extraction arm | 9555 Nm | 6765 N |
| 10 metres | 6 m cantilever arm + 4 m extraction arm | 9850 Nm | 6975 N |

*Tab. 5: Load table*

## 5.3 Installing the wall mount bracket

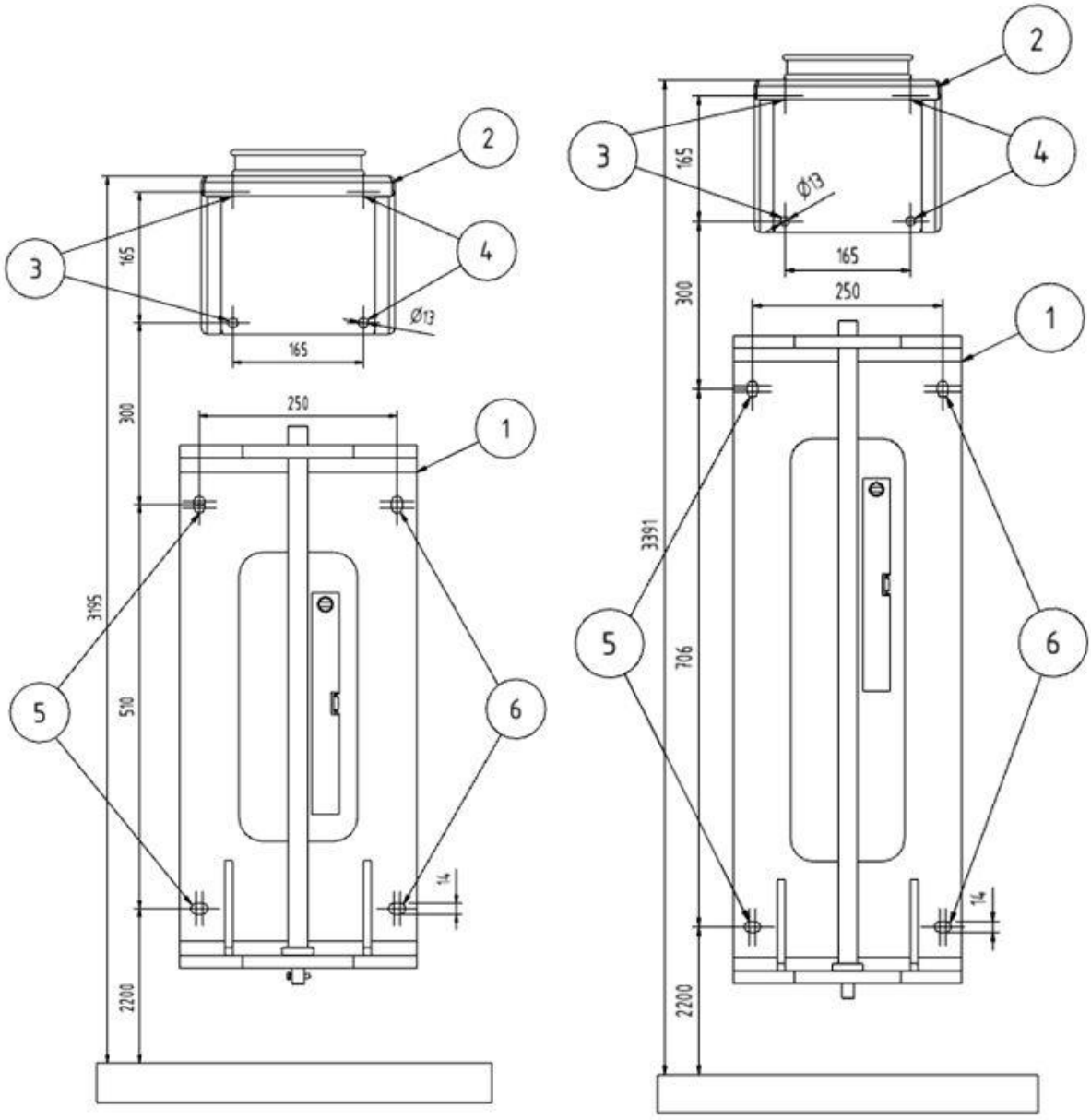



*Fig. 5: Wall mount bracket*

| Pos. | Description | Pos. | Description |
|---|---|---|---|
| 1 | Wall mount bracket | 3, 4, 5 | Mounting holes |
| 2 | Exhaust port | | |

*Tab. 6: Positions on the product*

1. Fasten the wall mount bracket for the cantilever arm and the wall mount bracket with air intake opening with corresponding screws and dowels to load-bearing wall or column.
2. Depending on the scope of supply, select either the large or small wall mount bracket.

**NOTE**

Observe the recommended mounting material in this manual.

3. Use the provided mounting holes of the wall mount bracket.
4. Align the wall mount bracket with a spirit level.
5. If necessary, use washers between the wall mount bracket and the wall to compensate any unevenness.

## 5.4 Installing the cantilever arm bracket

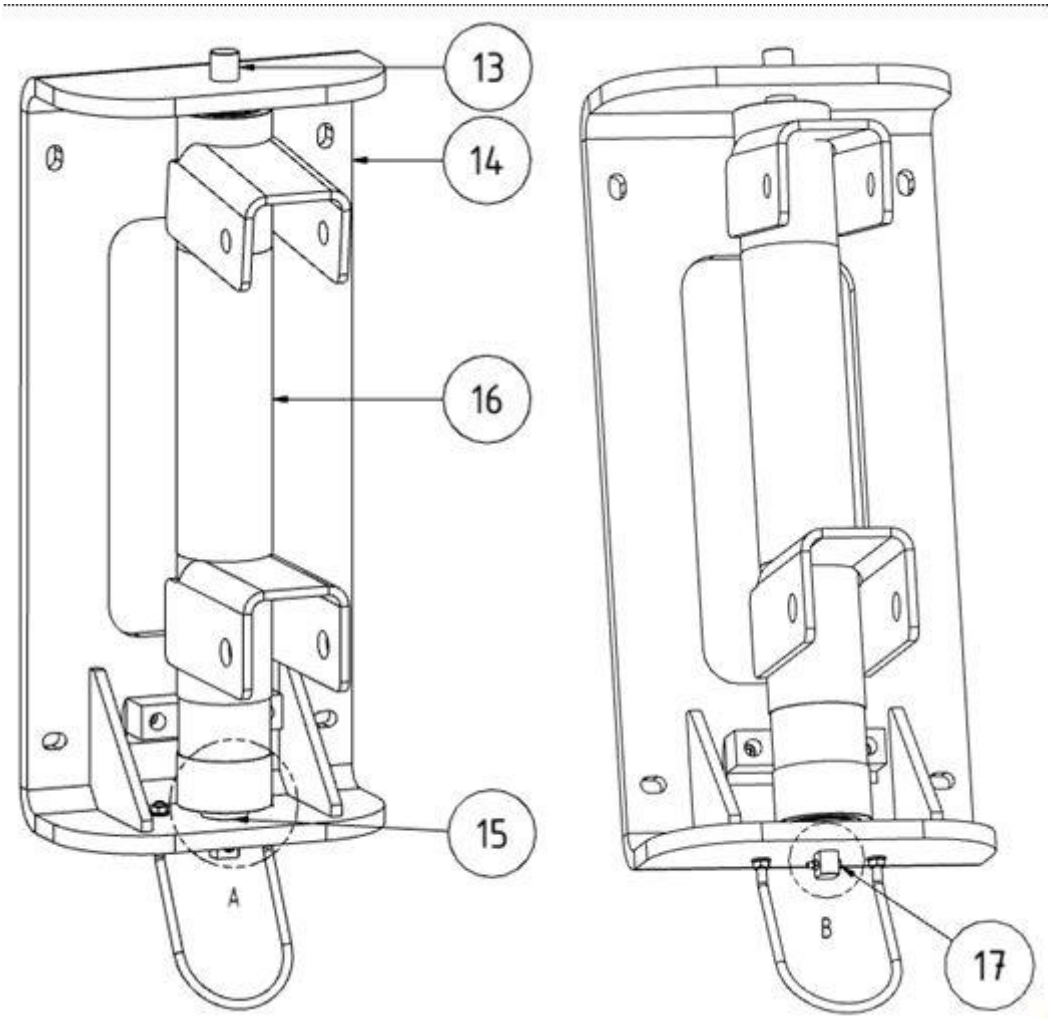


*Fig. 6: Cantilever arm bracket*

| Pos. | Description | Pos. | Description |
|---|---|---|---|
| 13 | Axis bolt | 16 | Cantilever arm |
| 14 | Wall mount bracket | 17 | Screws (M5x20) |
| 15 | Spacer | | |

*Tab. 7: Positions on the product*

1. Pull the axis bolt out of the wall mount bracket.
2. Position the spacers (item 15) on the lower leg of the wall mount bracket.
3. Position the bracket of the cantilever arm so that the axis bolt (item 13) can be easily inserted again.
4. Insert the axis bolt (item 13) through the wall mount bracket as well as through the spacers (item 15) and the bracket of the cantilever arm.
5. Secure the inserted axis bolt (item 13) under the wall mount bracket with the screws (item 21).

## 5.5 Installing the cantilever arm – part 1

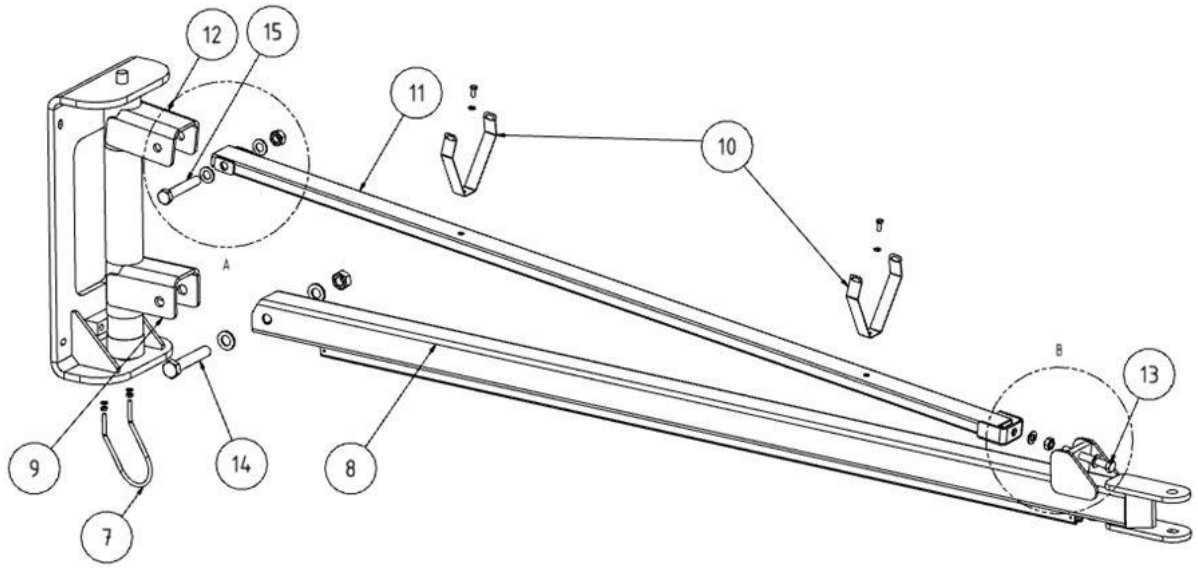



*Fig. 7: Cantilever arm part 1*

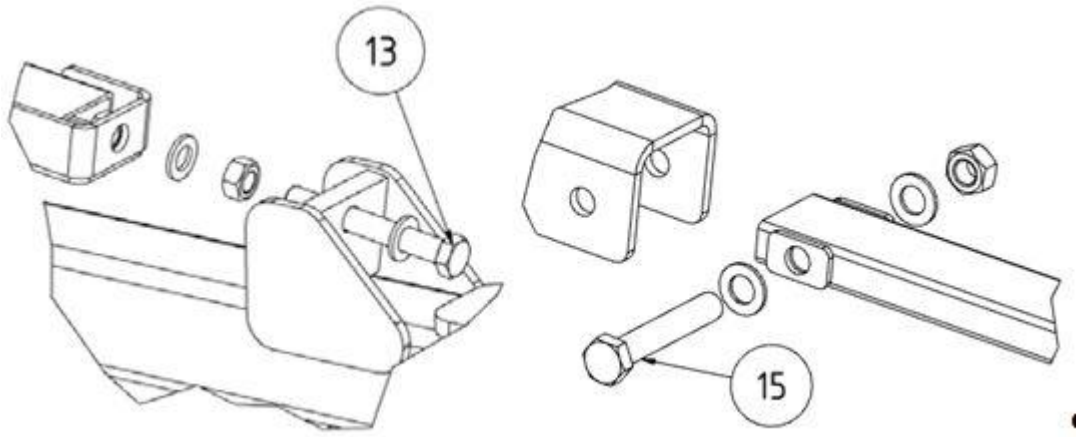



*Fig. 8: Cantilever arm*

| Pos. | Description | Pos. | Description |
|---|---|---|---|
| 7 | Bracket | 11 | Hinged tie bar |
| 8 | Cantilever arm | 12 | Wall mount bracket (top) |
| 9 | Wall mount bracket (bottom) | 13 | Clamping screw |
| 10 | Pipe bracket | 14+15 | Screws |

*Tab. 8: Positions on the product*

1. Mount the bracket (item 7) on the wall mount bracket.

2. Position the cantilever arm in the lower bracket of the wall mount bracket (item 8) and fasten with the screw so that the cantilever arm remains movable.
3. Mount the pipe brackets (item 10) on the tie rod (item 11).
4. Position the tie rod (item 11) in the upper holder of the wall mount bracket and secure it with the screw so that it remains movable.
5. Raise both parts of the cantilever arm so that the cantilever arm is horizontal.
6. Now connect the tie rod and the cantilever arm with the clamping screw.
7. Align the cantilever arm exactly horizontal by tightening/loosening the clamping screw.
8. After alignment, tighten the screws firmly.

## 5.6 Installing the cantilever arm – part 2

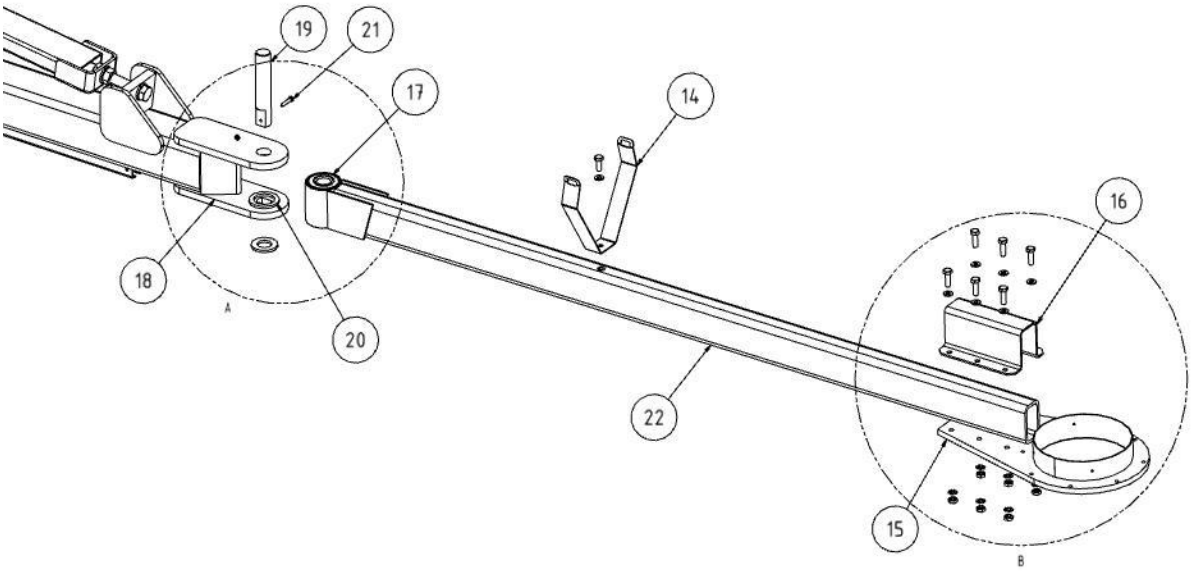



*Fig. 9: Cantilever arm part 2*

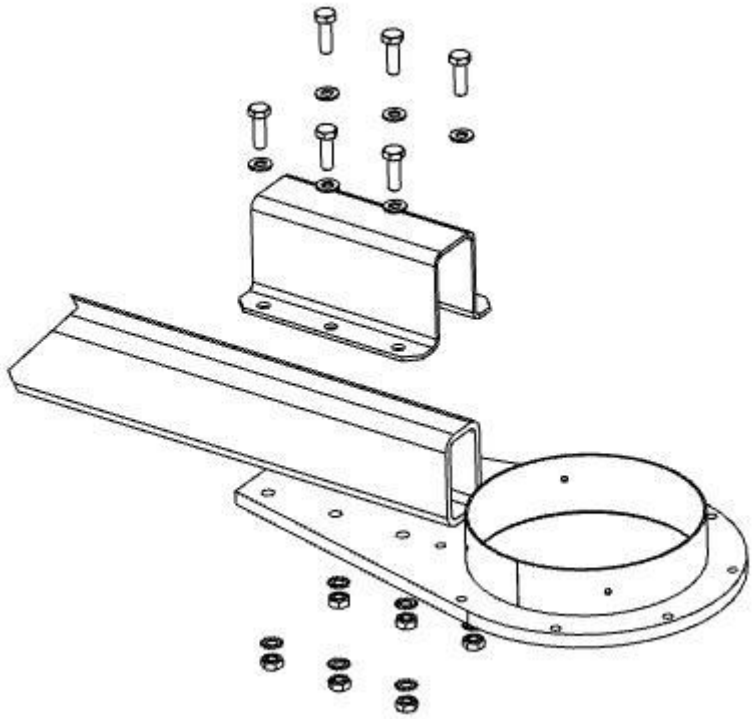


*Fig. 10: Installing the extraction arm holder*

| Pos. | Description | Pos. | Description |
|---|---|---|---|
| 14 | Pipe bracket | 19 | Axis bolt |
| 15 | Extraction arm holder | 20 | Spacer |
| 16 | Clamping profile | 21 | Screw |
| 17 | Plain bearing bush | 22 | Cantilever arm 2 |
| 18 | Cantilever arm 1 | | |

*Tab. 9: Positions on the product*

1. Install the pipe bracket on cantilever arm 2.
2. Screw the extraction arm holder (item 15) with the clamping profile (item 16) to the free end of the second cantilever arm (item 22).

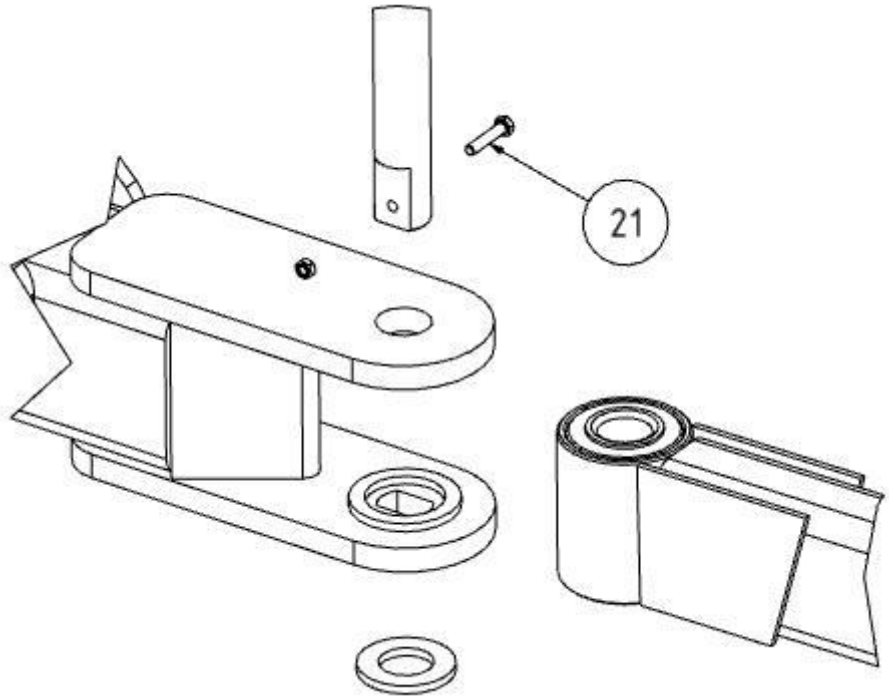



*Fig. 11: Connecting the cantilever arms together*

3. Position the spacers on the lower leg of the cantilever arm.
4. Then push the plain bearing bush of cantilever arm 2 (item 22) into the holder of cantilever arm 1 (item 18).
5. Insert the axis bolt (item 19) through the holes of the bracket on cantilever arm 1 (item 18), through the plain bearing bush of cantilever arm 2 (item 22) and through the spacer (item 20).
6. Slide a washer over the end of the axis bolt (item 19) and secure the axis bolt with the screw (item 21).

## 5.7 Installing the extraction arm on the cantilever arm

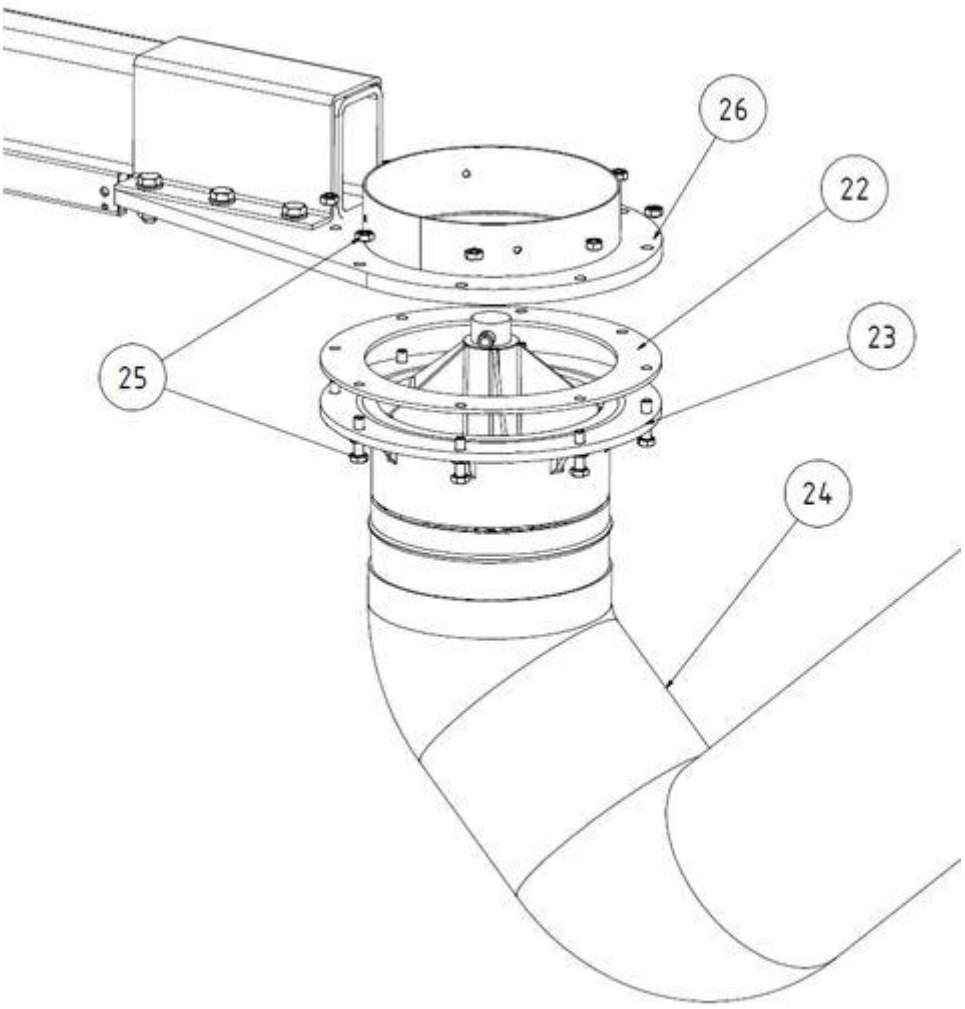



*Fig. 12: Extraction arm on the cantilever arm*

| Pos. | Description | Pos. | Description |
|---|---|---|---|
| 22 | Rubber seal | 25 | 8x screws (M6x25) + nuts |
| 23 | Slewing ring | 26 | Extraction arm holder |
| 24 | Extraction arm | | |

*Tab. 10: Positions on the product*

1. Place the flat rubber seal (item 22) on the flange of the slewing ring (item 23) of the extraction arm.
2. Screw the flange of the slewing ring (item 23) + rubber seal (item 22) to the extraction arm holder with the screws and nuts.

## 5.8 Adjusting Brake on Extraction Arm

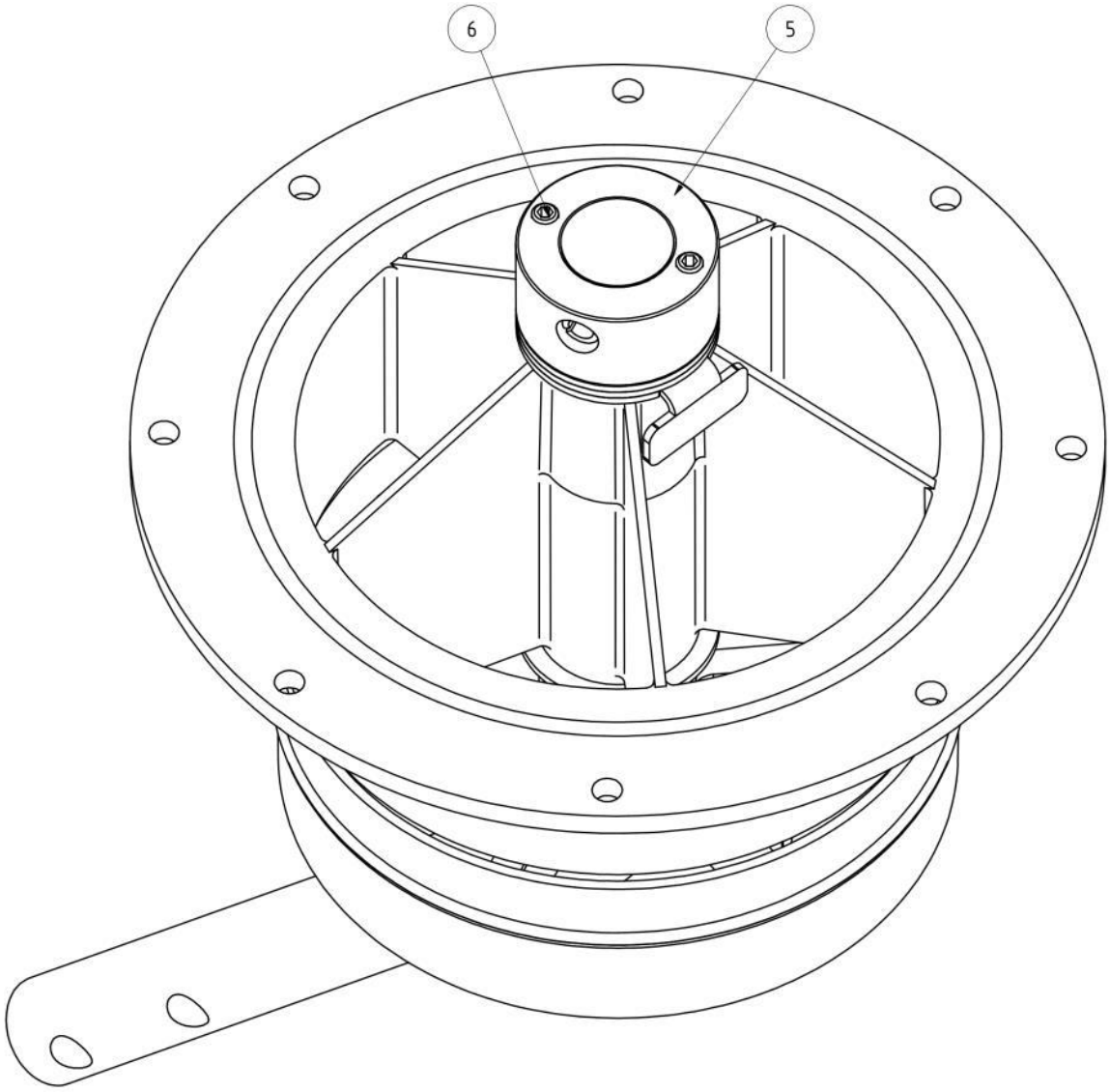



*Fig. 13: Brake*

| Pos. | Description | Pos. | Description |
|---|---|---|---|
| 5 | Brake | 6 | Screws |

*Tab. 11: Positions on the product*

1. Adjust the brake (item 5) of the slewing ring so that the extraction arm will hold itself up in any swivel position. The brake can be adjusted by tightening/loosening the screws (item 6).

## 5.9 Installing the spiral pipe

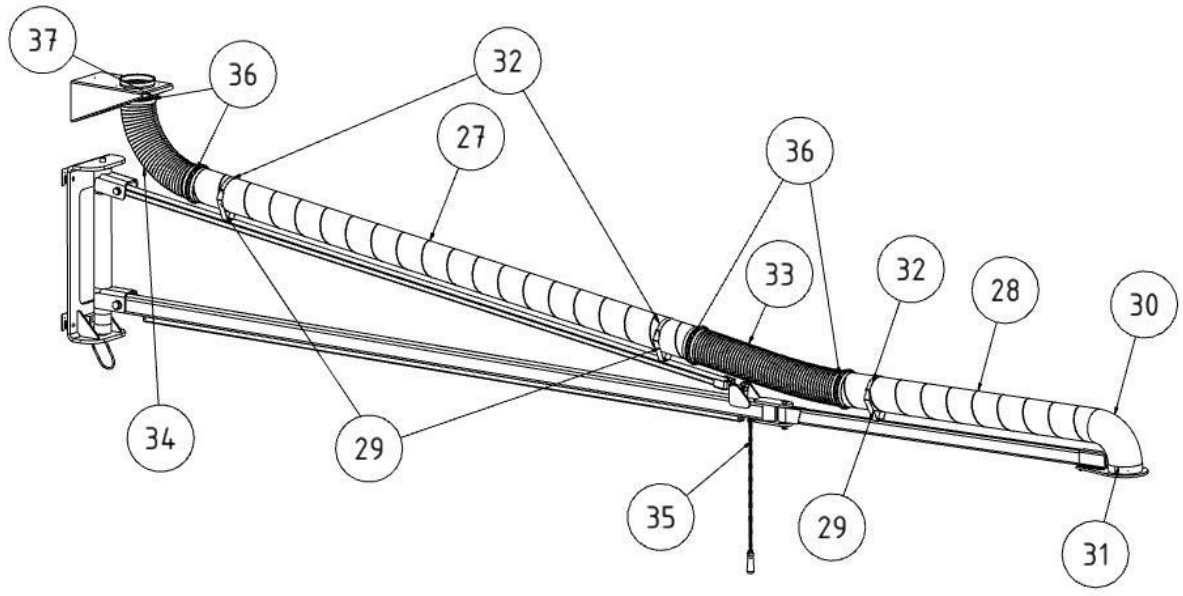



*Fig. 14: Installing the spiral pipe*

| Pos. | Description | Pos. | Description |
|---|---|---|---|
| 27 | Spiral pipe 1 | 33 | Extraction hose 1 |
| 28 | Spiral pipe 2 | 34 | Extraction hose 2 |
| 29 | Pipe bracket | 35 | Pull chain |
| 30 | Pipe bend | 36 | Hose clamps |
| 31 | Extraction arm holder | 37 | Wall mount bracket |
| 32 | Velcro tape | | |

*Tab. 12: Positions on the product*

1. Place spiral pipe 1 (item 27) into the pipe holders provided (item 29).
2. Insert the pipe bend (item 30) into spiral duct 2 (item 28).
3. Place spiral pipe 2 with pipe bend (item 30) onto the pipe holders. The pipe bend (item 30) must be inserted into the socket of the extraction arm holder (item 31).
4. Fasten the pipe bend with the supplied sheet metal screws.
5. Attach the spiral pipe to the pipe holders with the Velcro tape.
6. Push on the extraction hose 1 (item 33) in the joint area at the ends of the spiral pipes and fasten them with two hose clamps.

7. Also push the extraction hose onto the wall mount bracket (item 37) and connect it to spiral pipe 1 (item 27). Then fix the hose ends with two hose clamps.
8. Now attach the pull chain (item 35) to the cantilever arm.

**NOTE**

Only for extraction arms in rigid metal tube version. Shorten the rear tube section to 900 mm.

**NOTE**

For example, a wire feed unit can be mounted for carrying in the hitch under the cantilever arm.

**ATTENTION**

Note that the first cantilever arm has a maximum weight of 50 kg and the second cantilever arm has
10 kg, which cannot be exceeded.

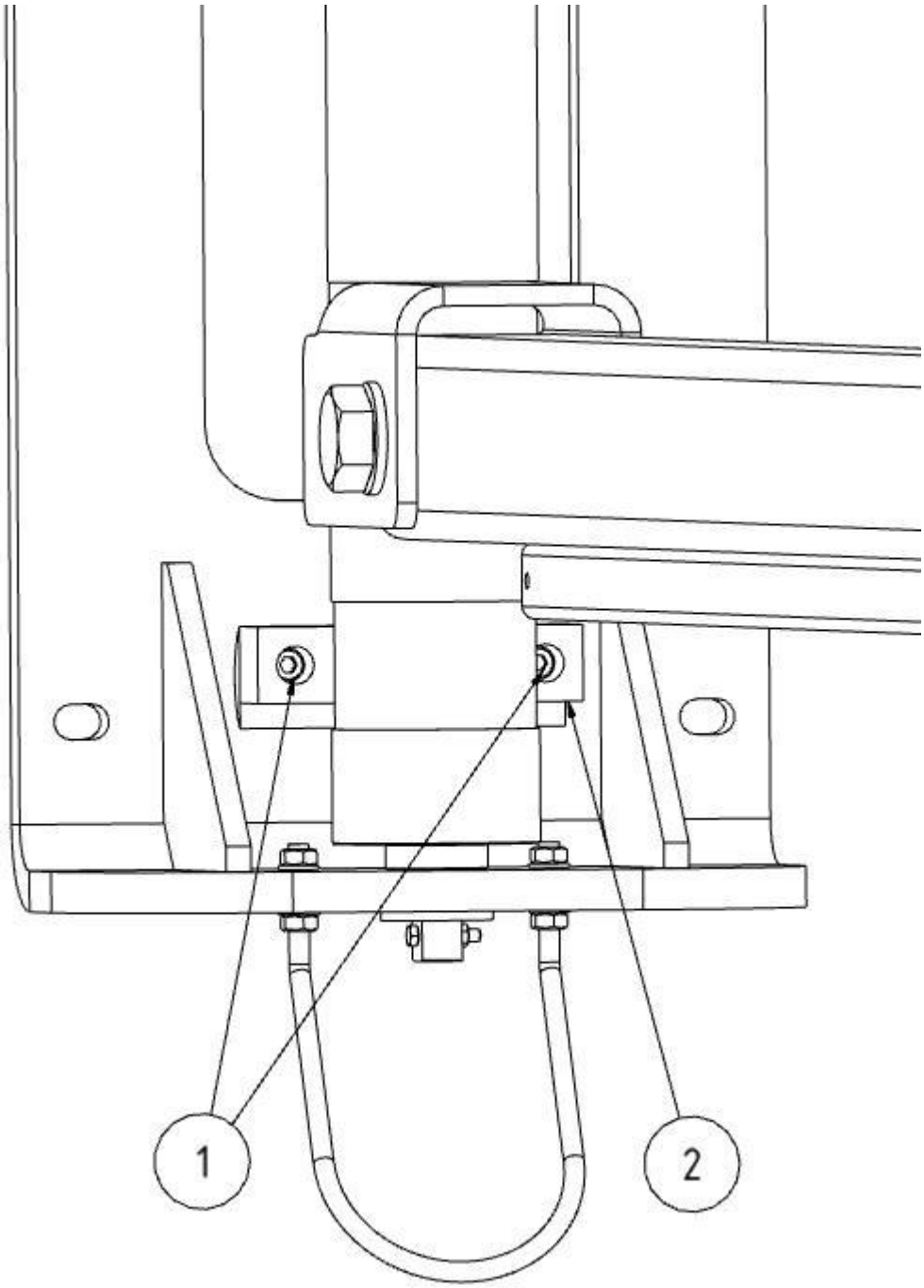



*Fig. 15: Brake*

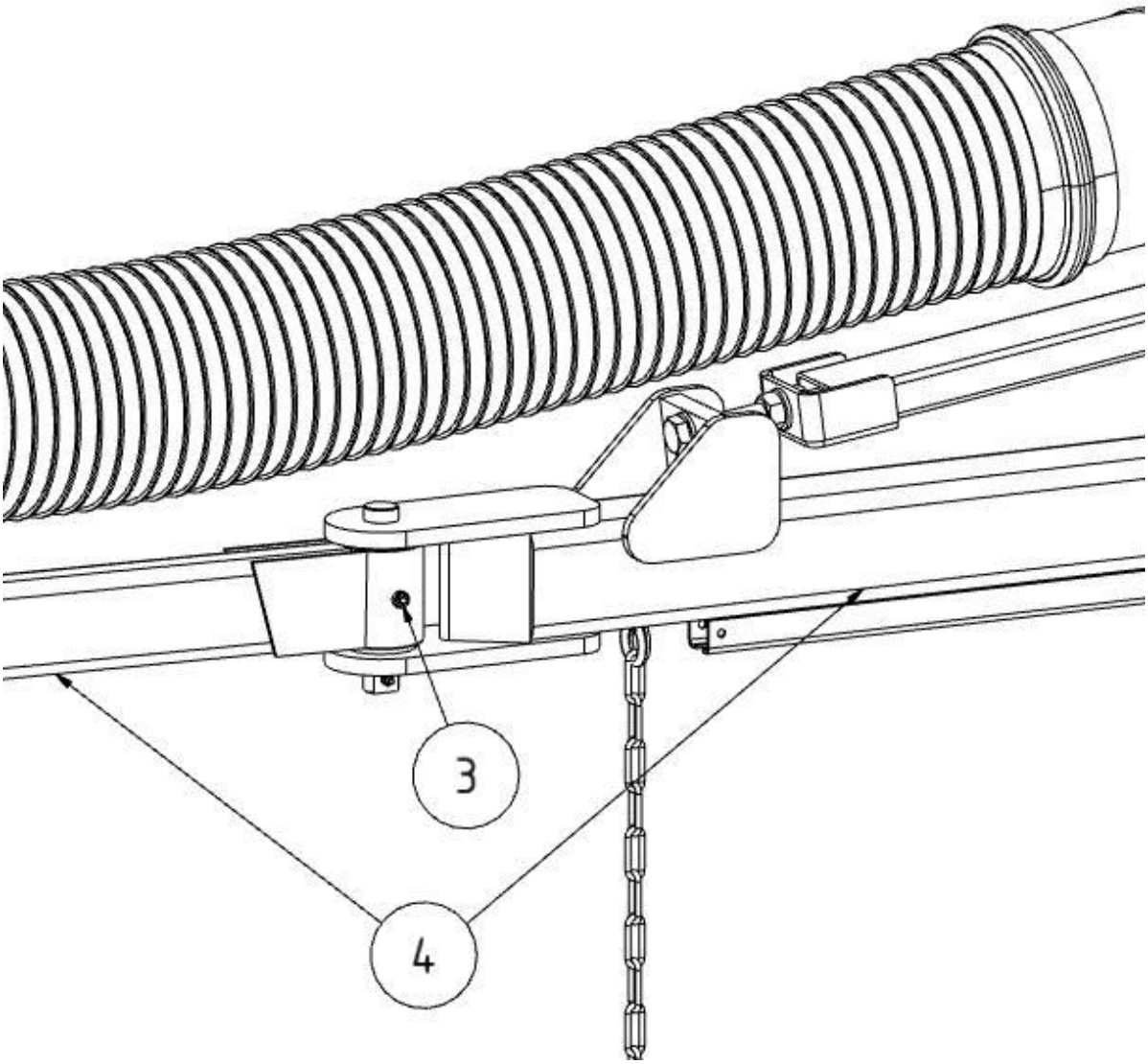



*Fig. 16: Brake*

| Pos. | Description | Pos. | Description |
|---|---|---|---|
| 1+3 | Screws | 4 | Cantilever arm |
| 2 | Brake | | |

*Tab. 13: Positions on the product*

1. After the assembly of the entire extraction arm, it might be necessary to adjust the brake on the wall mount bracket console and on the middle joint of the cantilever arms, so it holds itself up in any swivel position.
2. The braking effect may be adjusted by tightening/loosening the screws (items 1+3).

## 5.10 Mounting the extraction hood with lighting (optional)

If an extraction hood with On/Off function and lighting is mounted on the product, the extraction hood must be connected to the control unit via a control cable.

The chapters below describe the cable routing for extraction hoods with integrated control board and lighting unit.

**NOTE**

Before starting installation, check the existing product variant to determine the cable routing. See next chapters.

**NOTE**

Before starting installation, check the existing product variant to determine the correct cable routing.

### 5.10.1 Cable routing – extraction arms with crane cantilever

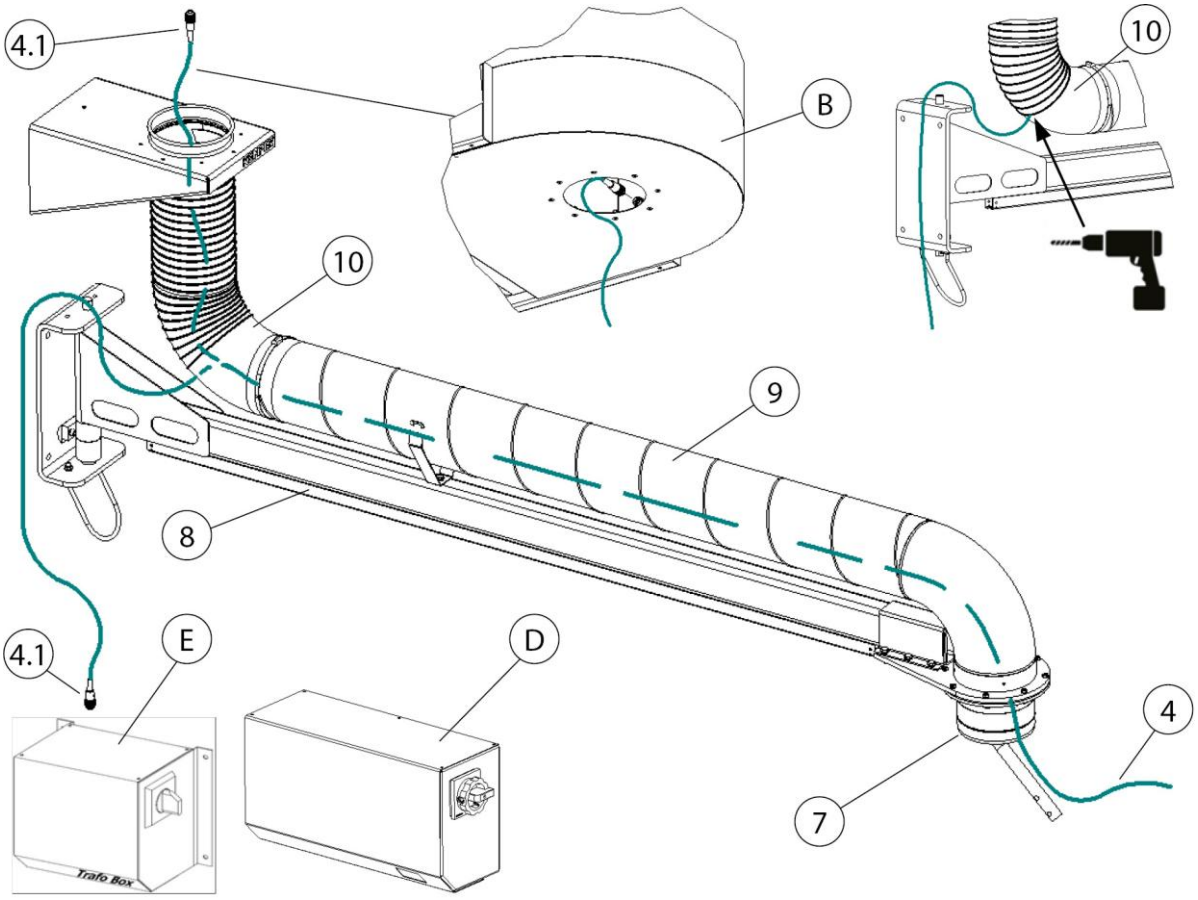


*Fig. 17: Cable routing – extraction arms with crane cantilever*

### Possible cabling routing variants

| Pos. | Description | Connection socket for lighting |
|---|---|---|
| B | Stationary filter unit | Connection socket in the unit |
| C | Stationary filter unit with control box | Connection socket on the control box |
| D | Control box | Connection socket on the control box |
| E | Transformer box | Connection socket on the transformer box |

*Tab. 14: Positions on the product*

| Pos. | Description | Pos. | Description |
|---|---|---|---|
| 4 | Connection cable (20 metre) | 8 | Cantilever (2 – 6 metre) |
| 4.1 | Connector plug | 9 | Pipeline |
| 7 | Slewing ring | 10 | Pipe bend |

*Tab. 15: Positions on the product*

### Cable routing – stationary filter unit with connection socket in the unit

1. Connect the connection cable (Pos. 4) to the unit. To do this, insert the connector plug (Pos. 4.1.) into the connection socket (Pos. 4.2).
2. Route the connection cable (Pos. 4) through the ducting system up to the extraction arm.
3. For further steps see chapter: Cable routing 2-4 metre extraction arm.

### Cable routing – stationary filter unit with control box or transformer box

1. Connect the connection cable (Pos. 4) to the control box (Pos. D) or transformer box (Pos. E). To do this, insert the connector plug (Pos. 4.1.) into the connection socket provided.
2. Route the connection cable (Pos. 4) up to the pipe bend (Pos. 10) of the cantilever (Pos. 9).

**NOTE**

Damage to the connection cable due to tensile stress or crushing!

When laying, make sure that the connecting cable is not subjected to tension or crushing in the joint areas.

Leave sufficient length when laying the cable!

3. Drill a hole at the back of the pipe bend (Pos. 10) and insert a suitable cable gland.
4. Pull the connecting cable (Pos. 4) through the cable gland, ducting system, slewing ring to the extraction arm.
5. For further steps see chapter: Cable routing + connection of the extraction hood with lighting.

### 5.10.2 Cable routing – Extraction hood + lighting (optional)

**NOTE**

For assembly of the available attachments, please follow the instructions provided.

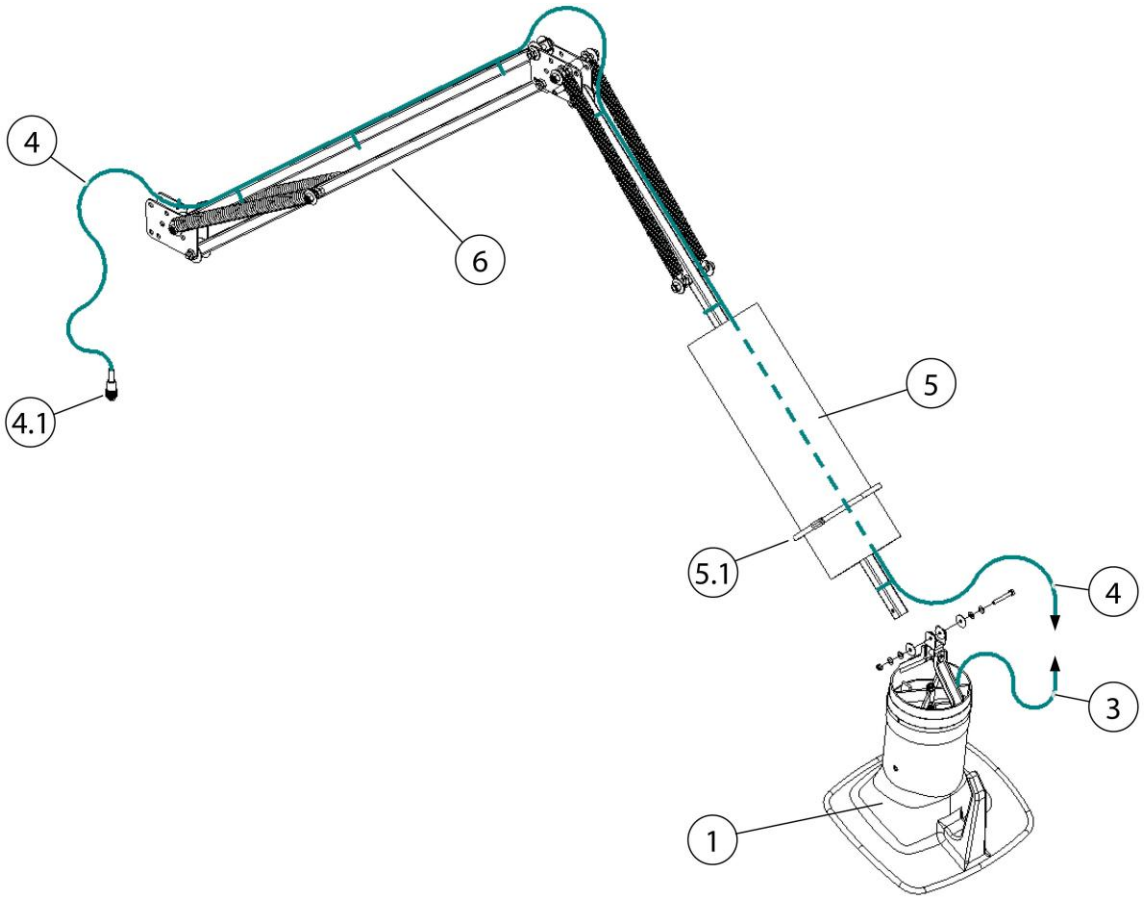


*Fig. 18: Cable routing - Extraction arm 2-4 metres*

| Pos. | Description | Pos. | Description |
|---|---|---|---|
| 1 | Extraction hood | 4.1 | Connector plug 4-pole |
| 3 | Connection cable - extraction hood | 5 | Suction tube |
| 3.1 | Crimp connector | 5.1 | Hose clamp |
| 4 | Connection cable 20 metres [787.4 inch] | 6 | Mounting frame |

*Table 16: Positions on the product*

1. Loosen the extraction hose (Pos. 5). To do this, loosen the hose clamp (Pos. 5.1).
2. Fasten the extraction hood with lighting (Pos. 1) on the support frame (Pos. 6). Use the enclosed mounting material for this purpose.
3. Lay the connection cable (Pos. 4) along the support frame (Pos. 6), through the extraction hose to the extraction hood and fix it with the cable ties provided.

**NOTE**

Damage to the connection cable due to tensile stress or crushing!

When laying, make sure that the connection cable is not subjected to tension or crushing in the joint areas.

Leave sufficient length when laying the cable!

4. Connect the connection cable (Pos. 4) to the connection cable of the extraction hood (Pos. 3). To do this, shorten the connection cable (Pos. 4), strip the insulation and connect it to the crimp connectors (Pos. 3.1) with the same numbers.
5. Attach the rear end of the hose (Pos. 5) to the slewing ring. Use the enclosed hose clamp (Pos. 5.1) for fixing.
6. Attach the other end of the extraction hose (Pos. 5) to the extraction hood (Pos. 1). Use the enclosed hose clamp (Pos. 5.1) for fixing.
7. Fix the extraction hose (Pos. 5) using the hose clamps (Pos. 5.1).

### 5.10.3 Cable routing and connection - Control Box/ Transformer Box

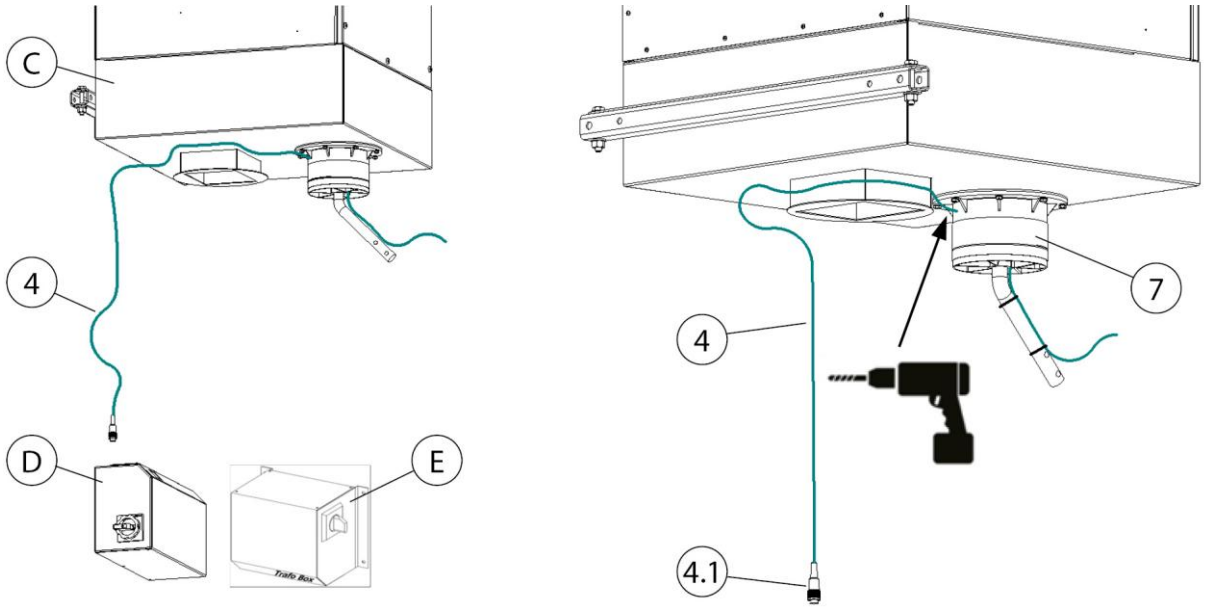



*Fig. 19: Cable laying – stationary unit*

| Pos. | Description | Pos. | Description |
|---|---|---|---|
| C | Stationary filter unit | 4 | Connection cable 20 metres [787.4 inch] |
| D | Control box | 4.1 | Connector plug 4-pole |
| E | Transformer box | 7 | Slewing ring - extraction arm |

*Tab. 17: Positions on the product*

1. Connect the connection cable (Pos. 4) to the control box (Pos. D) or transformer box (Pos. E). To do this, insert the connector plug (Pos. 4.1.) into the connection socket provided.
2. Lay the connection cable (Pos. 4) to the stationary filter unit (Pos. C).
3. Drill a Ø 8 mm [Ø 0.31 inch] hole at the back of the slewing ring.
4. Pull the connecting cable through the slewing ring.
5. For further steps see chapter: Cable routing + connection of the extraction hood with lighting + retrofit control box transformer.

# 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 Positioning the extraction hood

The extraction arm or extraction hood is designed in such a way that it can be adjusted and moved easily by hand. Once it has been positioned, the extraction hood maintains its set position of its own accord. Furthermore, both the extraction hood and the arm can be pivoted through 360° so that almost any position can be set. It is important that the extraction hood is always positioned properly in order to achieve adequate capture of the welding fumes. The correct position is shown on the following image.

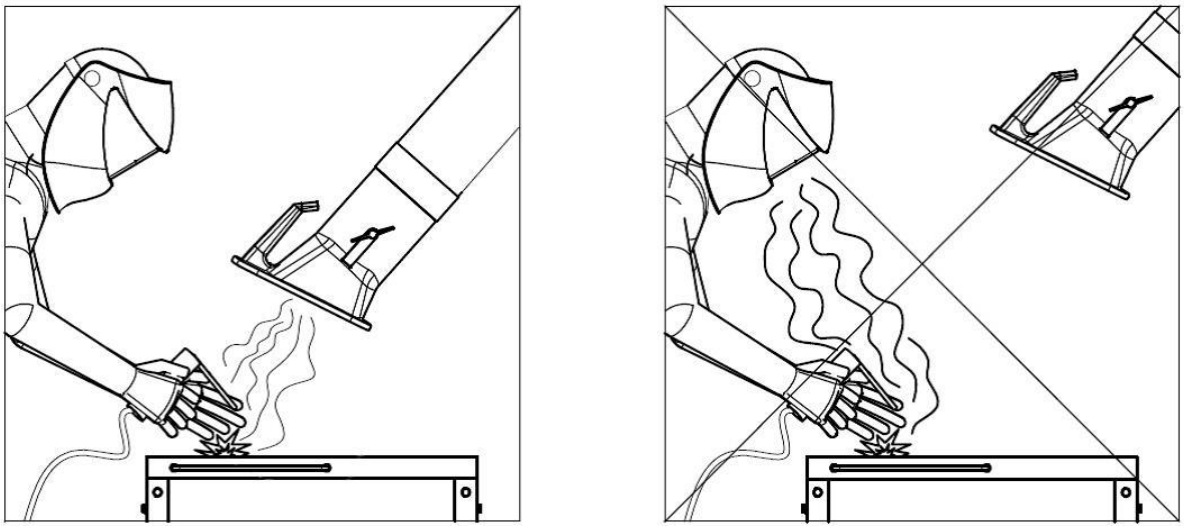


*Fig. 20: Positioning the extraction hood*

- Position the extraction arm so that the extraction hood is located approx. 25 cm diagonally above the weld.
- The extraction hood must be positioned so that it safely captures the welding fumes, taking into account the movement of welding fumes caused by the heat and the extraction range.
- Always move the extraction hood with respect to the weld position as you advance.

**⚠ WARNING**

An incorrectly positioned extraction hood or too low an extraction capacity do not ensure that air containing hazardous substances is captured adequately by the extraction hood. This means hazardous substances can enter the area where the operating personnel breathes and cause severe damage to health.

# 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 done at least once a month.

Please observe the listed warning notices for maintenance listed in chapter “safety”.

**⚠ WARNING**

Warning of serious personal injury hazard

In the event of misconduct, there is a danger of serious bodily injury, e.g. crushing damage, fingers or hands tearing off due to uncontrolled movements of individual machine elements.

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.

Maintenance and repair work and troubleshooting must be performed only when the plant is switched off.

## 7.3 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

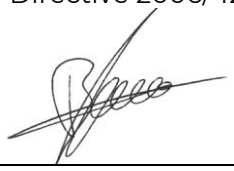
## 9.1 EU Declaration of Incorporation

| | |
|---|---|
| Designation: | Add-on product |
| Series: | |
| Type: | 79206, 79307, 79308, 79409, 79410 (possibly different article numbers for other product variants) |
| Machine ID: | (serial number) see the name plate on the product<br>The product has been developed, designed and manufactured as partly completed machinery in accordance with EC directives 2006/42/EC – Machinery Directive |
| Company: | At the sole responsibility of<br>KEMPER GmbH<br>Von-Siemens-Str. 20, D-48691 Vreden<br>The partly completed machinery must not be put into service until it has been established that the machinery into which the partly completed machinery is to be incorporated complies with the 2006/42/EC Machinery Directive. |

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

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

Authorised representative:
Kemper GmbH, Von-Siemens-Str. 20, 48691 Vreden, Germany
The aforementioned person is authorised to compile the technical documentation in accordance with Annex VII of Directive 2006/42/EC.



| | | |
|---|---|---|
| Vreden, 27.04.2026 | | CEO |
| Place, date | B. KEMPER | Identification of the signatory |

## 9.2 UKCA Declaration of Installation

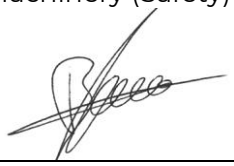
| | |
|---|---|
| Designation: | Installation products |
| Series: | |
| Type: | **79206, 79307, 79308, 79409, 79410** (possibly different article numbers for other product variants) |
| Machine ID: | (Serial number) see type plate on product<br>This product is developed, designed and manufactured in accordance with the UKCA directives<br>Supply of Machinery (safety) Regulations 2008 |
| | At the sole responsibility of |
| Company: | **KEMPER GmbH**<br>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

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:

UK Authorised Representative:
United Kingdom KEMPER (U.K.) Ltd.
Venture Court, 2 Debdale Road, Wellingborough, Northamptonshire NN8 5AA
The above-mentioned person is authorized to compile the technical documentation in Schedule 2 of the Supply of Machinery (Safety) Regulations 2008.



| | | |
|---|---|---|
| Vreden, 27.04.2026 | | CEO |
| Place, date | B. Kemper | Identification of the signatory |

## 9.3 Technical data

| Designation<br>m [ft] | Diameter<br>mm [in] | Weight<br>kg [lbs] | Approx. noise level at<br>1,000 m³/h [CFM] |
|---|---|---|---|
| Extraction arm 6.0 [20] | Ø 150 [5.9] | 140 [309] | 64 dB(A) |
| Extraction arm 7.0 [23] | Ø 150 [5.9] | 142 [314] | 64 dB(A) |
| Extraction arm 8.0 [26] | Ø 150 [5.9] | 145 [320] | 64 dB(A) |
| Extraction arm 9.0 [30] | Ø 150 [5.9] | 195 [430] | 64 dB(A) |
| Extraction arm 10.0 [33] | Ø 150 [5.9] | 198 [437] | 64 dB(A) |

*Tab. 18: Technical data*

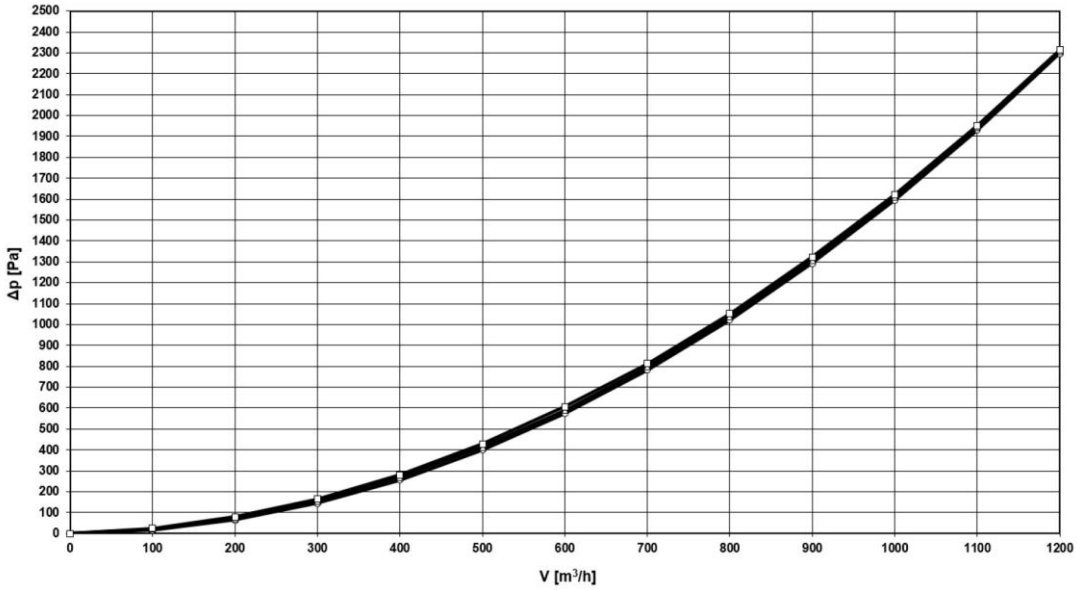



*Fig. 21: Pressure Loss Diagram*

The pressure loss diagram shows approximate values in a normal working position of the extraction arm, which deviate from the diagram values in practice depending on the positioning of the extraction arm.

## 9.4 Spare parts and accessories

| Description | Article No. |
|---|---|
| Replacement hose for hinged cantilever arm<br>Length 3.0 m, Ø 165 mm | 1140481 |

*Tab. 19: Spare parts*

**Deutschland (HQ)**
**KEMPER GmbH**
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