

## Operating Manual

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# Integral Compact Multicyclone Steel Booth

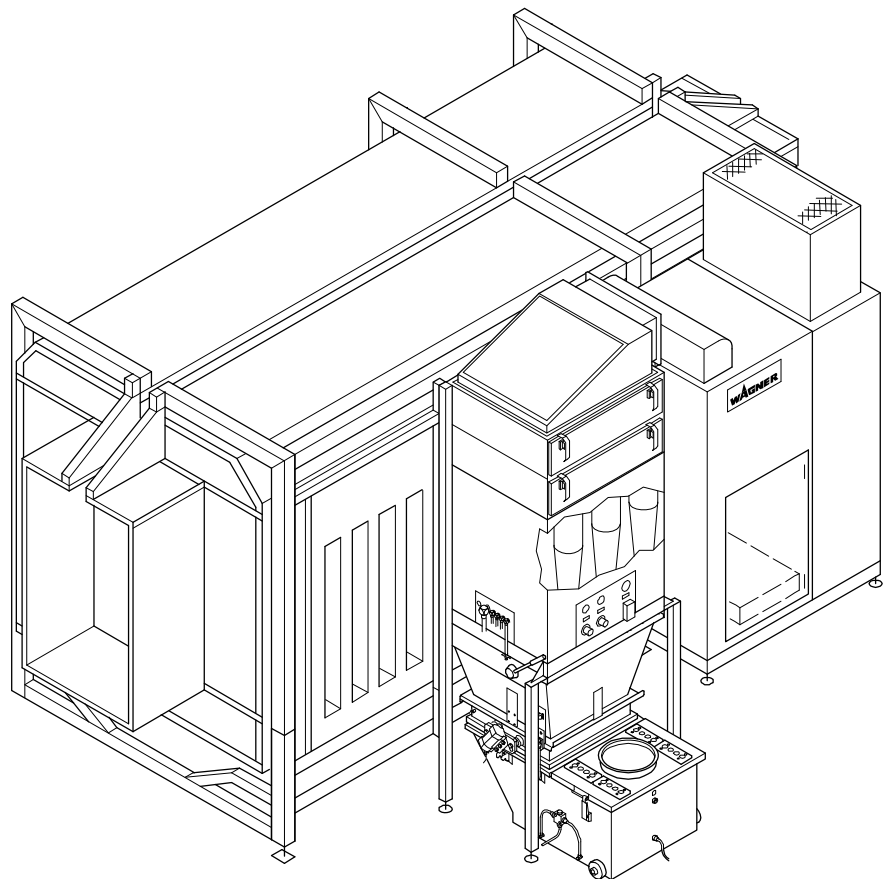
**STOP DANGER**



High-voltage!  
Turn power off  
before servicing!

**CAUTION**

Read rules for safe  
operation and  
instructions  
carefully!



## ICM Steel Booth



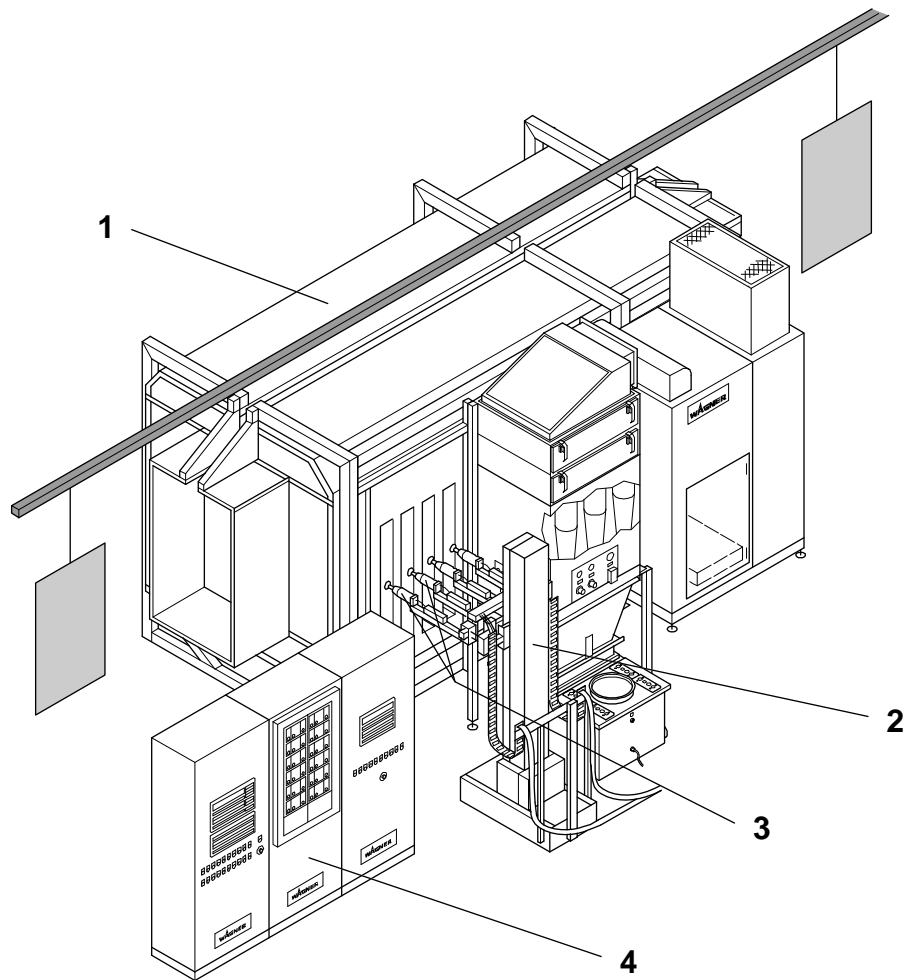
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**ICM Steel Booth**

- |   |                 |   |                                       |
|---|-----------------|---|---------------------------------------|
| 1 | ICM steel booth | 3 | Powder spray guns                     |
| 2 | Reciprocator    | 4 | Control cabinet (booth / application) |

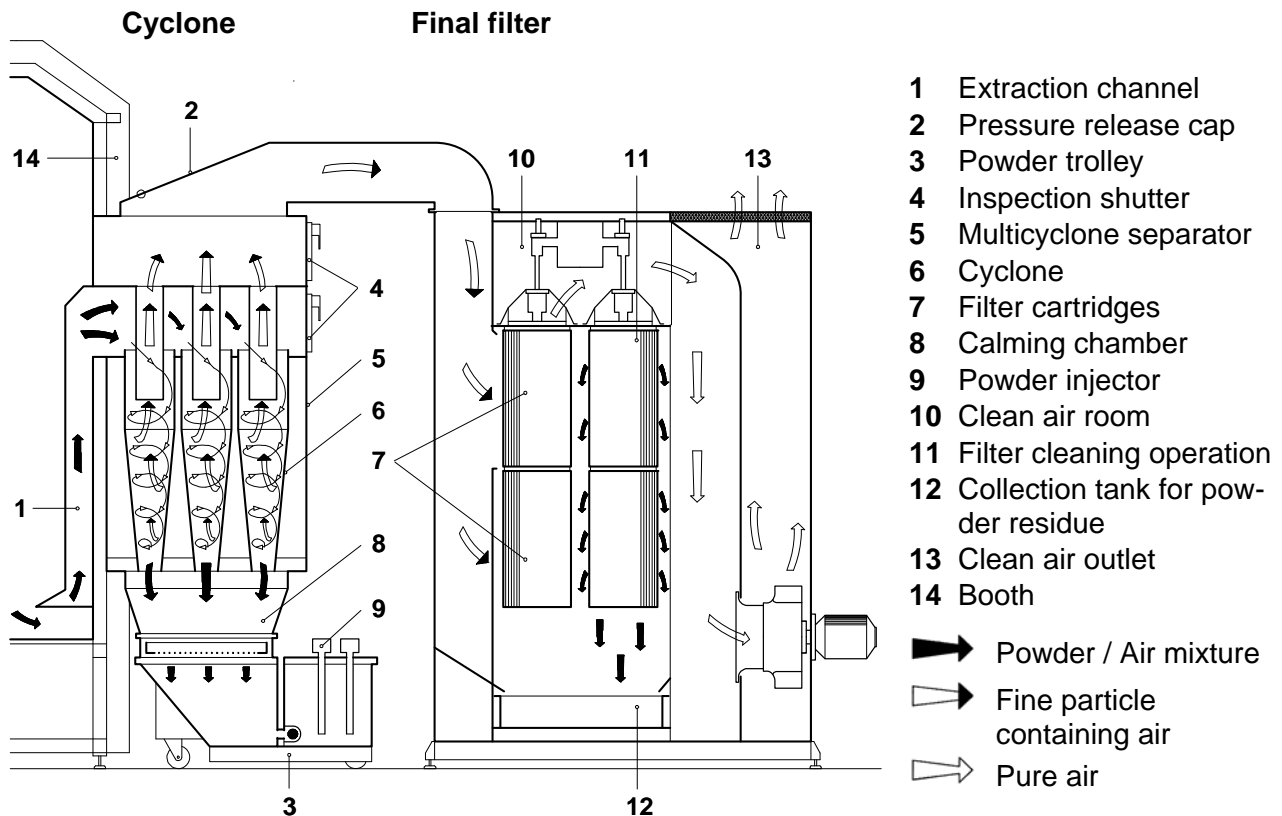
Because of the direct connection of the multicyclone to the booth, the ICM booth system (Integral Compact Multicyclone) is a compact solution for automatic powder coating and manual coating and is suited for continuous operation.

The powder trolley with calming chamber and screening chamber is connected below the multicyclone.

The booth is constructed in different sizes with suitable openings, top accommodate the coating of different sized parts.

With its integrated recovery, the steel booth complies with the valid recovery regulations for electrostatic powder coating. The extracted air is filtered and can be returned to the atmosphere without any problem.

### Operation principle:



The actual powder circuit is closed by the powder regained in cyclone 6. A small amount of the fine grain content ends up in the final filter device and is separated out there.

The calming chamber 8, which the powder trolley 3 is fixed to by the clamping lever, is located under the multicyclone. This is equipped with injectors for direct supply of the powder spray guns. A screening unit is located on the powder trolley, which stops particles of dirt being fed back into the powder circuit.

If the spray guns are supplied directly from a powder center, a peristaltic powder pump is set under the cyclone instead of the powder trolley, which transports the regained powder to the powder center.

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This manual contains information and hints for the service, repair and maintenance of the equipment. The user must obey all the rules of operation found in this manual; failure to do so will render the warranty invalid.

Wagner powder systems are designed to meet the most stringent safety requirements. They can be operated in compliance with generally applicable safety codes and applicable national safety regulations.

Please pay particular attention to the parts marked by the following symbols. Follow the instructions exactly, in the interests of both your own safety and the correct functioning of the unit.



### Warning

This symbol draws attention to the fact that if the operating instructions, working instructions, prescribed working sequences etc. are not followed exactly; this can lead to injury or even fatal accidents.



### Caution

This symbol indicates that failure to follow the operating instructions, working instructions, prescribed working sequences etc. exactly can lead to material damage.



### Hint

This symbol draws your attention to useful additional information and tips. Failure to observe these instructions can cause malfunctions.

# 1. Safety regulations

## 1.1 Safety advice



### Danger

This equipment can be dangerous if it is not operated according to the definitions in this Operating manual.

**Additionally, country-specific safety regulations in regard to fire protection must be followed,**

The following regulations must be followed by the user, to ensure safe and efficient use of the equipment.

- **Under no circumstances should persons with pacemakers be in the area where the high-voltage field between the spray gun and the workpiece to be coated builds up.**
- The operating company should also follow the safety guidelines of the VdS and the Employer's Liability Insurance Association.
- The operating company must ensure that an average concentration of powder paint in the air does not exceed 50 % of the lower explosion limit (LEL = max. permitted concentration of powder to air). If no reliable LEL value is available, the average concentration may not exceed 10 g/m<sup>2</sup>.

If it becomes evident that the powder concentration exceeds the permitted values in the case of high total powder discharge, the operating company must discuss the situation with the powder manufacturer. In this case, there is usually a significantly higher permitted maximum powder concentration through the exact calculation of the LEL.

The following table should provide a guide:

|                                    | 8,000 m <sup>3</sup> /h |   | 10,000 m <sup>3</sup> /h |   |
|------------------------------------|-------------------------|---|--------------------------|---|
|                                    | Untested powder         | Tested powder, e.g. LEL ≥ 40 g/m <sup>3</sup> | Untested powder          | Tested powder, e.g. LEL ≥ 40 g/m <sup>3</sup> |
| Permitted dust concentration       | 10 g/m <sup>3</sup>     | 20 g/m <sup>3</sup>                           | 10 g/m <sup>3</sup>      | 20 g/m <sup>3</sup>                           |
| Maximum total powder discharge g/h | 75,000                  | 150,000                                       | 100,000                  | 200,000                                       |
| = g/min                            | 1,250                   | 2,500   | 1,667                    | 3,333   |
| Powder discharge per gun 150 g/min | max. 8 guns             | max. 16 guns                                  | max. 10 guns             | max. 20 guns                                  |
| Powder discharge per gun 300 g/min | max. 4 guns             | max. 8 guns                                   | max. 5 guns              | max. 10 guns                                  |

The permitted number of guns increases accordingly with guaranteed LEL values over 40 g/m<sup>3</sup>.

- The connection for mains supply for the operation of the Wagner powder equipment **must** be electronically interlocked with the powder spray system exhaust equipment.
- The grounding of all booth elements must be guaranteed according to regulations.
- **Grounding cables must** be checked regularly to ensure that they are serviceable (see EN 60204).
- The operating company should arrange faults or defects to be repaired without delay.
- Repairs may only be carried out by a specialist, who has received appropriate training.
- Under no circumstances may repairs be carried out in the potentially explosive area.
- The floor of the working area **must** be electrostatically conductive (as measured by EN 1081).
- All conductive parts in the working area (within a radius of 1 meter around each spray gun and/or booth opening) must be electro-statically grounded.
- All persons within the working area must be wearing electro-statically conductive shoes.
- Gloves may not be worn. If gloves are used, they **must** be made of conductive material.
- Only mobile industrial vacuum cleaners of design 1 (see ZH 1/487 for C dusts) may be used for getting rid of dust build-ups.
- Accessing the booth is prohibited during operation.
- In rooms or areas at risk of fire, suitable fire extinguishers must be available in sufficient quantities and must be maintained in an operational condition.
- **Wear suitable working clothes.**
- **Use breathing protection during dust-creating work.**
- **Don't bend down to work in the booth.**  
If necessary, use an extension for the hand spray gun.
- **Check your equipment for signs of damage**  
Check that any lightly damaged parts function correctly before using the equipment. Check whether movable parts are working correctly, whether they are not jamming and whether parts are damaged. Damaged parts should be repaired by a Wagner Customer Service Point or exchanged.
- **Risk of falling:**  
The booth floor should only be walked on once it has been cleaned.
- **Risk of injury:**  
Depending on the operating state, the surface temperature of the conveyor belt drive motor can reach 90 °C.
- **Risk of explosion:**  
No plugged connections should be opened during operation.
- **Atex: (EWG 94/9)**  
This unit is suitable for use in zone 22 (ExII3D).



### Danger

**For your own safety, you should only use accessories and auxiliary equipment that is defined in the operating manual. Usage of other parts can result in a risk of injury.**

**Only use original Wagner spare parts.**

**A maximum of two persons may be in the booth.**

| HAZARD   | PREVENTION  |
|--|---|
| <p>Electrostatic arcing may cause an explosion or fire. Mixtures of powder and air can explode or ignite causing property damage and/or severe injury.</p> | <ul style="list-style-type: none"> <li>• Operator must be grounded. Grounding straps must be used when wearing rubber soled shoes.</li> <li>• Operator must remove all metallic objects from his or her person, which are not grounded.</li> <li>• The object being sprayed must be grounded.</li> <li>• All metallic objects within the spray area must be grounded (including spray booth, part hangers, fire extinguishers, etc.)</li> <li>• Grounded conductive floor must be provided in spray area.</li> <li>• Turn off the Power Pack and unplug from outlet before flushing out the gun, cleaning or replacing parts on the gun such as changing tips.</li> </ul>   |
| <p>Explosion or fire. Mixtures of powder and air can explode or ignite causing property damage and/or severe injury.</p>                                   | <ul style="list-style-type: none"> <li>• Exhaust and fresh air introduction must be provided to keep the air within the spray area free of accumulation of flammable atmosphere.</li> <li>• Smoking must not be allowed in spray area.</li> <li>• Fire extinguishing equipment must be present and in working order.</li> <li>• Electrostatic arcing must be prevented. (See Electrostatic arcing)</li> <li>• When cleaning the system, use only materials recommended by the coatings manufacturer. Be sure Power Pack is turned off and unplugged.</li> <li>• Avoid all ignition sources such as static electricity sparks, open flames such as pilot lights, hot objects such as cigarettes and sparks from connecting and disconnecting power cords and working light switches.</li> <li>• To prevent hazardous concentrations of flammable atmospheres, spray only in a properly ventilated spray booth.</li> <li>• Never operate spray gun unless ventilation fans are operating properly.</li> <li>• Check and follow all National, State and Local codes regarding air exhaust velocity requirements.</li> <li>• Ventilation must be maintained during the cleaning operation.</li> </ul> |
| <p>Toxic Substances: Some materials may be harmful if swallowed or come in contact with the skin.</p>  | <ul style="list-style-type: none"> <li>• Follow the requirements of the Material Safety Data Sheet supplied by the coatings manufacturer.</li> <li>• Exhaust and fresh air introduction must be provided within the spray area to keep the air free of high powder accumulations.</li> <li>• Wear a mask or respirator. Read all instructions for the mask to insure that it will provide the necessary protection against the inhalation of powder.</li> </ul>   |
| <p>General</p>   | <ul style="list-style-type: none"> <li>• Read all instructions and safety precautions before operating.</li> <li>• Comply with all appropriate local, state and national codes governing ventilation, fire prevention, and operation of Electrostatic equipment usage.</li> <li>• The United States Government Safety Standards have been adopted under the Occupational Safety and Health Act. These standards, particularly the General Standards, Part 1910 and the Construction Standard, Part 1926, should be consulted.</li> <li>• NFPA Standard No. 33 is to be followed when setting up your spray area. Contact the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts, 02269 for more information.</li> <li>• Check with insurance company for additional requirements.</li> <li>• Use only identical replacement parts.</li> <li>• Personnel must be given training in accordance with the requirements of NFPA Standard No. 33 chapter 18.</li> <li>• It is the duty of all personnel responsible for the spray equipment operation and maintenance to read and understand all safety information furnished with this equipment.</li> </ul>               |



## 1.2 Safety signs

The powder coating booth is equipped with advice signs at the points of access and working apertures. The following signs are used:

The size of the signs conforms to the standard 100 mm  $\varnothing$  range.

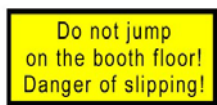
The following identification signs should be installed.



High-voltage



Risk of falling down



Explosive atmosphere



Please follow the operating manual



Forbidden for unauthorized persons



Access prohibited to persons wearing a heart pacemaker



Fire, unprotected lights and smoking prohibited



Electro-statically conductive shoes must be worn

## 2. Preparation for commissioning the equipment

### 2.1 Transport, handling and installation of the equipment

The powder coating booth is delivered in parts to the assembly point. Assembly is done on site.



#### Danger

- The powder coating system must be equipped with the corresponding warning signs at the prescribed location, in accordance with the "Assembly instruction signs".
- The powder coating system may not be used without these signs being in place.

The prescribed safety measures (protective clothing, material, etc) must be adhered to during all transport, handling and assembly work.

### 2.2 Conditions for perfect operation

#### 2.2.1 Supply connections

##### Electrical connection:

Three-phase current connection: 220-240 / 380-420 V at 50 Hz  
(in accordance with IEC 38)  
System ground (strip or ground rod): In accordance with VDE 0141 with NYAF > 16 mm<sup>2</sup>

##### Pneumatic connection:

Compressed air connection: ..... 87 ... 116 psi (6 ... 8 bar)

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##### Required compressed air quality:

| Quality class | Compressed air quality according to ISO 8573.1                                   |  |
|---------------|--|--|
| 5             | Max. residual water:<br>(pressure dew point in °F at 100 psi<br>/ °C at 700 kPa) | +44.6 °F / +7 °C                                   |
| 2             | Max. oil contents:   | 0.1 mg oil/m <sup>3</sup> / 0.1 oz/ft <sup>3</sup> |
| 3             | Max. concentration:  | 5 mg/m <sup>3</sup> / 5 oz/ft <sup>3</sup>         |
| 3             | Max. particle size:  | 5 µm / 5 microns                                   |

##### Ambient conditions:

If low temperature powders are used, the ambient temperature may have to be lower than 86 °F (30 °C).



##### Volume measures:

For volumes, specified in Nm<sup>3</sup> (standard cubic meters). One cubic meter of a gas at 32 °F (0 °C) and 1.013 bars is called norm cubic meter.

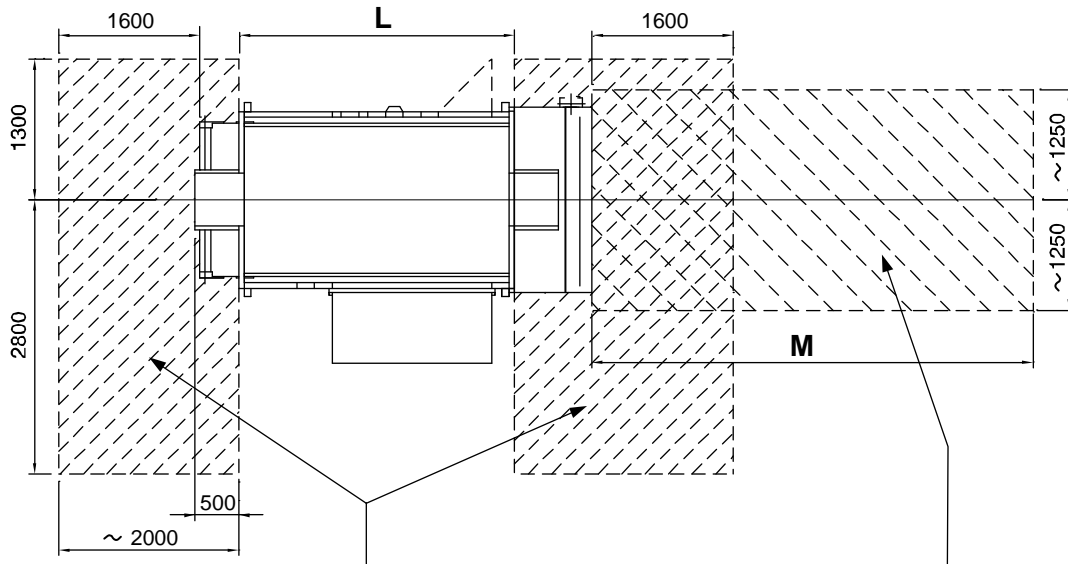
1 Nm<sup>3</sup>/h = 35.3 ft<sup>3</sup>/h; 1 bar = 14.504 psi

##### Compressed air requirement:

The compressed air requirement is very dependent on the number of guns and the frequency of color changes. It is not possible to give a fixed value here.

**2.2.2 Requirements to be met by the place of installation**

- The steel booth may not be installed at locations subject to high temperatures. Powder types that gel easily should be processed cool when using low-melting powder types, it can be necessary to have an ambient temperature of under 30 °C.
- Relative air humidity may be a maximum of 75 %.
- The minimum space between the blow-out opening from the final filter device **must** be 1.00 meter.



Space requirement for carrying out maintenance on the powder discharge belt

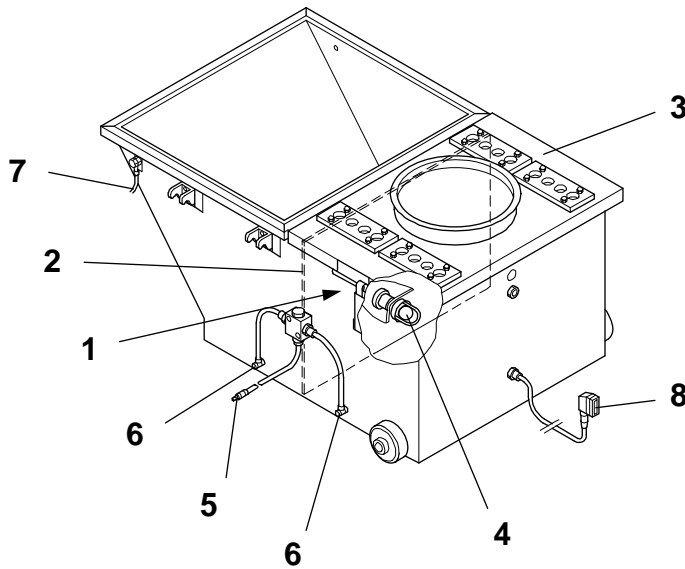
Up to booth length:  $L = 4,800 \text{ mm}$ :  
 $M = L + 2,000 \text{ mm}$

Space requirement for assembling and exchanging the powder discharge belt

Up to booth length:  $L = 4,800 \text{ mm}$ :  
 $M = (L / 2) + 1,400 \text{ mm}$

**2.2.3 Preparation of the powder trolley**

Proceed as follows:



- Check whether mixed color operation is being used.
- In the case of mixed color operation, stopper **1** must be fitted in the partition **2** instead of dosage valve **4**.
- Define the number of injectors to correspond to the spray guns.
- Fit container lid **3** corresponding to the number of injectors. See Chapter [6.7.4](#) and/or [6.7.6](#).
- Fill the powder trolley with color.



**Caution**

The powder container may only be filled **half full** with color.

- Install the dosage levelling valve **4**. It can be removed for cleaning purposes.
- Connect the compressed for the fluid air **5**.
- Using the one-way valve **6**, set the fluid air in the fluidized bed of the front and rear chambers separately.
  - The fluid air quantity is dependent on the powder condition.



**Caution**

A build-up of dust should be avoided.

- Connect the grounding cable **7**.
- Connect the minimum level control **8**.

## 2.2.4 Instructions for setting the powder trolley's vibrator motor



### Danger

- Vibrator motors must be fixed to a solid flooring so that the transferred vibrations do not cause fatigue-induced cracks and breaks. If necessary, provide strengthening boards or ribbing.
- The operating manual must be read and understood by every member of the operating company's staff who is responsible for installing, commissioning, maintaining and repairing vibration motors.
- The spare parts list for the corresponding motor type must also be included, to enable a better understanding of the operating manual.
- Independently carried-out modifications to the motors and customer-specific special versions, for example protective covers with opening and lengthened shafts remove any liability from the manufacturer for any damage that may result.
- Because of their construction, vibrator motors generate destructive forces. If used incorrectly, they can constitute a risk, for example, the device or parts of the device could fly off if it comes loose from its mountings. Preventative safety measures should be put in place.
- The device must be disconnected from the mains power supply before starting any maintenance or repair work. It is forbidden to operate the device without protective covers, because of the risk of accident.

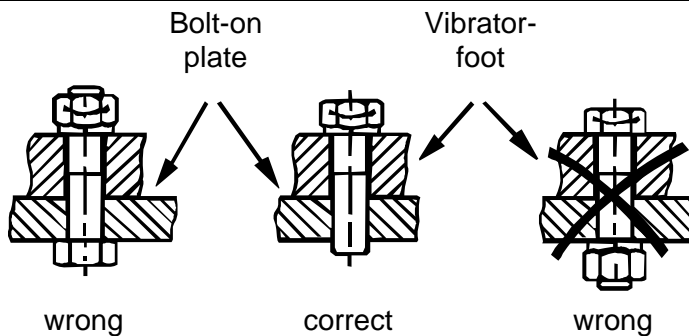


### Caution

Vibrator motors may only be built onto devices with flat and bending-resistant fixing flanges. They may not be put under tension. Only bolts with a quality rating of 8.8 and nuts with a quality rating of 6 may be used. The bolts must be secured against coming loose, for example through the use of spring washers, or similar.



**Caution**



After 2 hours of operation, bolts and nuts **must** be checked to see if they are still tight and if necessary should be tightened. Further daily checks should be made.



**Danger**

The minimum torque are for:

|              |            |              |              |
|--------------|------------|--------------|--------------|
| M5 = 8 Nm    | M8 = 30 Nm | M10 = 55 Nm  | M12 = 90 Nm  |
| M16 = 150 Nm |            | M20 = 280 Nm | M24 = 450 Nm |

**If the fixing bolts are loose, there is a danger that the vibrator's feet will break, giving rise to a risk of an accident.**

Proceed as follows:

- Position the vibrator motor on a flat surface.
- Check to make sure that **all four** supporting feet are leveled **equally**, so that no internal tensions result when the fixing bolts are tightened, resulting in subsequent damage, such as the supporting feet breaking.
- Tighten the vibrator motor securely using the supplied fixing bolts.
- Tighten the bolt fixing (R 80 with flat and spring washers) securely over the nut and lock nut.

**2.2.5 Control and settings of the system**



**Caution**

The operating manual **of the corresponding control cabinet** must be followed for the **control unit and commissioning** of the steel booth.

- You will find a detailed description of the control unit in the special control unit operating manual supplied.

## 2.3 Grounding

The **steel both must** be completely grounded for safety reasons. Wagner recommends the use of copper cable of at least 16 mm<sup>2</sup>, with sufficient mechanical stability, for connecting to the operating ground. Please also refer to the powder spray gun Operating manual.

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Good grounding of the **workpiece** is also necessary for optimum powder coating.

A poorly grounded workpiece causes:

- dangerous electric charging of the workpiece
- back-spray onto spray gun and user
- uneven coating
- very bad wrap around



### Warning

**Sparks between workpiece and conveyor hooks (hangers) can occur if hooks or other hanger parts are not completely cleaned!**

**These sparks can cause heavy radio frequency interference.**

Requirements for a good grounding and coating are:

- a conducting suspension for the workpiece that is to be coated as far as the transport equipment
- a grounding of the powder booth, transport and suspension equipment to be supplied on site with a copper cable of at least 16 mm<sup>2</sup> to the operating ground.
- a regular cleaning of powder deposits from the hangers
- a grounding resistance for the workpiece of a maximum of 1 MΩ (mega ohm)
- a grounding cable connected to the controller module or control cabinet

## 2.4 Flame detection system and fire extinguishing measures

Flame detectors can be installed in the ICM steel booth at the prepared locations, which trigger an immediate discharge of extinguishing gas when a fire is detected (see also the extinguisher Operating manual).



### Hint

If required, the fire detection and extinguisher equipment **must** be planned and installed **separately**. They are **not** supplied with the booth.

### 3. Commissioning the system

#### 3.1 Switching the system on

**Proceed as follows:**

1. Switch on the compressed air.
2. Switch on the main switch.
3. Switch on the fire extinguisher (if present) and acknowledge.
4. Activate the grounding equipment (if present).



#### **Caution**

Wait for the **Booth OK** signal.

5. Switch the fan on.
6. Switch on the cleaning operation of the final filter.
7. Switch on the air for the fluid base.
8. Switch on the screening unit.
9. Move the spray guns into the booth.
10. Switch on the reciprocators.
11. Switch on the high-voltage for the spray guns (not in the case of Tribo spray guns).



#### **Hint**

If the distance between the powder spray guns and the powder discharge belt is too small (< 200 mm), this can impact negatively on the cleaning of the belt because of the static charging.

#### 3.2 Switching the system off

In the case of a break in work, powder residues must be thoroughly removed from all the powder-conveying parts throughout the complete coating system.

**Proceed as follows:**

1. Switch off the powder feed and the high voltage for the spray guns and secure the unit against being accidentally switched back on.
2. Remove the powder-conveying parts from the powder trolley, blow through with air and reinstall.
3. Carry out a general cleaning of the inside of the booth.
4. Use the suction to clean along the whole length of the powder discharge belt, if installed.
5. Switch off the main switch.



### 3.3 Carrying out a color change

In the case of a color change, powder residues **must** be **thoroughly** removed from all the powder-conveying parts throughout the complete coating system.

When cleaning the equipment, the regained powder is fed back into the powder trolley. For this reason, check whether the powder trolley has enough capacity free for the powder before starting and empty it if necessary.

The cleaning sequences described in the following are a recommendation. The actual process must be modified to match the individual configuration of the equipment.



#### Caution

The booth extraction and the filter cleaning operation **must remain switched on** at each color change.



#### Hint

- The color change described in the following chapters 3.3.1 and 3.3.2 are valid for the case a separate powder container (a so-called swap-container) is used for each color.
- If you are working without a swap-container, i.e. the same powder container is used in the case of a color change, and then the powder container must be thoroughly cleaned as described in Chapter [3.3.1](#).

#### 3.3.1 Color change with a steel booth with powder discharge belt



#### Caution

The powder discharge belt **must** be switched off before each color change and the build-ups of powder that fall from the walls **must** be removed.

#### Proceed as follows:

1. Leave the booth exhaust air **switched on** with the filter cleaning operation.
2. Switch the powder discharge belt off and remove the build-ups of powder that fall from the walls.
3. Switch off the powder feed and the high-voltage for the spray guns and secure the unit against being accidentally switched back on.
4. Remove the powder-conveying parts from the powder trolley, blow through with air and reinstall.
5. Carry out a general cleaning of the inside of the booth.
6. Clean the insides of the guns with air and dismantle them if they are very dirty.
7. Clean the guns and gun holders externally with air. Move the cleaned guns out of the booth.
8. Clean the inside of the booth with the jet blast unit.
9. Clean the extraction channel with the vacuum cleaner and unhinge the cover.
10. Use the suction to carry out a general cleaning of the air inlet space.
11. Carry out a thorough cleaning of the complete booth and the extraction channel cover using a suitable cleaning device.
12. Switch the booth exhaust air off.
13. Loosen the clamp connections and move the powder trolley and the screening chamber out.

14. Separate the grounding cable, the fluid air connection and the level control from the powder trolley.
15. Switch the booth exhaust air back on.
16. Using the suction clean out the calming chamber with weir plates and cyclone plates.
17. Clean the calming chamber and the weir plates with a cloth.
18. Clean the residual dust room with a vacuum cleaner, if required.
19. Clean the air inlet space, the twist blade rings and the sink tubes with air.
20. Clean the cyclone from below with air and with a brush or cloth, as necessary.
21. Clean the air inlet space and the cyclone plate thoroughly with a cloth and hang the extraction channel cover back in place.
22. Switch the booth exhaust air off.
23. Mount the powder-conveying parts on the new powder trolley.
24. Clamp the new powder trolley to the screening unit and reconnect the powder trolley as described in Chapter [2.2.3](#). Change the powder hoses as well, in the case of strong color change.
25. Carry out a final inspection.

### 3.3.2 Color change with a steel booth with fixed floor

#### Proceed as follows:

1. Leave the booth exhaust air **switched on** with the filter cleaning operation.
2. Switch off the powder feed and the high-voltage for the spray guns and secure the unit against being accidentally switched back on.
3. Remove the powder-conveying parts from the powder trolley, blow through with air and re-install.
4. Carry out a general cleaning of the inside of the booth.
5. Remove and clean the floor scraper (if present) using suction.
6. Clean the insides of the guns with air and dismantle them if they are very dirty.
7. Clean the guns and gun holders externally with air. Move the cleaned guns out of the booth.
8. Clean the inside of the booth with the jet blast unit.
9. Clean the extraction channel with the vacuum cleaner and unhinge the cover.
10. Use the suction to carry out a general cleaning of the air inlet space.
11. Carry out a thorough cleaning of the complete booth and the extraction channel cover using a suitable cleaning device.
12. Reinstall the floor scraper (if present).
13. Switch the booth exhaust air off.
14. Loosen the clamp connections and move the powder trolley and the screening chamber out.
15. Separate the grounding cable, the fluid air connection and the level control from the powder trolley.
16. Switch the booth exhaust air back on.
17. Using the suction clean out the calming chamber with weir plates and cyclone plates.
18. Clean the calming chamber and the weir plates with a cloth.
19. Clean the residual dust room with a vacuum cleaner, if required.
20. Clean the air inlet space, the twist blade rings and the sink tubes with air.

21. Clean the cyclone from below with air and with a brush or cloth, as necessary.
22. Clean the air inlet space and the cyclone plate thoroughly with a cloth and hang the extraction channel cover back in place.
23. Switch the booth exhaust air off.
24. Mount the powder-conveying parts on the new powder trolley.
25. Clamp the new powder trolley to the screening unit and reconnect the powder trolley as described in Chapter [2.2.3](#). Change the powder hoses as well, in the case of strong color change.
26. Carry out a final inspection.

### 3.3.3 Color change without a swap container

**Proceed as follows:**

1. Completely empty the powder trolley.
2. Remove any powder residue completely from the powder trolley and wipe it out with a soft cloth.
3. Fill the powder trolley **half full** with new color.
4. Clamp the powder trolley to the screening unit and reconnect the powder trolley as described in Chapter [2.2.3](#).

## 4. Maintenance and Cleaning

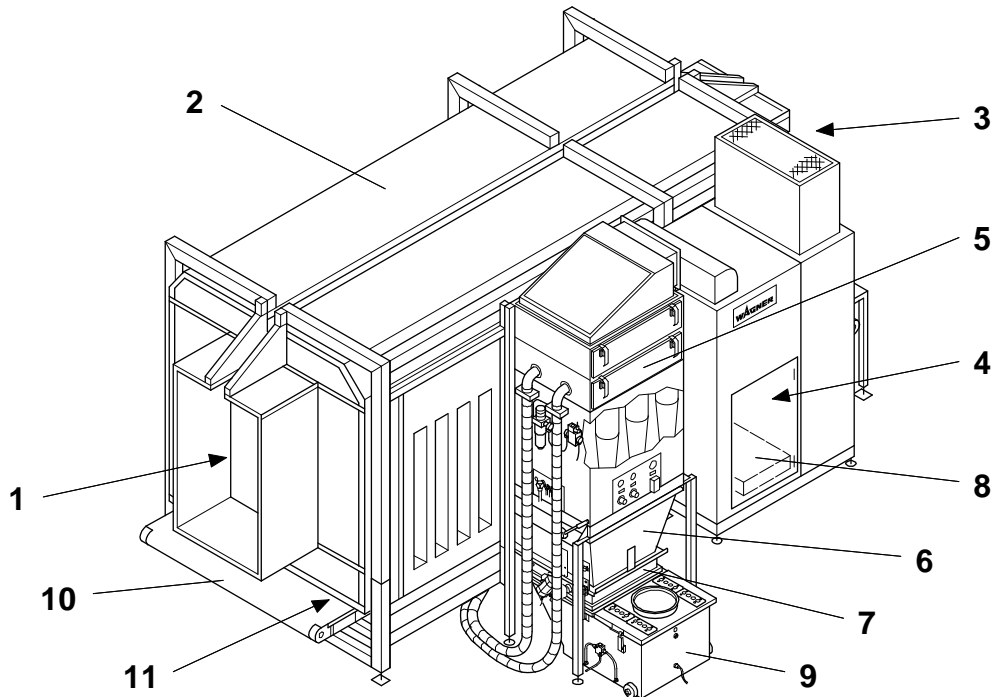


### Caution

Maintenance and repair may only be carried out by trained personnel.

The complete system **must** be switched off before starting the maintenance work and **secured against being switched on again unintentionally**.

### 4.1 Booth



| Item | Designation                             | Inspection  | Comments   |
|------|---|---|--|
| 1    | Inside of the booth                     | Several times a day, if required                              | Large build-ups of powder must be removed immediately.   |
| 2    | Booth roof, booths, exhaust ducts, etc. | Monthly   | Use suction to clean them from the outside, in order to avoid dust build-ups.                  |
| 3    | Flat filter                             | Weekly  | Swap the flat filters if they are very dirty and check the condition of the filter cartridges. |
| 4    | Filter cartridges                       | If there is a malfunction in the automatic cleaning operation | If the seal or filter material is damaged, change them immediately.                            |
| 5    | Cyclone                                 | Daily   | Clean with compressed air  |
| 6    | Calming chamber                         | Daily   | Clean with compressed air  |
| 7    | Screening chamber complete with screen  | At least once a day   | Use a soft mouth piece to remove dirt from the screen using suction.                           |

| Item | Designation   | Inspection  | Comments  |
|------|---|---|---|
| 8    | Powder residue collection tank  | Check the filling level daily   | Empty the powder residue collection tank promptly.  |
| 10   | Powder discharge belt (if installed)  | Let it run until the powder has been completely removed from the belt by the suction. * | Check for any signs of damage to the belt.  |
| 11   | Fit a damp sponge on the sponge bar (in the case of systems with powder discharge belt) | Let the belt run through at least once in the case of a color change                    | Remove and clean the sponge after the belt has run through. Repeat the process, if necessary. |

\* Please also refer to the separate powder discharge belt Operating manual.

#### 4.2 Powder trolley with screening chamber

| Designation       | Inspection                                | Comments  |
|-------------------|---|---|
| Screening chamber | Check weekly for blockages and/or damage. | If necessary, replace the screen with a new one.  |
| Powder trolley    | Clean weekly                              | Cleaning as described in Chapter: <a href="#">3.3 "Carrying out a color change"</a> .<br>The dosage levelling valve can be removed for cleaning purposes. |
| Fluid base        | Clean weekly                              | Cleaning as described in Chapter: <a href="#">3.3 "Carrying out a color change"</a> .<br>If necessary, replace the fluid base with a new one.             |



#### Caution

Do not tighten the throttle valve at the fabric.

Clean the fluid base with particular care.

The compressed air **must meet the requirements** of ISO 8573-1, as described in **Chapter [2.2.2 "Requirements to be met by the place of installation"](#)** in order to avoid the fluid base becoming prematurely dirty.

**4.3 Vibrator motor**

| Designation        | Inspection  | Comments  |
|--------------------|---|---|
| Fixing bolts       | Each time before the motor is switched on and <b>after the first 24 hours</b> | Check that <b>all four fixing bolts</b> on the vibrator motor are tight.  |
| Connection cable   | From time to time   | Check for any chafe marks and if necessary, replace the cable.  |
| Lubricating grease | Every 4,500 operating hours   | Replace all the grease.<br>Clean the ball bearings thoroughly after disassembly and fill a maximum of 1/3 with grease.<br>Inform your Wagner Service Point in the case of wear. |



**Caution**

- The prescribed STRABURAGS NBU 12 MF grease from the Klüber Company must be used.
- Never mix different grease types.
- Never re-grease at different time intervals than those prescribed.
- Excessive grease causes the ball bearings to overheat and cause a loss of performance.
- Repairs **must** be carried out in a **dust-free environment**.
- **No dirt** must get into the inside of the motor.

## 5. Rectification of malfunctions

### 5.1 Booth

| <b>Malfunction</b>  | <b>Cause</b>   | <b>Remedy</b>  |
|---|--|--|
| Suction capacity is too weak (safety switch-off is triggered) | <ul style="list-style-type: none"> <li>- Defective fuse.</li> <li>- Filter cleaning operation is not switched on.</li> <li>- Solenoid valve in the filter system is defective.</li> </ul>                                      | <ul style="list-style-type: none"> <li>- Change the fuses.</li> <li>- Switch on and shorten the cleaning intervals if necessary (program clock generator in the control cabinet).</li> <li>- Swap the solenoid valve out if necessary.</li> </ul>  |
| Dust discharge at the fan output                              | <ul style="list-style-type: none"> <li>- Filter cartridges installed incorrectly.</li> <li>- Filter cartridges seal defective.</li> <li>- Filter cartridge is damaged.</li> <li>- Rotary air nozzles are defective.</li> </ul> | <ul style="list-style-type: none"> <li>- Install the filter cartridges correctly.</li> <li>- Change the foam rubber gasket.</li> <li>- Change the filter cartridge.</li> <li>- The rotary air nozzles must be able to turn freely. If necessary install the filter correctly and/or clean the rotary air nozzles.</li> </ul> |
| Excessive noise and/or vibration in the fan                   | <ul style="list-style-type: none"> <li>- Faulty bearings in the fan.</li> <li>- Build-up of dust on the fan blades.</li> </ul>   | <ul style="list-style-type: none"> <li>- Change the bearings.</li> <li>- Clean the fan blades.</li> </ul>  |
| The wiper doesn't move  | <ul style="list-style-type: none"> <li>- Compressed air hoses not connected.</li> <li>- The limit switch on the rotation cylinder is not connected and/or not set correctly.</li> </ul>  | <ul style="list-style-type: none"> <li>- Connect the compressed air hoses.</li> <li>- Connect the limit switch and/or set it correctly.</li> </ul>   |

## 5.2 Powder trolley

| Malfunction   | Cause   | Remedy  |
|---|---|---|
| The screen is not separating any dirt out               | <ul style="list-style-type: none"> <li>- The screen frame is faulty.</li> </ul>   | <ul style="list-style-type: none"> <li>- Swap out the screen frame with the screen mesh.</li> </ul>   |
| The screen does not let any more powder through         | <ul style="list-style-type: none"> <li>- The screen mesh is clogged.</li> <li>- The powder is lumpy, e.g. through oil, air humidity or the start of polymerization caused by too high a temperature.</li> <li>- The screen frame rubber bearing is faulty.</li> </ul> | <ul style="list-style-type: none"> <li>- Clean off the dirt using a vacuum cleaner with a soft cleaning head.</li> <li>- If necessary, the powder must be changed completely.</li> <li>- Replace the round rubber bearing.</li> </ul> |
| No powder feed  | <ul style="list-style-type: none"> <li>- Too little powder in the circuit.</li> <li>- The fluid base of the powder trolley is dirty or damaged.</li> <li>- The injector is clogged or worn.</li> </ul>  | <ul style="list-style-type: none"> <li>- Top up the powder.</li> <li>- If the air supply is sufficient, clean or exchange the fluid base.</li> <li>- Clean the injector and if necessary, swap out the worn parts.</li> </ul>         |
| No powder feed  | <ul style="list-style-type: none"> <li>- The powder hose is dirty or kinked.</li> <li>- The guns are clogged.</li> <li>- Insufficient conveyor or dosage air.</li> </ul>  | <ul style="list-style-type: none"> <li>- Clean the powder hose and make sure there are <b>no kinks</b> in it.</li> <li>- Clean the guns.</li> <li>- Check the air supply.</li> </ul>  |
| The powder supply is insufficient or interrupted        | <ul style="list-style-type: none"> <li>- Speed is too low in the powder feed hose.</li> <li>- Insufficient fluidization of the powder.</li> </ul>   | <ul style="list-style-type: none"> <li>- Increase the supply and dosage air.</li> <li>- Increase the fluid air quantity at the throttle.</li> </ul>   |
| The powder doesn't flow from one chamber into the other | <ul style="list-style-type: none"> <li>- Insufficient fluidization of the powder.</li> </ul>  | <ul style="list-style-type: none"> <li>- Increase the fluid air quantity at the throttle.</li> </ul>  |
| Build up of dust in the area of the powder container    | <ul style="list-style-type: none"> <li>- The fluid air quantity is too large.</li> </ul>  | <ul style="list-style-type: none"> <li>- Reduce the fluid air quantity at the throttle.</li> </ul>  |



## 6. Spare parts lists

### 6.1 How to order spare parts

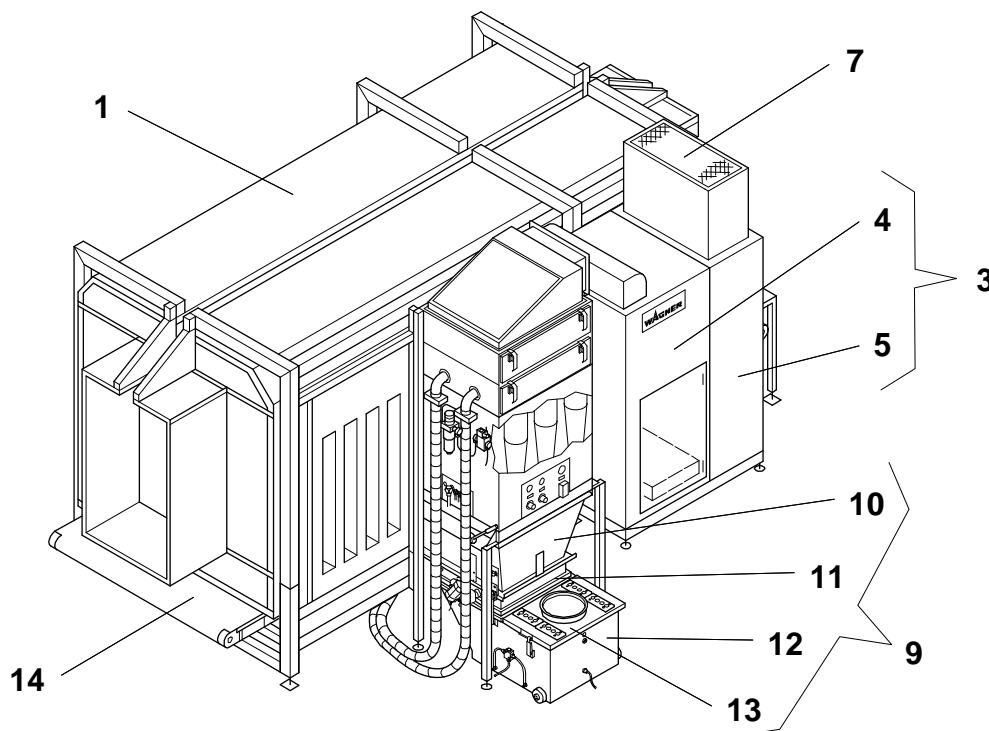
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Faulty and unserviceable parts are replaced in accordance with our General Terms and Conditions of Delivery.

In order to be able to guarantee safe and smooth spare parts delivery, the following information is necessary:

- **Invoicing address**
- **Delivery address**
- **Name of contact persons for check back**
- **Type of delivery**
- **Quantity ordered, article number and designation**

### 6.2 Complete system

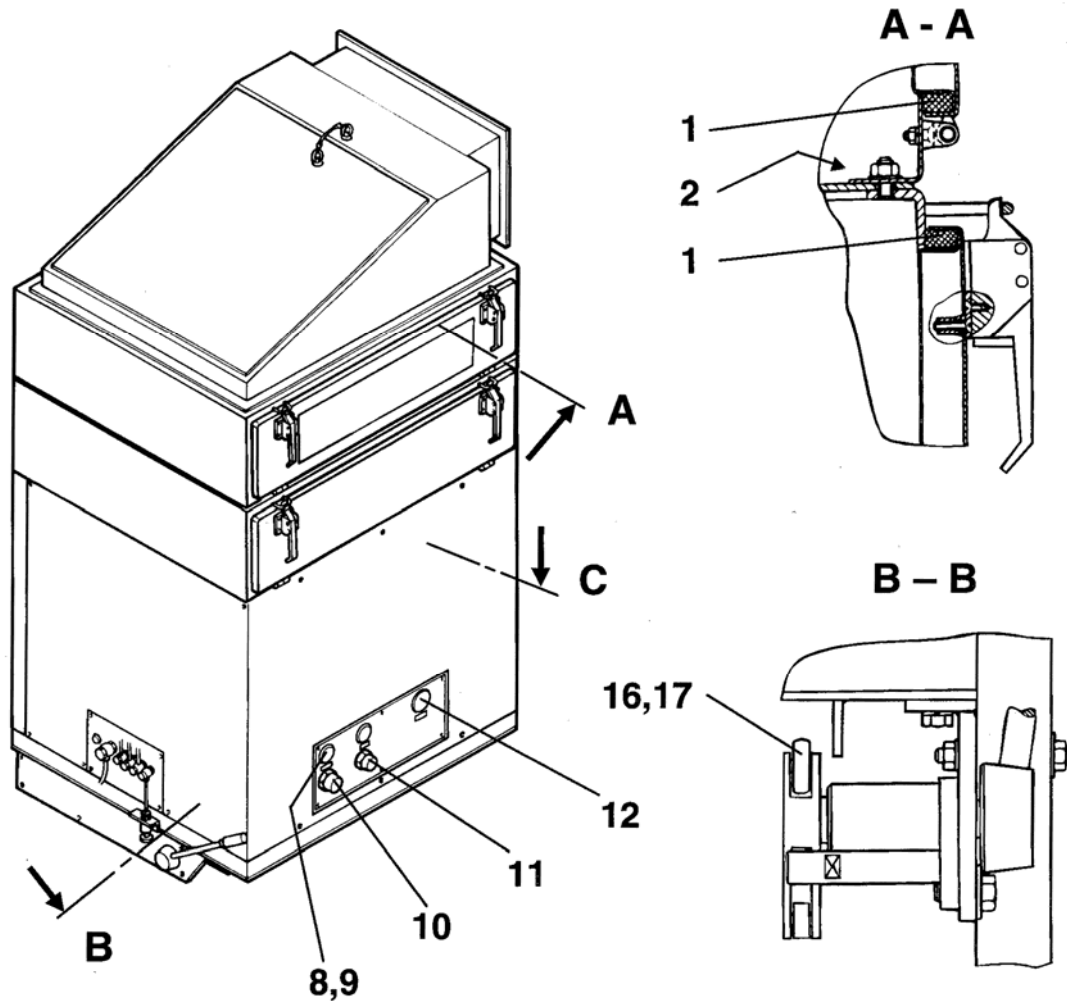


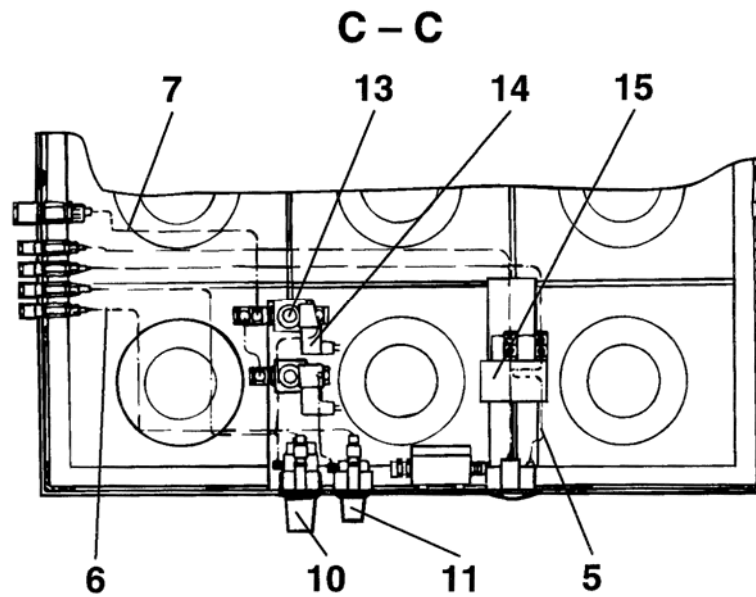
| Item | Designation   | Article No. |
|------|---|-------------|
| 1    | Steel booth   | --          |
| 2    | Cyclone unit  | 3100315     |
| 3    | Final filter device, consisting of: Items 4 and 5               | --          |
| 4    | Filter unit for suction capacity: 8,000 m <sup>3</sup> /h       | 3140995     |
|      | Filter unit for suction capacity: 10,000 m <sup>3</sup> /h      | 3140955     |
|      | Filter unit for suction capacity: 12,000 m <sup>3</sup> /h      | 3140955     |
| 5    | Ventilator unit with suction capacity: 8,000 m <sup>3</sup> /h  | 3101551     |
|      | Ventilator unit with suction capacity: 10,000 m <sup>3</sup> /h | 3061380     |
|      | Ventilator unit with suction capacity: 12,000 m <sup>3</sup> /h | 3304377     |

| Item | Designation  | Article No. |
|------|--|-------------|
| 6    | Exhaust duct: Depends on the length  | --          |
| 7    | Blow-out silencer for final filter ( <b>special accessory</b> ):<br><b>Must be ordered separately.</b> | 3100435     |
| 9    | Powder trolley consisting of items 10 to 13  | --          |
| 10   | Calming chamber  | 3134640     |
| 11   | Screening chamber with riddle screen   | 3106026     |
| 12   | Powder trolley without container lid   | 3150742     |
| 13   | Container lid, dependant on the type and design 1.)  | --          |
| 14   | Powder discharge belt with suction: Dependant on the length of the booth                               | --          |

1.) See Chapter [6.7.4](#) and/or [6.7.6](#).

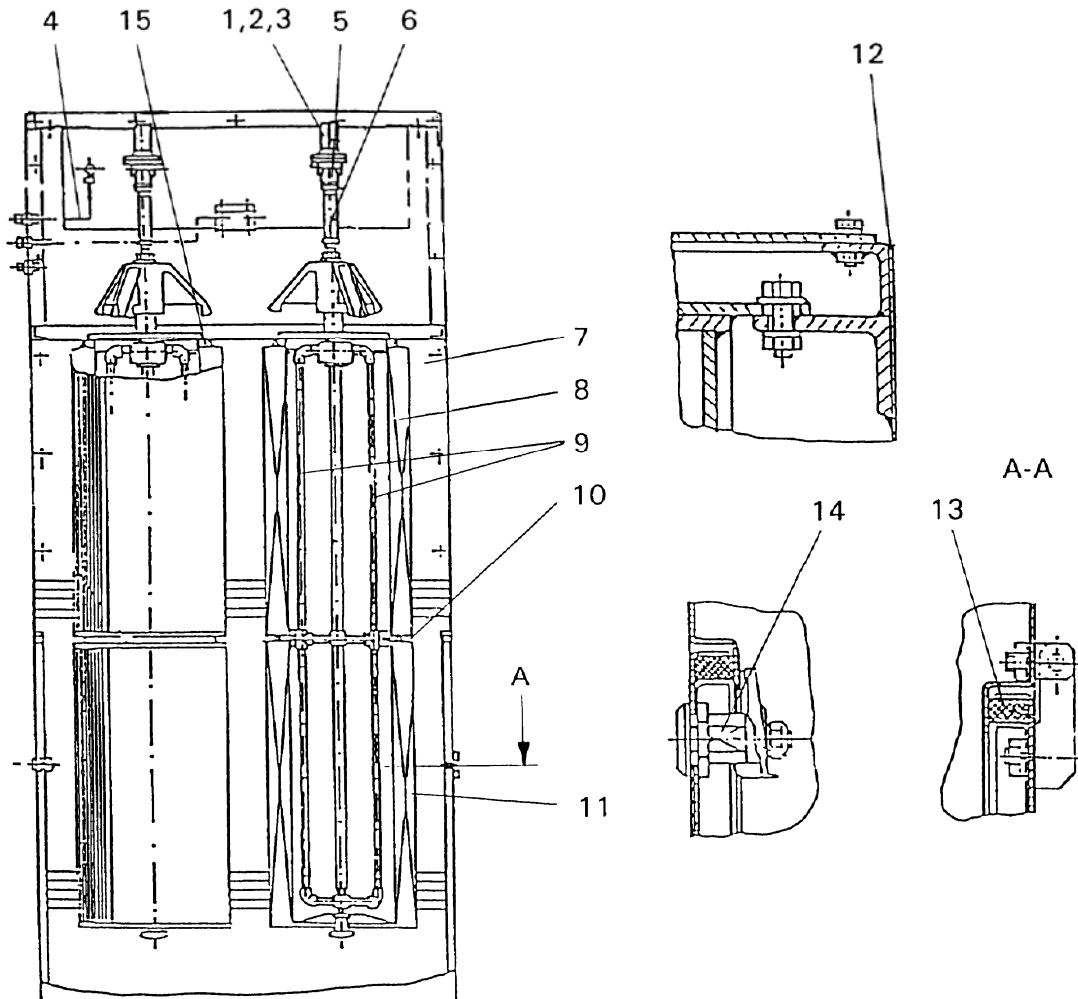
### 6.3 Cyclone unit





| Item | Article No. | Designation                           |
|------|-------------|---------------------------------------|
| 1    | 3065486     | Seal 10 x 20                          |
| 2    | 3050168     | Sealing tape 9 x 2                    |
| 3    | 3063421     | Closure plugs                         |
| 4    | 3020110     | Closure plugs                         |
| 5    | 3055734     | Polyethylene hose D 6/4               |
| 6    | 3055759     | Polyethylene hose D 8/6               |
| 7    | 3987076     | PVC hose, diameter 10.2 x 8           |
| 8    | 3051234     | Pressure gauge 0 -10 bar              |
| 9    | 3050907     | O-ring                                |
| 10   | 9998240     | Pressure regulator 0-6.0 bar          |
| 11   | 3060190     | Pressure regulator 0.5 -10 bar        |
| 12   | 3026339     | Differential pressure gauge 0 – 5 bar |
| 13   | 3303997     | Solenoid valve                        |
| 14   | 3110347     | Solenoid valve separator, complete    |
| 15   | 3025456     | Differential pressure monitor         |
| 16   | 3053979     | Roller                                |
| 17   | 3055669     | Roller                                |

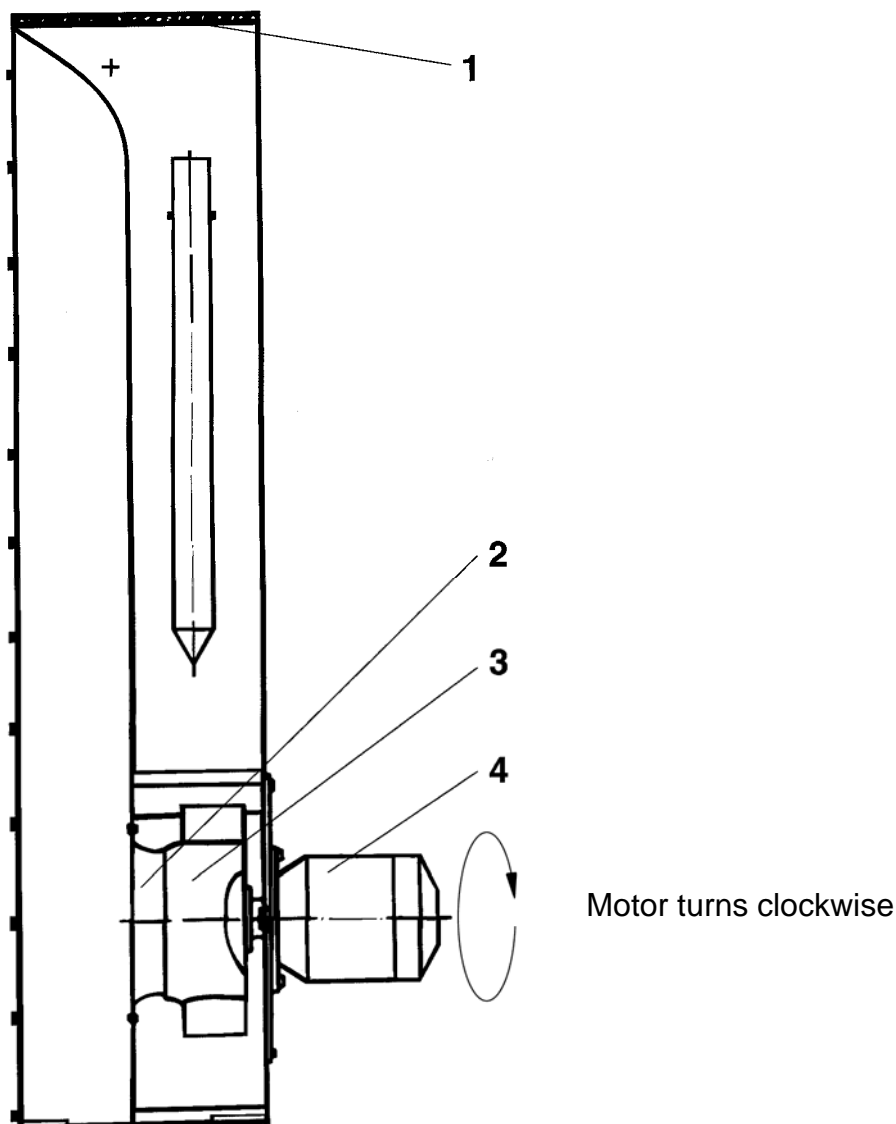
**6.4 Filter unit**



| Item | Article No. | Designation                                 |
|------|-------------|---|
| 1    | 3303998     | Solenoid valve, 2/2-way                     |
| 2    | 3113994     | Valve connector                             |
| 4    | 3051701     | Hose, diameter = 10.2/8                     |
| 5    | 3055182     | Hose nipple                                 |
| 6    | 3055181     | Hose, diameter = 27/19                      |
| 7    | 3054018     | Acrylic sealing material                    |
| 8    | 3131046 *   | Dust filter cartridge                       |
| 9    | 3140849     | Rotary air nozzle, complete                 |
| 10   | 3061404     | Intermediate ring for double element        |
| 11   | 3131045 *   | Dust filter cartridge                       |
| 12   | 3050168 *   | Sealing tape 9 x 2                          |
| 13   | 3056486     | Foam rubber gasket 10 x 20                  |
| 14   | 3061405     | Sash fastener stepped tabs, complete        |
| 15   | 3059434 *   | Foam rubber gasket (included in items 8+11) |

\* Wearing part

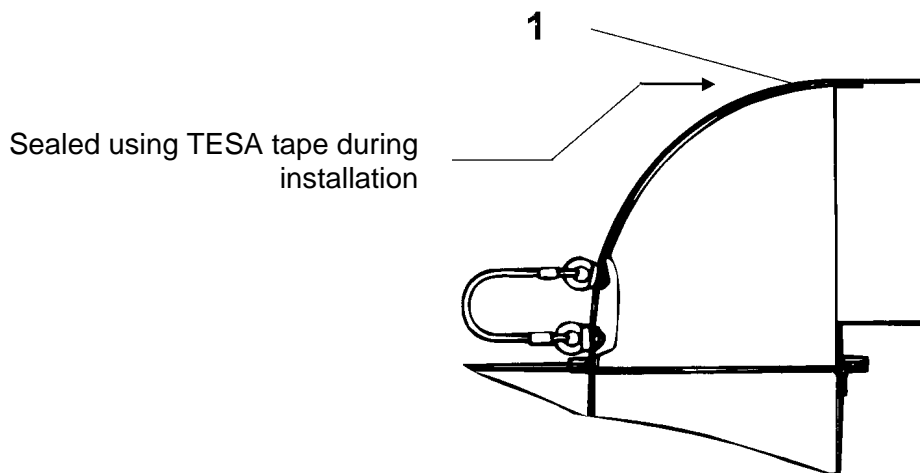
## 6.5 Fan unit



| Item | Article No. | Designation   |
|------|-------------|---|
| 1    | 3100027 *   | Flat filter 1,190 x 610 (8,000 m <sup>3</sup> /h and 10 – 12,000 m <sup>3</sup> /h fan unit, 1,200 mm wide) |
| 2    | 3101557     | Inflow nozzle, type ES 355 (8,000 m <sup>3</sup> /h)  |
|      | 3061389     | Inflow nozzle, type 400 (10 – 12,000 m <sup>3</sup> /h)   |
| 3    | 3101556     | Radial fan rotor RS-E (500 x 132) (8,000 m <sup>3</sup> /h)   |
|      | 3061388     | Radial fan rotor R1-40-400 (10 – 12,000 m <sup>3</sup> /h)  |
| 4    | 3302656     | Three-phase AC motor, 11.0 kW, 230/400V 50Hz (8,000 m <sup>3</sup> /h) *                                    |
|      | 3302655     | Three-phase AC motor, 15.0 kW, 230/400V 50Hz (10,000 m <sup>3</sup> /h) *                                   |
|      | 3304376     | Three-phase AC motor, 18.5 kW, 400/690V / 3 phase 50Hz (12,000 m <sup>3</sup> /h) *                         |

\* Wearing part

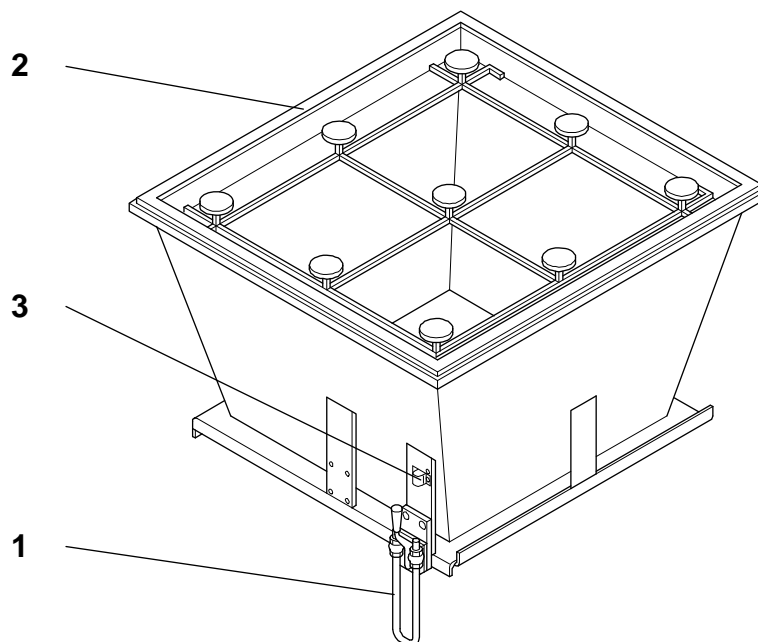
**6.6 Exhaust duct**



| Item | Article No. | Designation  |
|------|-------------|--------------|
| 1    | 3050168     | Sealing tape |

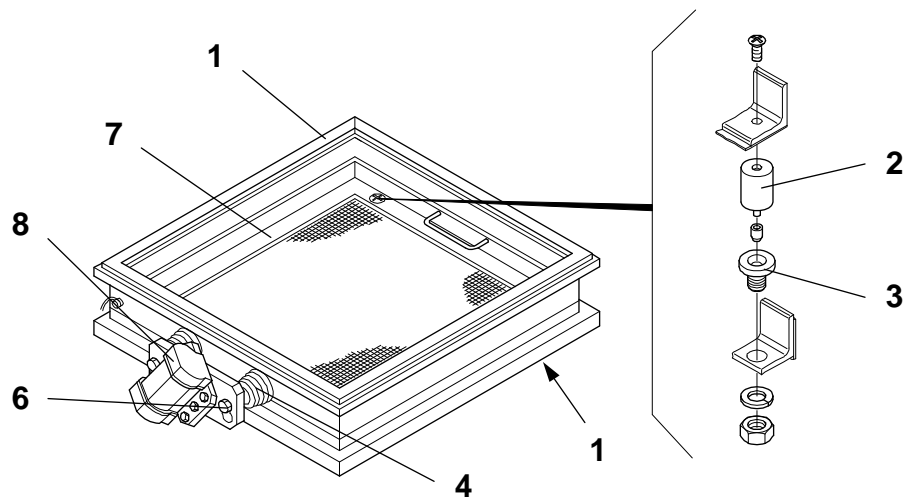
**6.7 Powder trolley with screening and calming chamber**

**6.7.1 Calming chamber**



| Item | Article No. | Designation        |
|------|-------------|--------------------|
| 1    | 3057073     | Clamp              |
| 2    | 3053914     | Foam rubber gasket |
| 3    | 3069288     | Retaining spring   |

### 6.7.2 Screening chamber

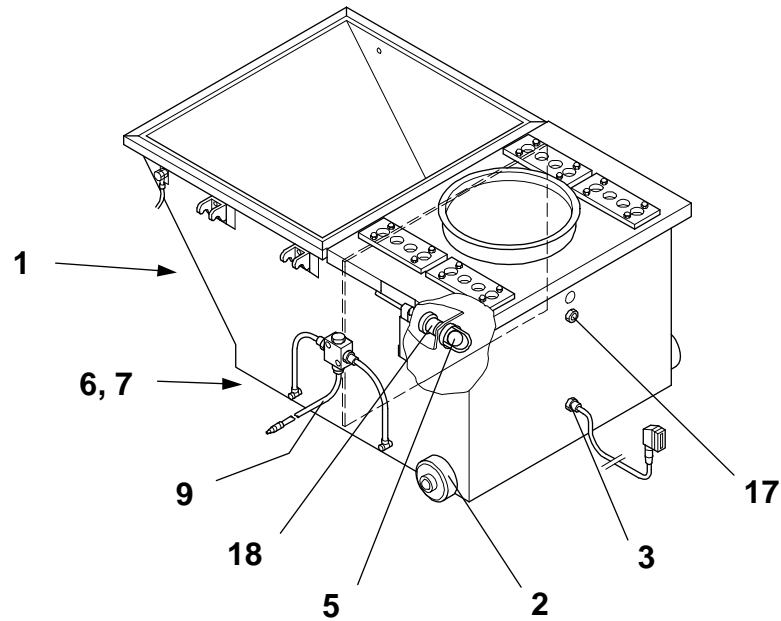


| Item | Article No. | Designation                                      |
|------|-------------|--|
| 1    | 3065486     | Foam rubber gasket 20 x 10                       |
| 2    | 3069022     | Round rubber element, short                      |
| 2    | 3054635     | Round rubber element, long                       |
| 3    | 3053954     | Guide bush                                       |
| 4    | 3069014     | Shock absorber                                   |
| 6    | 9900127     | Hexagonal screw M10x35-8.8Z1                     |
| 7    | 3102830     | Screen frame, complete, with 315 µm nylon screen |
| 8    | 3148721     | Vibrator motor                                   |

\* Is included in the vibrator drive complete, article no. **3101 339**.

**6.7.3 Powder trolley**

Without container lid, with fluidized bed and dosage valve.

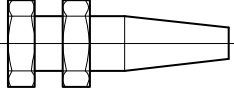
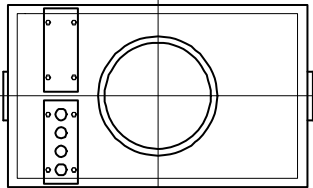
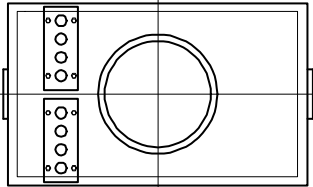
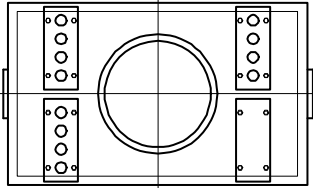
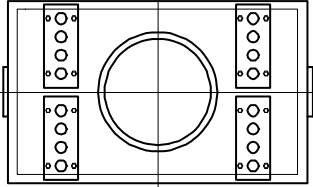


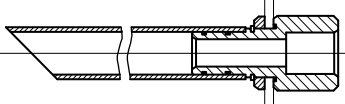


| Item | Article No. | Designation                           |
|------|-------------|---------------------------------------|
| 1    | 3063308     | Single guide caster (not shown)       |
| 2    | 3063307     | Wheel (plastic)                       |
| 3    | 3148885     | Proximity switch                      |
| 4    | 3065487 *   | Rubber lid (not shown)                |
| 5    | 3101310     | Dosage valve, complete                |
| 6    | 3020199     | Hollow bolt with one-way valve        |
| 7    | 3303952     | Swivel ring                           |
| 8    | 3065486 *   | Foam rubber 20x10 (not shown)         |
| 9    | 3051701     | PVC hose, diameter 10.2 x 8           |
| 10   | 3051007     | Seal screw (not shown)                |
| 17   | 3084477     | Closure plugs NW 20                   |
| 17   | 3066922     | Fresh powder grommet NW 20 (optional) |
| 18   | 3068835     | Closure plugs                         |

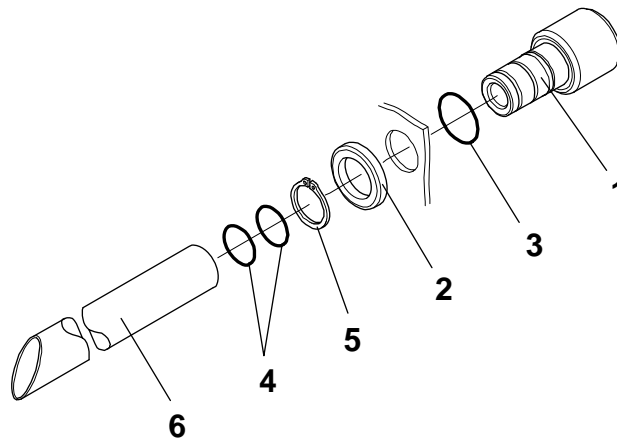
\* Wearing part



## 6.7.4 Types and designs for PJ 18 and PJ 24 (up to 12/2006)

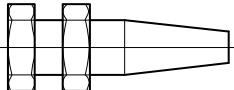
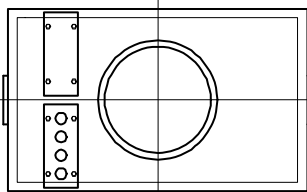
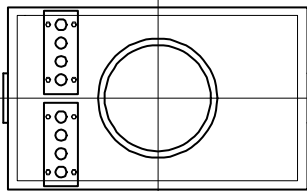
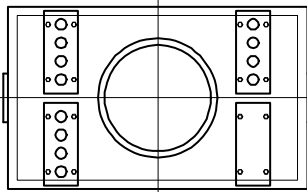
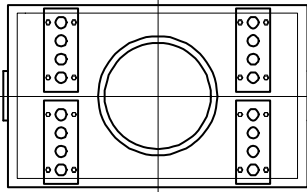


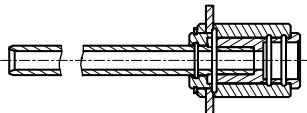
| Article No. | Designation   |   |
|-------------|---|---|
| 3066922     | Fresh powder grommet kit  |    |
| 3101507     | Container lid<br>for 1-4 injectors                              |    |
| 3101508     | Container lid<br>for 1-8 injectors                              |    |
| 3101509     | Container lid<br>for 1-12 injectors                             |   |
| 3101510     | Container lid<br>for 1-16 injectors                             |  |
| 3052494     | Blind plug 1.)  |  |
| 3050056     | Check nut 1.)   |  |
| 3101337     | Suction system <b>PJ 18</b><br>(for collecting blow-out device) |  |
| 3101324     | Suction system <b>PJ 24</b>                                     |   |

6.7.5 Types and designs for PJ 18 and PJ 24 (up to 12/2006)

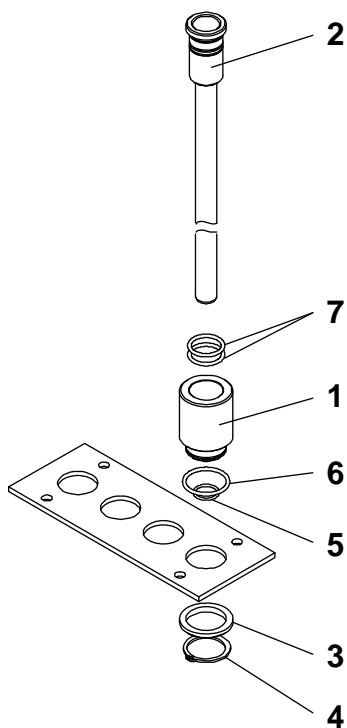


| Item | Article No. | Designation                       |
|------|-------------|-----------------------------------|
| 1    | 3101333     | Suction piece (for <b>PJ 18</b> ) |
| 1    | 701431      | Suction piece (for <b>PJ 24</b> ) |
| 2    | 701432      | Clamping ring                     |
| 3    | 9971009     | O-ring                            |
| 4    | 9971178     | O-ring                            |
| 5    | 701433      | Lock washer                       |
| 6    | 3101330     | Suction tube (length = 370mm)     |

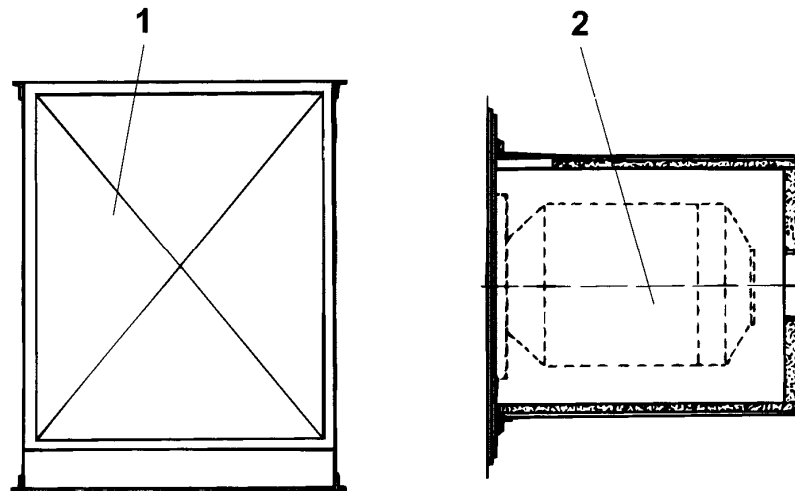
## 6.7.6 Types and designs ICM/ICF (from 01/2007)

| Article No. | Designation                         |   |
|-------------|-------------------------------------|---|
| 3066922     | Fresh powder grommet kit            |    |
| 3310770     | Container lid<br>for 1-4 injectors  |    |
| 3310771     | Container lid<br>for 1-8 injectors  |    |
| 3310772     | Container lid<br>for 1-12 injectors |   |
| 3310773     | Container lid<br>for 1-16 injectors |  |
| 3053051     | Blind plug 1.)                      |  |
| 3052097     | Check nut 1.)                       |  |
| 3310754     | Suction system                      |  |

6.7.7 Suction system ICM/ICF (from 01/2007)

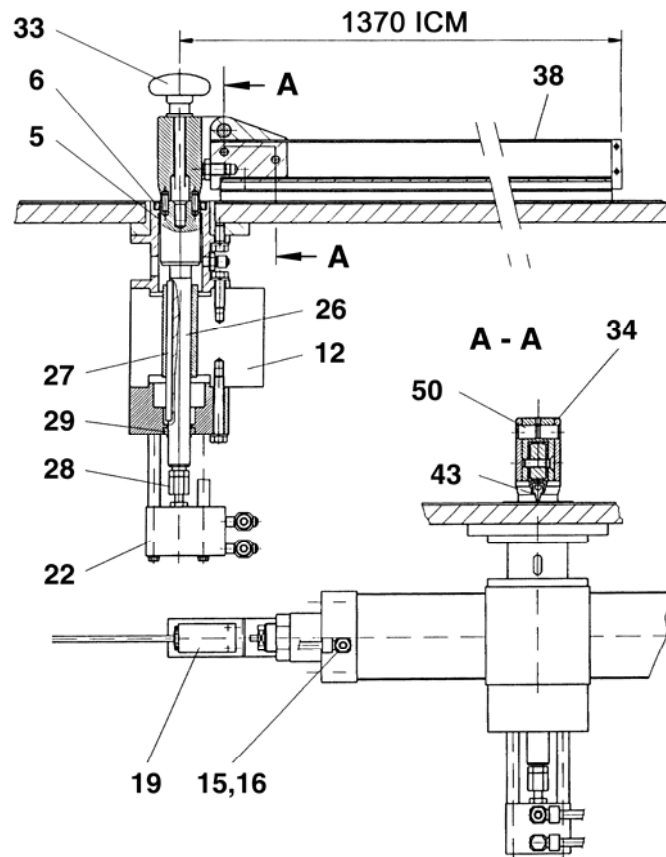


| Item | Article No. | Designation                 |
|------|-------------|-----------------------------|
| 1    | 3310749     | Injector connection ICM/ICF |
| 2    | 3306783     | Suction tube, complete      |
| 3    | 3310750     | Suction piece clamping ring |
| 4    | 2306794     | Securing ring               |
| 5    | 9974023     | Conducting O-ring           |
| 6    | 9971004     | O-ring                      |
| 7    | 3158382     | Conducting O-ring           |

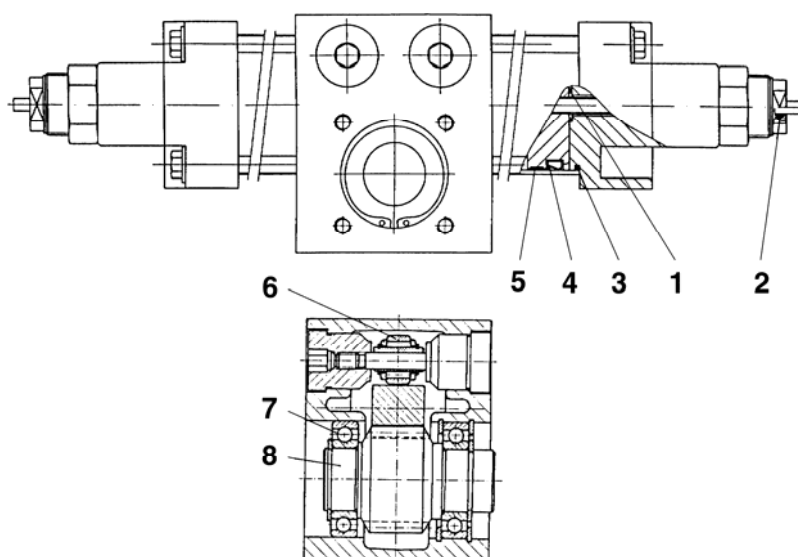
**6.8 Special accessories****6.8.1 Silencer**

| Item | Article No. | Designation                               |
|------|-------------|---|
| 1    | 3140958     | Blow-out silencer for final filter        |
| 2    | 3103049     | Sound suppression hood for 11/15 kW motor |

6.8.2 Wiper for booths with fixed floor



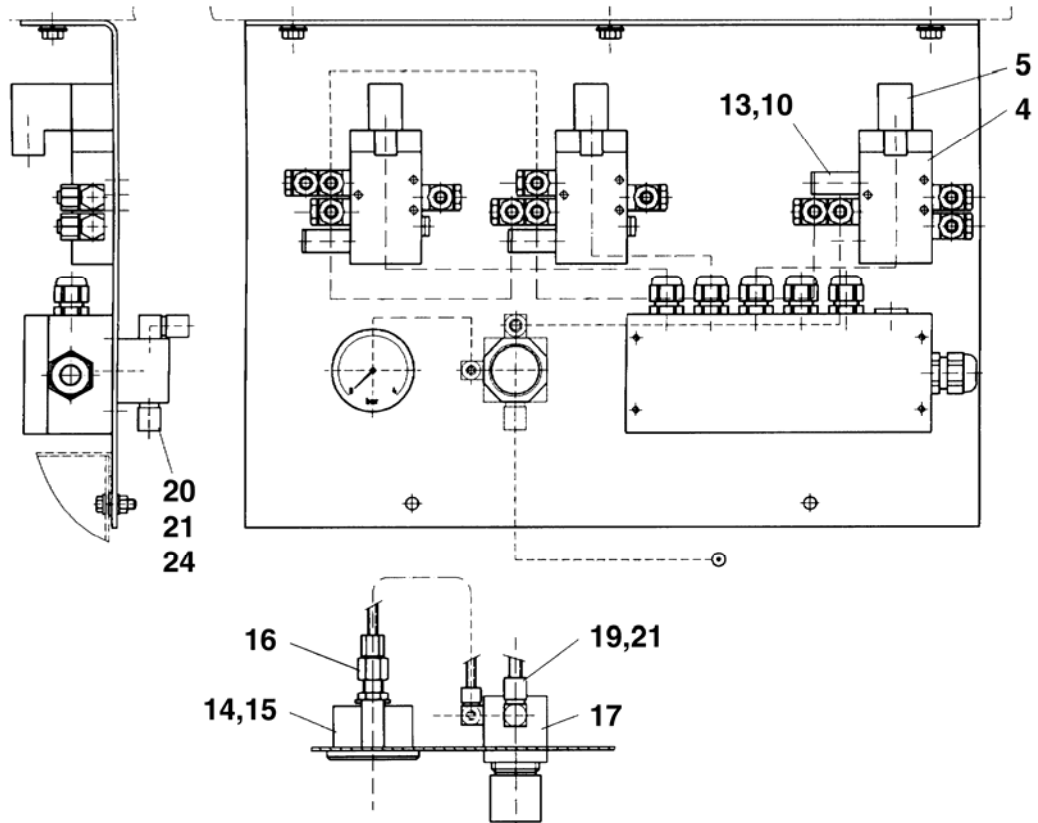
| Item | Article No. | Designation                           |
|------|-------------|---------------------------------------|
| 5    | 3059026     | Glycodur A socket                     |
| 6    | 3130615     | Wiper-scraper seal                    |
| 12   | 3061792     | Rotary drive 195°                     |
|      | 3132630     | Rotary drive 150°                     |
| 15   | 3051040     | Sealing ring                          |
| 16   | 3050149     | Aluminum sealing ring                 |
| 19   | 3059327     | Limit switch                          |
| 22   | 3061696     | Short stroke cylinder (double-action) |
| 26   | 3130616     | Bearing shaft                         |
| 27   | 3130210     | Feather key                           |
| 28   | 3062595     | Flexo coupling                        |
| 29   | 3062596     | Stripper                              |
| 33   | 3059039     | Handle assembly                       |
| 34   | 3130723     | Seating head                          |
| 38   | 3061794     | Arm (1,340 mm long)                   |
| 43   | 3070629     | Wiper lip                             |
| 50   | 3059046     | Bolt                                  |



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| Item | Article No. | Designation                                 |
|------|-------------|---|
| 2/ - | 3059615     | Seal set, consisting of: Item 12/1 ... 12/5 |
| 12/1 | --          | O-ring                                      |
| 12/2 | --          | Lip ring (6 x 10 x 3 Cl)                    |
| 12/3 | --          | O-ring                                      |
| 12/4 | --          | Lip seal                                    |
| 12/5 | --          | Guide belt                                  |
| 12/6 | 3059620     | Cam roll                                    |
| 12/7 | 3059621     | Ball bearing                                |
| 12/8 | 3059622     | Bevel wheel                                 |

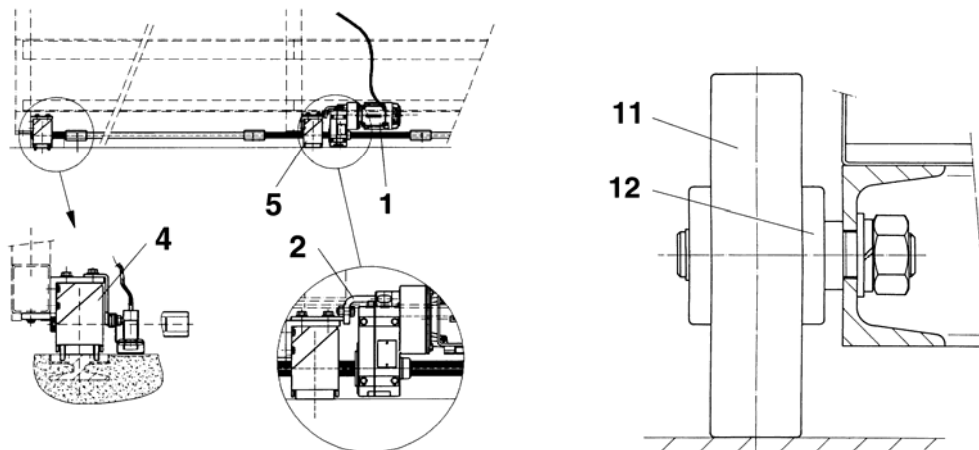
6.8.3 Wiper control unit



| Item | Article No. | Designation                                     |
|------|-------------|---|
| 4    | 3059430     | Solenoid valve (5/2-WV – Type 9982)             |
| 5    | 3058910     | Valve connector (B 24 VAC/DC)                   |
| 10   | 3056800     | Silencer  |
| 13   | 3050173     | Aluminum sealing ring G1/8"                     |
| 14   | 3055347     | Pressure gauge (0 ... 58 psi / 0 ... 4 bar)     |
| 15   | 3050907     | O-ring  |
| 16   | 3055136     | Pressure gauge fitting                          |
| 17   | 3060189     | Pressure regulator (0 ... 58 psi / 0 ... 4 bar) |
| 18   | 3054987     | SR bracket fitting                              |
| 19   | 3054980     | SR bracket fitting                              |
| 20   | 3054977     | Threaded connection straight                    |
| 21   | 3050149     | Aluminum sealing ring G1/4"                     |
| 24   | 3050061     | Polyethylene hose (transparent)                 |

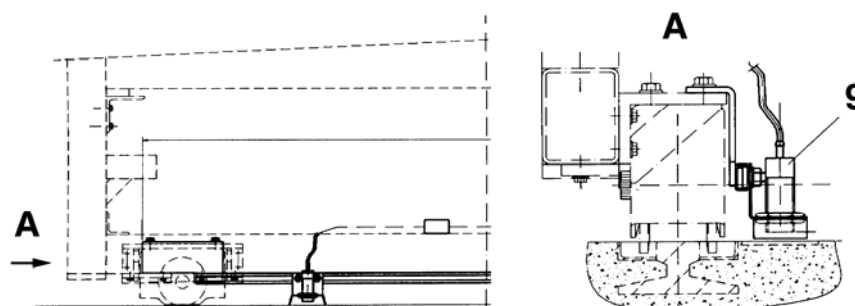


#### 6.8.4 Drive and wheel set for mobile booths



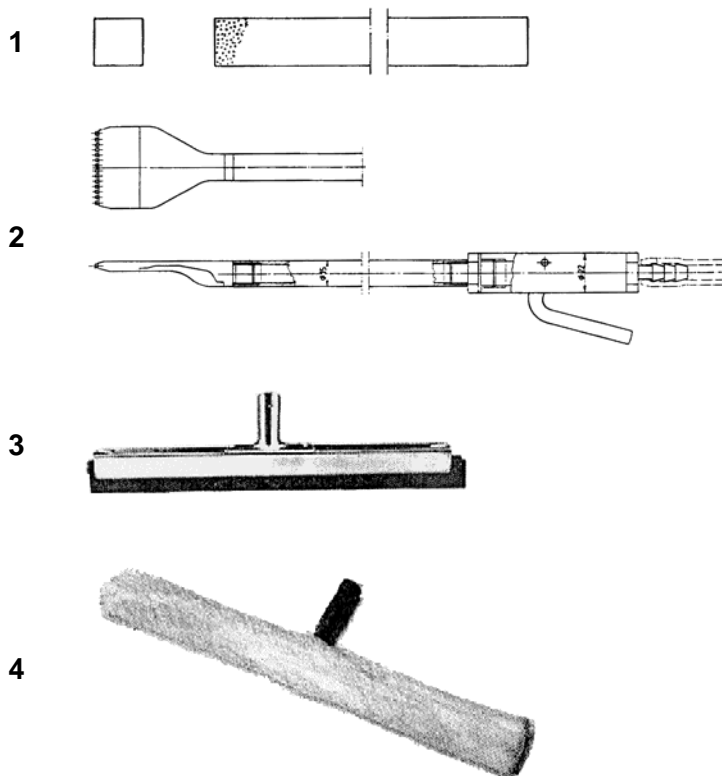
| Item | Article No. | Designation                             |
|------|-------------|---|
| 1    | 3135927     | Brake motor with plug-on gear (0.37 kw) |
| 2    | 3090445     | Torque support                          |
| 4    | 3059221     | Wheel flange block assembly             |
| 5    | 3059130     | Wheel flange block assembly             |
| 11   | 3061421     | PEVOLON wheel                           |
| 12   | 3061422     | Bolt                                    |

#### 6.8.5 Positioning equipment for mobile booths



| Item | Article No. | Designation                |
|------|-------------|----------------------------|
| 9    | 3026244     | Inductive proximity switch |

6.8.6 Cleaning accessories



| Item | Article No. | Designation    | Application   |
|------|-------------|----------------|---|
| 1    | 3107449     | Sponge         | For cleaning the belt in the booth.                   |
| 2    | 3107643     | Jet blast unit | To clean the booth.                                   |
| 3    | 3107454     | Rubber scraper | To remove coarse powder residue from the booth walls. |
| 4    | 3107456     | Fabric scraper | For fine, moist cleaning of the booth walls.          |

## 7. Specification

### 7.1 Booth

|   | 8,000 m <sup>3</sup> /h<br>Suction capacity | 10,000 / 12,000 m <sup>3</sup> /h<br>Suction capacity |
|---|---|---|
| Dimensions: cyclone unit<br>(width x depth x height)                      | 800 x 1,008 x 2,450 *                       | 800 x 1,008 x 2,450 *                                 |
| Dimensions: final filter device<br>(width x depth x height)               | 1,200 x 1,660 x 2,810 *                     | 1,200 x 1,660 x 2,810 *                               |
| Number of filters   | 12  | 12  |
| Total filter surface  | 120 m <sup>2</sup>                          | 120 m <sup>2</sup>                                    |
| Filter capacity according to<br>ZH1-487- paragraph 2                      | < 0,5 %                                     | < 0,5 %   |
| Number of cyclones  | 9   | 9   |
| Compressed air container<br>capacity (for cleaning)                       | 34 l  | 34 l  |
| Compressed air cleaning<br>operation                                      | 72.5 – 79.8 psi<br>(5 - 5.5 bar)            | 72.5 – 79.8 psi<br>(5 - 5.5 bar)                      |
| Compressed air requirement for<br>cleaning at a pulse time of<br>1 second | 56 Nm <sup>3</sup> /h                       | 56 Nm <sup>3</sup> /h                                 |
| Compressed air requirement for<br>wiper                                   | 0.8 Nm <sup>3</sup> /h                      | 0.8 Nm <sup>3</sup> /h                                |
| Total compressed air<br>requirement (without powder<br>discharge belt)    | 86 Nm <sup>3</sup> /h                       | 86 Nm <sup>3</sup> /h                                 |
| Belt suction compressed air<br>requirement                                | 60 Nm <sup>3</sup> /h at 87 psi (6 bar)     | 60 Nm <sup>3</sup> /h at 87 psi (6 bar)               |
| Compressed air input pressure   | 116 psi (8 bar)                             | 116 psi (8 bar)                                       |
| Voltage (ventilator)  | 400 / 690 V                                 | 400 / 690 V   |
| Frequency (ventilator)  | 50 Hz                                       | 50 Hz   |
| Ventilator motor  | 11 kW                                       | 15 / 18.5 kW  |
| Illumination  | 2 x 58 W per lamp **                        | 2 x 58 W per lamp **                                  |
| Cleaning  | 40 W  | 40 W  |
| Control unit  | -- kW ***                                   | -- kW ***   |
| Total connected load  | -- kW ***                                   | -- kW ***   |
| Differential pressure setting   | 3,000 Pa                                    | 3,300 Pa 15kW Motor<br>4,500 Pa 18.5kW Motor          |

\* with exhaust duct

\*\* Number of lamps depends on equipment (booth length)

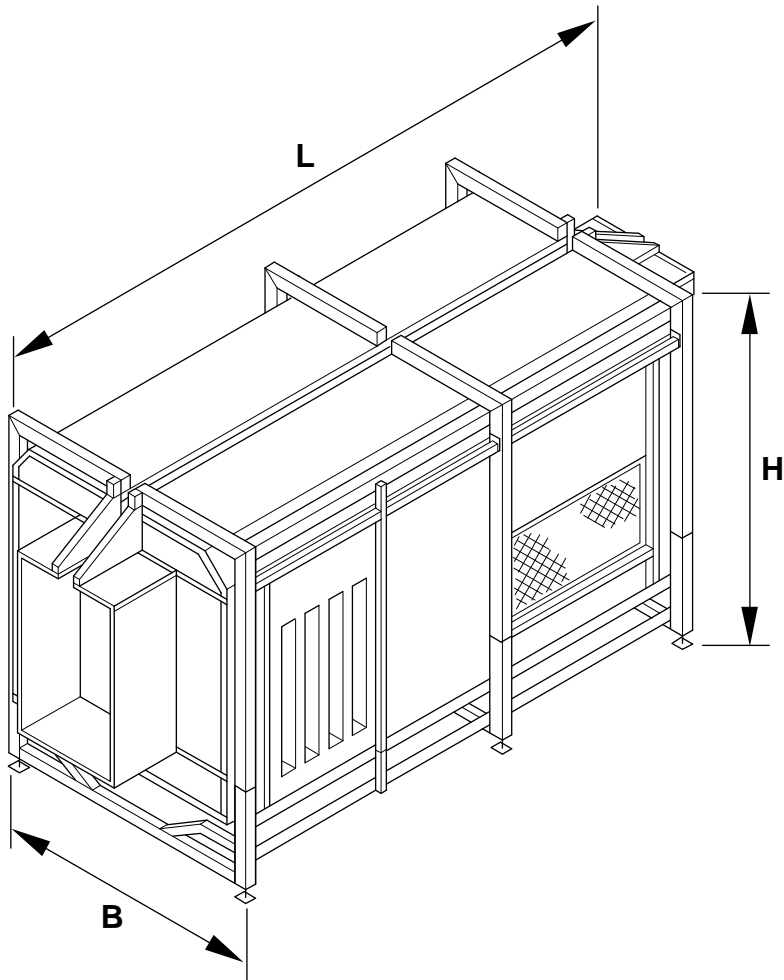
\*\*\* See separate Operating manual for the control cabinets (cover of the power circuit plans).



### Caution

Rotary air nozzles should only be installed by trained personnel.

| Steel booth            | Type 1   | Type 2   | Type 3   |
|------------------------|----------|----------|----------|
| Height (H) in mm       | 2,810    | 3,210    | 3,610    |
| Width (B) in mm        | 2,200    | 2,200    | 2,200    |
| Length (L) as required | variable | variable | variable |
| Sluice                 | variable | variable | variable |



**Illustration, type 2**

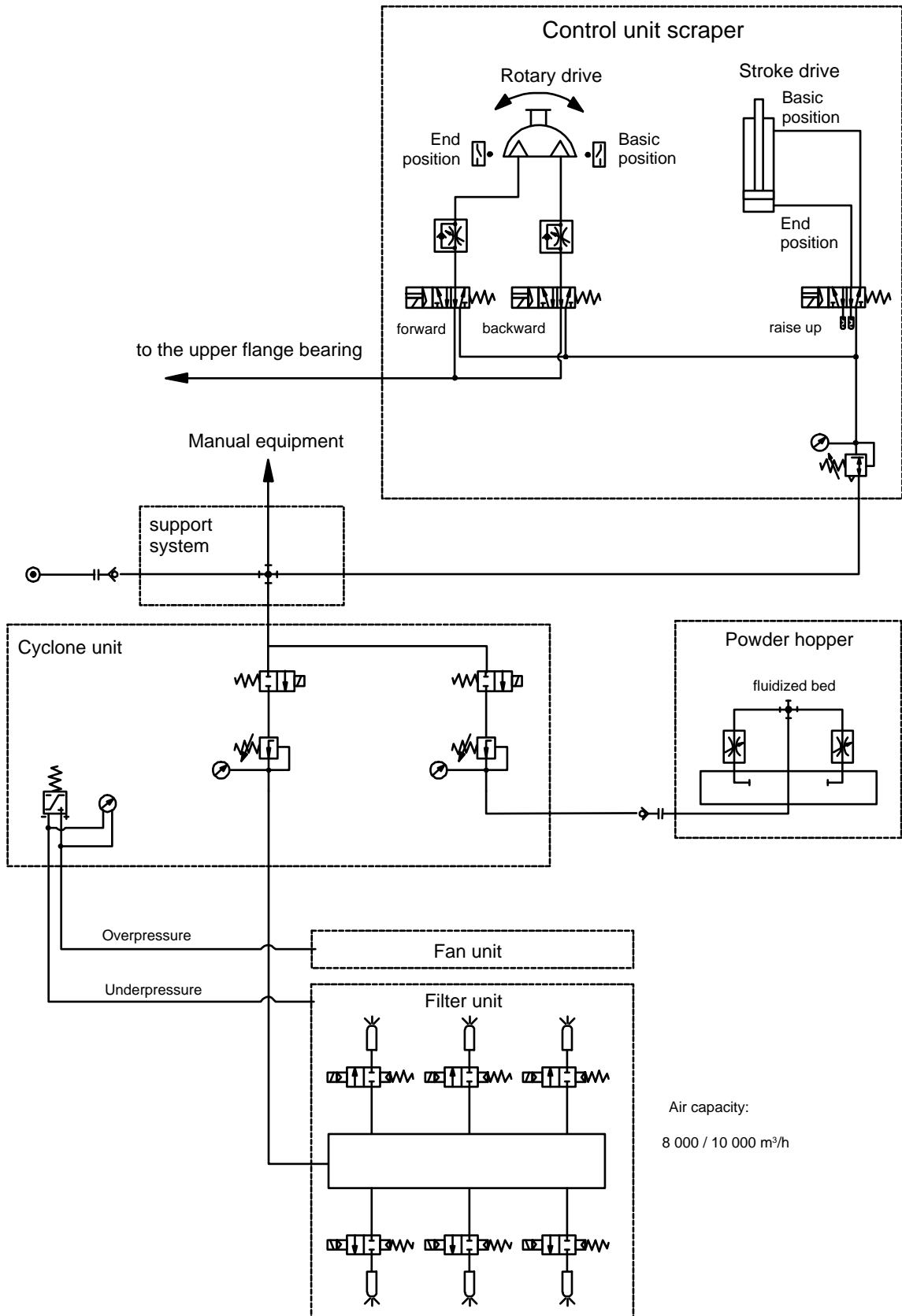
- H** Booth height
- B** Booth width
- L** Booth length

## 7.2 Powder trolley

|   |                              |
|---|------------------------------|
| Dimensions: (length x width x height)     | 1,080 x 785 x 1,060          |
| Contents                                  | approx. 200 l                |
| Powder filling quantity                   | approx. 120 kg               |
| Number of injectors                       | max. 16                      |
| Level control                             | Minimum probe                |
| Compressed air input pressure             | 87 ... 116 psi (6 ... 8 bar) |
| Fluidized base compressed air requirement | 30 Nm <sup>3</sup> /h        |
| Voltage (vibrator motor)                  | 380 / 400 V                  |
| Frequency (vibrator motor)                | 50 / 60 Hz                   |
| Output (vibrator motor)                   | 0.100 kW *                   |
| Protection class (vibrator motor)         | IP 65                        |
| ISO class (vibrator motor)                | E                            |
| Power consumption (vibrator motor)        | 0.2 A                        |
| Speed (vibrator motor)                    | 3,000 rpm                    |

- \* The screen performance can be trimmed to the corresponding powder type by moving the vibrator motor between 0° and 7°.

**7.3 Pneumatic plan for the complete system**



## 8. Warranty

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### **What is covered by this warranty?**

Faulty or defective parts are replaced according to our general delivery conditions.

Within the applicable warrant period, Wagner will repair or replace, at our option, defective parts without charge if such parts are returned with transportation charges prepaid to the nearest authorized service center. If Wagner is unable to repair this product so as to conform to this Limited Warranty after a reasonable number of attempts, Wagner will provide, at our option, either a replacement for this product or a full refund of the purchase price of this product.

**These remedies are the sole and exclusive remedies available for breach of express and implied warranties.**

### **What is not covered by this warranty?**

This warranty does not cover any of the following damages or defects:

1. Damages or defects caused by use or installation of repair or replacement parts or accessories not manufactured by Wagner,
2. Damages or defects caused by repair performed by anyone other than a Wagner authorized service center, or
3. Damages or defects caused by or related to abrasion, corrosion, abuse, misuse, negligence, accident, normal wear, faulty installation or tampering in a manner which impairs normal operation.

### **Limitation of remedies:**

IN NO CASE SHALL WAGNER BE LIABLE FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES OR LOSS, INCLUDING TRANSPORTATION COSTS, WHETHER SUCH DAMAGES ARE BASED UPON A BREACH OF EXPRESS OR IMPLIED WARRANTIES, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT, OR ANY OTHER LEGAL THEORY.

### **Disclaimer of implied warranties:**

THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

### **No ability to transfer:**

This warranty is extended to the original purchaser only and is not transferable.

### **Your rights under state law:**

Some states do not allow limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitation and exclusion may not apply to you. This warranty gives you specific legal rights; you may also be entitled to other rights, which vary from state to state.

## 8.1 EU Declaration of conformity

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Wagner hereby declares that the unit described in these operating instructions has been designed and manufactured according to the provisions of EU Directives 98/37/EG, 94/9/EG, 73/23 EWG and 89/336 EWG.

The following **European standards** were applied:

|               |                   |              |
|---------------|-------------------|--------------|
| EN 12100-1/-2 | EN 50281-1-1/-1-2 | EN 61000-6-1 |
| EN 61000-6-2  | EN 61000-6-3      | EN 60204-1   |
| EN 50053-2    | EN 50050          | EN 50177     |

The following **German** standards and/or Guidelines were applied:

BGI 764

The product includes an **EU declaration of conformity**. This can be ordered again if necessary from your WAGNER dealer by giving details of the product and serial number involved.

The EU Declaration of conformity has the number **3304094**.







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