

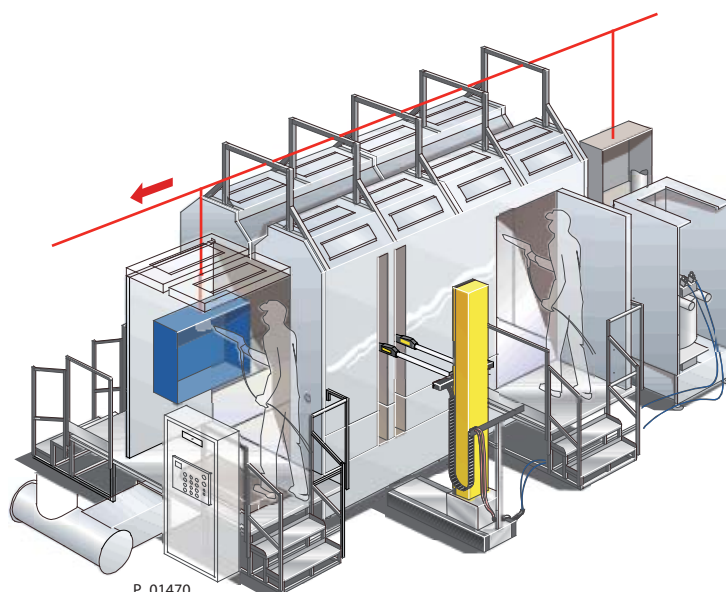


Translation of the original  
Operating manual

Superserie

## Plastic booth for fast booth cleaning

Version 08/2011





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# 1 ABOUT THESE INSTRUCTIONS

This operating manual contains information on the operation, repair and maintenance of the unit.

→ Always observe these instructions when operating the unit.

This equipment can be dangerous if it is not operated in accordance with this manual.

Compliance with these instructions constitutes an integral component of the warranty agreement.

## 1.1 LANGUAGES

The operating manual is available in the following languages:



Language:	Order No.	Language:	Order No.
German	2316827	English	2316829
French	---	Dutch	---
Italian	---	Spanish	---

## 1.2 WARNINGS, NOTES AND SYMBOLS IN THESE INSTRUCTIONS



Warning instructions in this manual point out particular dangers to users and equipment and state measures for avoiding the hazard.

These warning instructions fall into the following categories:



**Danger** - imminent danger. Non-observance will result in death, serious injury and serious material damage.

 SIHI_0100_GB	 <b>DANGER</b>
	<p><b>This line warns of the hazard!</b> Possible consequences of failing to observe the warning instructions. The signal word points out the hazard level.</p> <p>→ The measures for preventing the hazard and its consequences.</p>

**Warning** - possible danger. Non-observance can result in death, serious injury and serious material damage.

 SIHI_0103_GB	 <b>WARNING</b>
	<p><b>This line warns of the hazard!</b> Possible consequences of failing to observe the warning instructions. The signal word points out the hazard level.</p> <p>→ The measures for preventing the hazard and its consequences.</p>

**Caution** - a possibly hazardous situation. Non-observance can result in minor injury.

 SIHI_0101_GB	 <b>CAUTION</b>
	<p><b>This line warns of the hazard!</b> Possible consequences of failing to observe the warning instructions. The signal word points out the hazard level.</p> <p>→ The measures for preventing the hazard and its consequences.</p>

**Caution** - a possibly hazardous situation. Non-observance can cause material damage.

SIHI_0102_GB	<b>CAUTION</b>
	<p><b>This line warns of the hazard!</b> Possible consequences of failing to observe the warning instructions. The signal word points out the hazard level.</p> <p>→ The measures for preventing the hazard and its consequences.</p>

**Note** - provide information on particular characteristics and how to proceed.

## **2 GENERAL SAFETY INSTRUCTIONS**

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### **2.1 SAFETY INSTRUCTIONS FOR THE OPERATOR**

- Keep these operating instructions to hand near the unit at all times.
- Always follow local regulations concerning occupational safety and accident prevention.

#### **2.1.1 ELECTRICAL PLANT AND UNITS**

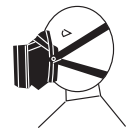
- To be provided in accordance with the local safety requirements with regard to the operating mode and ambient influences.
- May only be maintained by skilled electricians.
- Must be operated in accordance with the safety regulations and electrotechnical regulations.
- Must be repaired immediately in the event of problems.
- Must be put out of operation if they pose a hazard.
- Must be de-energized before work is commenced on active parts. Secure the system against being switched back on without authorisation. Inform staff about planned work, observe electrical safety regulations.
- To protect the electrical components, lay all of the various elements to a collective grounding point.  
It is thus absolutely necessary to attach the device correctly to a grounded voltage supply.
- With open housings, there is a danger from line voltage. Repairs and maintenance may only be carried out by skilled personnel.
- Keep liquids away from the electrical components.

#### **2.1.2 PERSONNEL QUALIFICATIONS**

- Ensure that the unit is operated and repaired only by trained persons.
- The operating personnel must be trained before operating the system using these manual.

### 2.1.3 A SAFE WORK ENVIRONMENT

- Ensure that the floor of the working area is anti-static (measurement in accordance with EN 1081).
- Ensure that all persons within the working area wear anti-static shoes.
- Ensure that gloves that are being worn, are made of conductive material.
- The powder release must be electronically interlocked with the powder spray system exhaust equipment.
- Excess coating material (overspray) must be collected up safely.
- Ensure that there are no ignition sources such as naked flame, glowing wires or hot surfaces in the vicinity. Do not smoke.
- Maintain sufficient quantities of suitable fire extinguishers and ensure that they are serviceable.
- 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 10g/m<sup>3</sup>.



If the powder concentration exceeds the permissible values when the total powder discharge is high, the user must contact the powder manufacturer. In this case, when the LEL value is determined accurately, generally the permissible maximum powder concentration is significantly higher.

The following table shows the recommended values:

		Allowed powder/air concentration	Max. total powder output quantity [g/h]	Max. total powder output quantity [g/min]	Output per gun 150g/min	Output per gun 300g/min
12000 m <sup>3</sup> /h	unchecked powder	10g/m <sup>3</sup>	120000	2000	max. 13 guns	max. 6 guns
	checked powder e.g. LEL ≤ 40 g/m <sup>3</sup>	20g/m <sup>3</sup>	240000	4000	max. 26 guns	max. 13 guns
16000 m <sup>3</sup> /h	unchecked powder	10g/m <sup>3</sup>	160000	2666	max. 17 guns	max. 8 guns
	checked powder e.g. LEL ≤ 40g/m <sup>3</sup>	20g/m <sup>3</sup>	320000	5333	max. 35 guns	max. 17 guns
20000 m <sup>3</sup> /h	unchecked powder	10g/m <sup>3</sup>	200000	3333	max. 22 guns	max. 11 guns
	checked powder e.g. LEL ≤ 40g/m <sup>3</sup>	20g/m <sup>3</sup>	400000	6666	max. 44 guns	max. 22 guns

		Allowed powder/air concentration	Max. total powder output quantity [g/h]	Max. total powder output quantity [g/min]	Output per gun 150g/min	Output per gun 300g/min
24000 m <sup>3</sup> /h	unchecked powder	10g/m <sup>3</sup>	240000	4000	max. 26 guns	max. 13 guns
	checked powder e.g. LEL ≤ 40g/m <sup>3</sup>	20g/m <sup>3</sup>	480000	8000	max. 53 guns	max. 26 guns
28000 m <sup>3</sup> /h	unchecked powder	10g/m <sup>3</sup>	280000	4666	max. 31 guns	max. 15 guns
	checked powder e.g. LEL ≤ 40g/m <sup>3</sup>	20g/m <sup>3</sup>	560000	9333	max. 62 guns	max. 31 guns

For guaranteed LEL values higher than 40 g/m<sup>3</sup>, the permissible number of guns increases accordingly.

## 2.2 SAFETY INSTRUCTIONS FOR STAFF

- Always follow the information in these instructions, particularly the general safety instructions and the warning instructions.
- Always follow local regulations concerning occupational safety and accident prevention.
- 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!



### 2.2.1 SAFE HANDLING OF WAGNER POWDER SPRAY UNITS

- Never point the powder spray gun at people.
- Before all work on the unit, in the event of work interruptions and functional faults:
  - Switch off the energy/compressed air supply.
  - Secure the powder spray gun against actuation.
  - Relieve the pressure from the powder spray gun and unit.
  - By functional faults: Identify and correct the problem, proceed as described in chap. "Trouble shooting".





### 2.2.2 EARTH THE UNIT

The electrostatic charge may, in certain cases, give rise to electrostatic charges on the device. These can involve with unloading transmitting or flame formation.

- Ensure that the device is grounded before each coating process.
- Earth the workpieces being painted.
- Ensure that all persons inside the working area are earthed, e.g. that they are wearing antistatic shoes.
- Grounding cables must be checked regularly to ensure that they are serviceable (see EN 60204).



### 2.2.3 MATERIAL HOSES

- Only use original Wagner powder hose.



### 2.2.4 CLEANING

- De-energize the unit electrically.
- Disconnect the pneumatic supply line.
- Relieve the pressure from the unit.
- Secure the control unit against being switched back on without authorisation.
- Only mobile industrial vacuum cleaners of design 1 (see EN 60335-2) may be used for getting rid of dust build-ups.

### 2.2.5 HANDLING POWDER PAINTS

- Take note of the processing regulations laid down by the manufacturer of the powder paint being used, when preparing or processing the powder.
- Take note of the manufacturer's advice and the relevant environmental protection regulations when disposing of powder paints.
- Implement the prescribed safety measures, in particular the wearing of safety glasses and safety clothing as well as the use of protective hand cream.
- Use dust masks or breathing apparatus.
- To ensure sufficient protection of health and the environment, only operate the device in a powder booth or at a spray wall with activated ventilation (exhaust air).



## 2.3 USING IN ACCORDANCE WITH THE INSTRUCTIONS

WAGNER accepts no liability for any damage arising from incorrect use.

- Use the unit only to work with the materials recommended by WAGNER.
- Operate the unit only as an entire unit.
- Do not deactivate safety equipment.
- Use only WAGNER original spare parts and accessories.



## 2.4 FOR USE IN POTENTIALLY EXPLOSIVE AREAS

### 2.4.1 USING IN ACCORDANCE WITH THE INSTRUCTIONS

The device is suitable for processing powder-type materials according to the explosion group categorization.

## 2.5 SAFETY FUNCTIONS

The powder coating booth has the following safety devices:

- Lock for the booth control with the exhaust system.
- Option mechanical changeover spray wall:
  - safe retraction of the stop bolts upon actuation of the change trigger.
- Locking of the moving device with open safety grille.
- Locking of the conveyor belt when the workpiece inlet is closed.
- Connection to the fire alarm system.

**2.6 SAFETY FEATURES**

Plates bearing information for the user have been attached to the work openings of the powder coating booth.

The plate size corresponds to the standard category Ø 100 mm; 3.94 inches.

The label plates, which must be attached, are shown below:



High-voltage!  
In the control cabinet:  
(25 mm; 0.98 inches)  
voltage before main switch



Forbidden for unauthorized persons!



Explosive atmosphere!



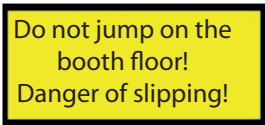
Forbidden for persons with a cardiac pacemaker!



Risk of tripping!



Fire, open light and smoking prohibited!



Wear electrostatically conductive footwear!



Wear respirator!



Follow the instructions in the operating manual!

## **3 WARRANTY AND CONFORMITY DECLARATIONS**

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### **3.1 IMPORTANT NOTES ON PRODUCT LIABILITY**

As a result of an EC regulation, effective as from January 1, 1990, the manufacturer shall only be liable for his product if all parts come from him or are approved by him, and if the devices are properly fitted, operated and maintained.

If other makes of accessory and spare parts are used, the manufacturer's liability could be fully or partially null and void.

The usage of original WAGNER accessories and spare parts guarantees that all safety regulations are observed.

### **3.2 WARRANTY CLAIM**

This equipment is covered by the following manufacturing warranty.

We will at our discretion repair or replace free of charge all parts which within 24 months in single-shift, 12 months in 2-shift or 6 months in 3-shift operation from date of receipt by the Purchaser are found to be wholly or substantially unusable due to causes prior to the sale, in particular faulty design, defective materials or poor workmanship.

The terms of the warranty are met at our discretion by the repair or replacement of the unit or parts thereof. The resulting costs, in particular shipping charges, road tolls, labour and material costs will be borne by us except where these costs are increased due to the subsequent shipment of the unit to a location other than the address of the purchaser.

This warranty does not cover damage caused by:

Unsuitable or improper use, faulty installation or commissioning by the purchaser or a third party, normal wear, negligent handling, defective maintenance, unsuitable coating products, substitute materials and the action of chemical, electrochemical or electrical agents, except when the damage is attributable to us.

Components not manufactured by Wagner are subject to the warranty terms of the original maker.

The replacement of a part does not extend the warranty period of the unit.

The unit should be inspected immediately upon receipt.

To avoid loss warranty, any apparent defect should be notified to us or the dealer in writing within 14 days from date of sale of the unit.

The right to commission warranty services to a third party is reserved.

Warranty claims are subject to proof of purchase by submitting an invoice or delivery note. If an inspection finds damage not covered by the present warranty, the repair will be carried out at the expense of the purchaser.

Note that this warranty does not in any way restrict legally entitled claims or those contractually agreed to in our general terms and conditions.

J. Wagner AG

### 3.3 CE-CONFORMITY

Herewith we declare that the supplied version of

- Superserie plastic booth

complies with the following guidelines:

- 2006/42/EG (Machine guideline)
- 94/9 EG

Applied standards, in particular:

- DIN EN ISO 12100-1:2004
- DIN EN ISO 12100-2:2004
- DIN EN 61241-0:2007
- DIN EN 61241-1:2005
- DIN EN 61241-14:2005
- EN 14121:2007
- DIN EN 12981:2009
- EN 60204-1:2009
- EN 13463-1:2009
- EN 13463-5:2004

Marking:



#### **CE Certificate of Conformity**

The certificate is enclosed with this product. The certificate of conformity can be reordered from your WAGNER representative, quoting the product and serial number.

#### **Part number:**

Superserie plastic booth 2316837

## 4 GENERAL DESCRIPTION

### 4.1 SCOPE OF DELIVERY

Quantity	Order No.	Designation
1		Superserie booth
The standard equipment includes:		
1	2316837	Declaration of Conformity
1	2316827	Operating manual German
1	see chapter1.1	Operating manual in the local language

### 4.2 TECHNICAL DATA

<b>Dimensions:</b>	
Inner width *	1800/2000 mm; 5.91/6.56 ft
External width *	2130/2330 mm; 6.99/7.64 ft
External width with platforms *	max. 4500 mm; 14.76 ft
Inner length *	2500 to 7500 mm; 8.20 to 24.60 ft
External length *	2700 to 11000 mm; 8.86 to 36.09 ft
Inner height over the hall floor *	2850 to 3920 mm; 9.35 to 12.86 ft
Distance between gun slits (standard)	300 mm; 11.81 inches
Width of the gun slit (standard)	100 mm; 3.94 inches
Distance of the workpiece from the hall floor	900 to 1180 mm; 2.95 to 3.87 ft
Workpiece heights (standard) *	1400 to 2200 mm; 4.59 ft to 7.22 ft
Workpiece widths (standard) *	up to 1000 mm; 3.28 ft
Weight (project-specific)	min. 1700 kg; 133.85 quarter

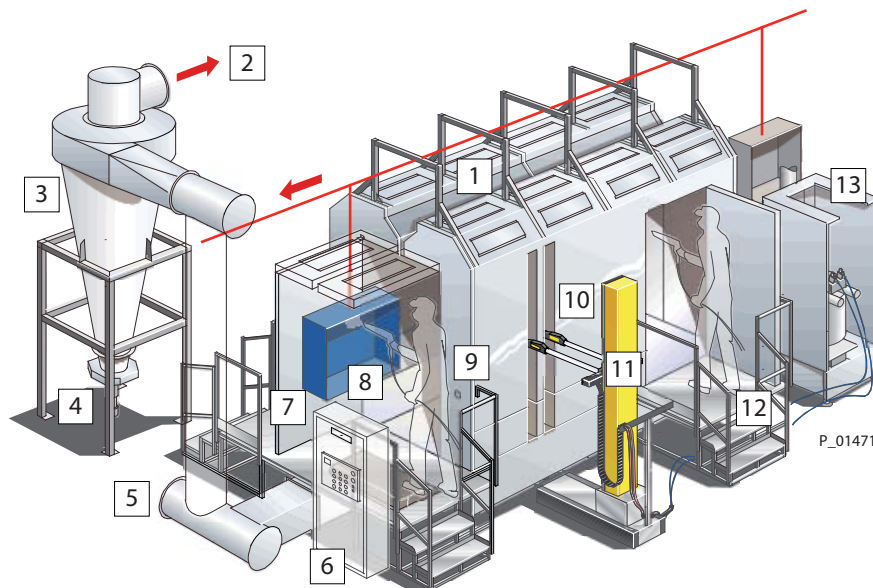
<b>Electrical:</b>	
Electrical connection	Three-phase current connection 220-240 / 380-420 V at 50 Hz (as per IEC 38)
Illumination **	Booth max. 20 x 72 W 1 manual coating stand 2 x 72 W 2 manual coating stands 4 x 72 W
Application	7 to 10 kW
System ground (band or rod grounding)	acc. VDE 0141 low impedance with NYAF > 16 mm <sup>2</sup>

<b>Pneumatic:</b>	
Compressed air connection	6-8 bar; 0.6-0.8 MPa; 87-116 psi
Compressed air quality	class 3.5.2 as per ISO 8573-1
Suction capacity *	12000 to 24000 m <sup>3</sup> /h; 15692.60 to 31385.19 cy
Air throughput of floor cleaning	dependent on length and setting up to 10 Nm <sup>3</sup> /h; 13.07cy with a booth inner length of 2500 mm; 8.20 ft, typically 5 Nm <sup>3</sup> /h; 6.54 cy
Air throughput of gun cleaning	not generally assignable, given for projects on layout

\* See the system layout for booth dimensions.

\*\*system-specific

### 4.3 GENERAL DESCRIPTION



#### Installation example

- |                                |   |
|--------------------------------|---|
| 1 Booth                        | 8 External manual coating point           |
| 2 to the final filter device   | 9 Parking position for manual gun         |
| 3 Cyclone unit                 | 10 Powder spray guns with blow-off device |
| 4 Recovery                     | 11 Reciprocator                           |
| 5 Self-cleaning exhaust system | 12 Integrated manual coating point        |
| 6 Control cabinet              | 13 Powder center                          |
| 7 Changeable drop wall         |   |

The Superserie plastic booth is designed for a quick manual color change. It is suitable for automatic coating in multi-color operation, for coating operations with small and large piece numbers.

The booth is designed in different sizes with suitable apertures for coating different parts. The spray guns are supplied directly from a powder container or from a powder feed center.

Insufficiently coated and/or difficult parts of the workpiece are recoated at this manual coating point. For this, the booth can be equipped with integrated and exterior manual coating points and a drop wall.

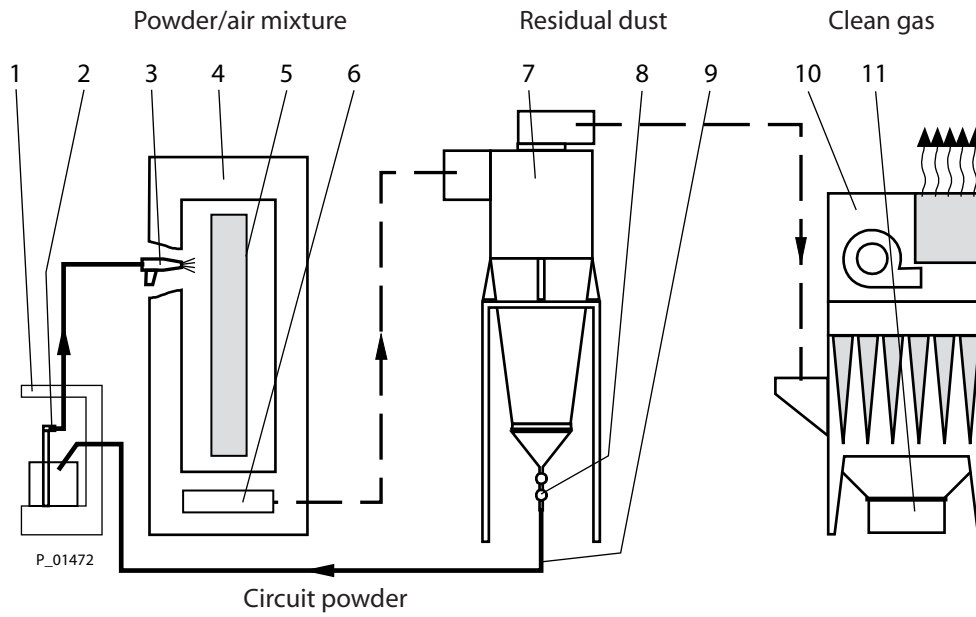
If the booth does not have any exterior manual coating point, an aperture on the front side is closed with a sliding door.

The booth walls and doors are manufactured from a special non-conducting plastic material.

The powder spray booth, with its integrated powder recovery system, meets the regulations for electrostatic powder coating and recovery and can be used for continuous operation.



**Operating principle:**



- |                        |                              |
|------------------------|------------------------------|
| 1 Powder center        | 7 Cyclone unit               |
| 2 Powder injector      | 8 Peristaltic powder pump    |
| 3 Powder spray gun     | 9 Powder conveyor hose       |
| 4 Booth                | 10 Final filter device       |
| 5 Workpiece            | 11 Residual powder collector |
| 6 Booth exhaust system |                              |



P\_01473

sequential pneumatic floor  
cleaning

Exhaust system

A fixed, PVC construction serves as the floor. Powder is discharged automatically and continuously with blast rods in the booth. The exhaust slits for booth air are located on the sides of the booth floor.

The powder recovered in the cyclone unit 7 is conveyed back to the powder feed center 1. This closes the powder circuit. A small part of the fine particle fraction penetrates through to the final filter device 10/11 and is captured there.

## 5 ASSEMBLY

	<b>WARNING</b>
	<p><b>Incorrect assembly/ installation!</b> Risk of injury and damage to the equipment.</p> <p>→ Installation may only be performed by trained and authorized persons. We recommend that installation work is carried out by WAGNER personnel.</p>

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### 5.1 REQUIREMENTS FOR THE INSTALLATION SITE

The plastic booth may not be installed in rooms with high temperatures. Powders with a gelling tendency should be processed at low temperatures. If low temperature curing powders are used the ambient temperature has to be lower than 35°C; 95°F. Please observe the specifications of the powder manufacture.

A minimum distance of 1.00m; 3.28 ft must exist between the final filter unit blowout aperture and the hall ceiling.

The free working area at the work place should be at least 1.5m<sup>2</sup>; 16.146 sf and at no place less than 1.00 m; 3.28 ft wide.

Temperature range	+5 - +40°C; +41 - +104°F
Allowed part surface temperature	+5 - +50°C; +41 - +122°F
Allowed plastic surface temperature	+5 - +40°C; +41 - +104°F
Air currents near the booth	< 0.1 m/sec
Relative humidity	< 75%

**5.2 TRANSPORT OF THE BOOTH**

	<b>WARNING</b>
	<p><b>Parts have high weights and centres of gravity!</b> Risk of injury and damage to equipment.</p> <ul style="list-style-type: none"> <li>→ Only use appropriate lifting tackle (crane, fork lift) for assembly.</li> <li>→ Secure the parts against tipping during transport.</li> <li>→ Cordon off assembly area to keep out unauthorised persons.</li> </ul>

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The powder coating booth is delivered disassembled to the site of installation.

Final assembly is performed on-site.

Normally, the delivery consists of a pre-mounted basic frame and pallets with packed elements.

The pallets must be moved with suitable industrial trucks. The basic frame has support points for forklift arms. They can be used for transport on the floor and for attaching ropes. The pallets must be moved with suitable industrial trucks. The basic frame has support points for forklift arms. They can be used for transport on the floor and for attaching ropes. The arms of the reciprocators must be set precisely to the existing mountings, otherwise the devices may be damaged.

To transport the parts to the place of installation, there must be an opening with a width of minimum 2500 mm; 8.20 ft. There must also be sufficient space in front of and behind the opening to maneuver parts with a length of up to 3500 mm, 11.48 ft. This length is system-specific!

The order-and project-specific connection and installation plans are enclosed with the system documentation. As additional information for powder coating an area plan has been created.

The system is assembled according to special assembly and service instructions.

During all transport, handling and assembly activities follow the safety instructions and the related safety measures stipulated (safety clothing, aids, etc.) are to be observed.

Transport conditions:



max. air temperature	+5 - +40°C; +41 - +104°F
Allowed plastic surface temperature	+5 - +40°C; +41 - +104°F
Relative humidity	< 75%

### 5.3 INSTALLATION OF INTERFACES

The booth has the following interfaces for integration into a powder coating system:

Pos.	Description	Location	Function	Interface
1	Installation	Underside of booth base, manual coating device platform	Levelling of booth. Levelling of platform.	Fixed floor with bearing capacity of 20 kg/cm <sup>2</sup> .
2	Compressed air connection	On bottom in booth base	Pneumatic floor cleaning is supplied on site with onsite pressure reducer.	Thread G1/2" Pressure 6-8 bar: 0.6-0.8 MPa; 87-116 psi.
3	Distribution box – valves	On bottom in booth base	Control cable connection of on site control for 3 floor cleaning solenoid valves.	24 VDC; valves NC.
4	Illumination for booth interior	Roof area for booth interior	Illumination for booth and work-stations.	Housing for lights must be wired directly to the on site power supply.
5	Piping flange	On side on suction tube collector	On site piping connection to vacuum generation system.	Flange NW 500mm; Ø external 587 mm, Ø hole circle 595 mm, Ø hole 12 mm.
6	Illumination for manual coating point	Manual coating point	If a manual coating station is built without a second roof, sufficient illumination should be provided on site.	Housing for lights must be wired directly to the on site power supply.
7	Fire detection	Booth roof, area next to lights		
10	Grounding	Base and manual coating device platform	Compliance with safety specifications.	On site ground rail.

#### 5.4 CONTROL AND SETTINGS OF THE SYSTEM

	 <b>WARNING</b>
	<p><b>Danger from electric current!</b> Danger to life from electric shock.</p> <ul style="list-style-type: none"> <li>→ The system may only be connected by skilled electricians.</li> <li>→ Must be operated in accordance with the safety-, fire- and electrotechnical regulations.</li> <li>→ Must be de-energized before work is commenced on active parts.</li> </ul>

For a detailed description of the control, see the special, enclosed operating manual of the control.

The powder coating booth offers various setting possibilities on the booth control cabinet as well as on the devices attached to the booth. These setting possibilities are described in detail in the corresponding, enclosed operating manuals.

**The air pressure for gun blow-off may not exceed 2.5 bar; 0.25 MPa; 36.26 psi in order to keep the noise within the prescribed limits.**

## 5.5 GROUNDING

The powder coating system must be perfectly grounded for safety reasons.

Wagner recommends the use of a copper cable of at least 16 mm<sup>2</sup> with sufficient mechanical resistance.

It is important for systems safety and to achieve an optimum coating, that all system components such as workpieces, conveyors, color supply, control unit and booth or spray stand are perfectly grounded.

### A poorly grounded workpiece causes:

- dangerous electric charging of the workpiece
- very bad wrap around
- uneven coating
- backspraying to the spray gun, i.e. contamination

### Prerequisites for perfect grounding and coating are:

- Conducting suspension for the workpiece that is to be coated.
- Grounding of the powder coating booth, transport and suspension equipment to be provided on site, in accordance with the corresponding Operating manuals or the definitions laid down by the manufacturer.
- Regular cleaning of hangers from powder residues.
- Grounding resistance for the workpiece of a maximum of 1 MΩ (mega ohm).
- Grounding cable connected to the controller module or control cabinet.

**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.**



### DANGER

#### Discharge of electrostatically charged components!

Explosion hazard from electrostatic sparks or flames.

Before starting all maintenance or repair work:

- Before entering the inner part of the booth, the operator must wear the supplied grounding strap on the wrist and ensure that the grounding cable is properly connected to the grounding point of the booth and the grounding strap!

	 <b>DANGER</b>
	<p><b>High-voltage field!</b> Danger to life from malfunctioning heart pacemakers.</p> <p>→ Ensure that under no circumstances persons with pacemakers should be in the spray area.</p>



## 5.6 FIRE DETECTION AND FIRE EXTINGUISHING MEASURES



The booth must be prepared on site for the installation of flame detectors. At fire detection a quenching gas is released into the booth to suffocate the fire. See operating manual of the fire extinguishing system.

The delivery and installation of fire extinguishing system is the responsibility of the operator.



## 6 INITIAL START UP

	 <b>WARNING</b>
	<p><b>Incorrect start-up!</b> Risk of injury and damage to the equipment.</p> <p>→ Trained and authorized personnel may only carry out commissioning. We recommend that you let the commissioning work be carried out by Wagner personnel.</p>

	 <b>WARNING</b>
	<p><b>Incorrect installation /operation!</b> Risk of injury and damage to the equipment.</p> <p>→ Before initial start up the entire system is to be checked in accordance with the valid lawful regulations by a “competent person” or an approved supervisory body!</p> <p>→ When putting into operation and for all work, read and follow the operating instructions and safety regulations for the additionally required system components.</p>

<h3>CAUTION</h3>
<p>Before initial start up, the powder coating booth must be cleaned thoroughly. This must be done to remove any dirt and production/assembly residues.</p> <p>During the cleaning procedure, it is also very important to remove electrostatic charges from inner surfaces of the powder coating booth!</p>

### 6.1 TESTING BEFORE INITIAL START UP

The function of the on site safety shutdown for the air interlock should be tested. The VDMA standard sheet “Procedural guidelines for testing painting systems” contains information on this.



### 6.2 DOCUMENTATION OF SETTINGS AND MEASUREMENTS

Before initial start up, the booth’s settings must be recorded in a report as evidence of correct installation.

## 7 OPERATION

Compliance with all valid national health and safety specifications and the system operation, maintenance and repair details provided in this operating manual forms part of safe system operation.

### 7.1 OPERATING PERSONNEL

	 <b>WARNING</b>
	<p><b>Incorrect operation!</b> Personal injury and equipment damage.</p> <p>→ Operating staff must be technically suitable and must have been trained in the system.</p>

### 7.2 OPERATING PERSONNEL WORKSTATIONS

Personnel may only remain in the system at points other than their workstations for particular tasks (e.g. maintenance, servicing, repairs).


Workstation	Manual coating
Location	External or internal manual coating station
Task	Coating workpieces
Residual risk	1 Slipping at dirty workstation 2 Inhaling powder paint 3 Noise pollution
Safety measures	1 Clean environment regularly 2 Wear respirator 3 Wear ear protection

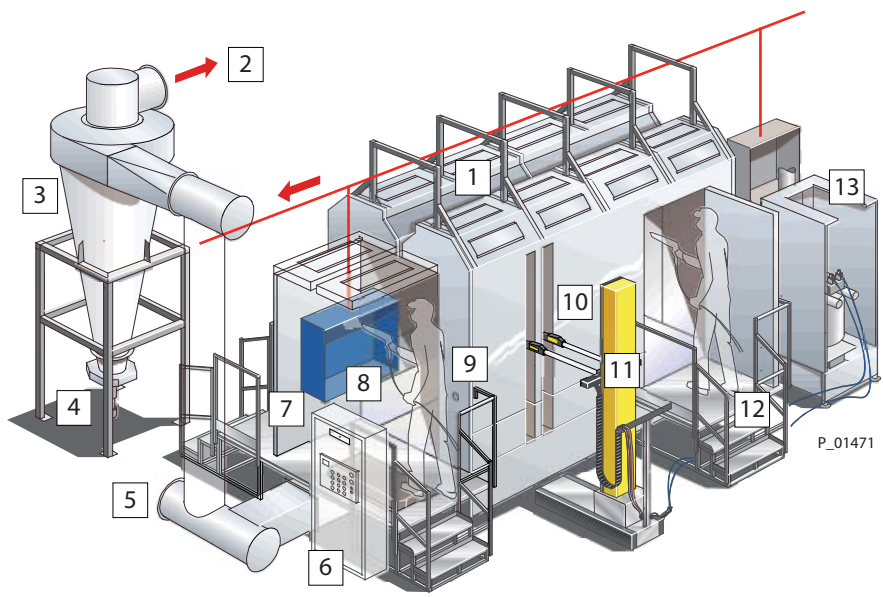
**7.3 OPERATING MODES AND PROCEDURES**

**CAUTION**

It is essential that the inside walls of the booth are cleaned before every start or after every long stationary period in order to obtain optimum coating results!

**7.3.1 SWITCHING ON THE SYSTEM**

	<p><b>! WARNING</b></p> <p><b>Risk of jam!</b> Risk of injury and damage to the equipment.</p> <p>→ To avoid collisions and hazards, the operator switching the system on must ensure that both cleaning doors are opened during coating and/or transport operations.</p>
---	---



**Procedure:**

1. Activate exhaust system 2.
2. Wait until the start-up procedure is completed and the signal lamp "Booth OK" lights up on the control cabinet 6.
3. Switch on powder center 13 on the main switch.
4. Check if peristaltic powder conveyor 4 is turned on.
5. Take the powder center according to the operating manual of the powder center into operation.
6. Switch on screen vibrator 4 on the cyclone 3.
7. Switch on control system on the control cabinet 6. If an error is displayed, remedy and acknowledge.
8. Switch on reciprocators 11.
9. Switch on high-voltage on the control cabinet 6.
10. The floor cleaning is automatically activated when the switch is in the switch-on position.
11. Select manual mode on the control cabinet 6.
12. Switch on spray guns 10 and check their function.
13. Leave manual mode an switch to "Auto".



**7.3.2 MANUAL COATING**

The manual coating point allows the operator to manually correct or complete the coating of workpieces before or after automatic coating.

These booths can be interpreted as pure manual coating booths.

Integrated manual coating station:

- The person carrying out manual coating stands on a platform outside the booth.
- For manual coating, he/she must move the gun through the open door in the booth wall at the correct distance with regard to the workpiece (see operating manual of the gun).

	 <b>WARNING</b>
	<p><b>Risk of jam!</b> Risk of injury and damage to the equipment.</p> <p>→ Do not inflect into the booth! Use the extension if necessary!</p>

External manual coating station:

- The person carrying out manual coating stands on a platform outside the booth and has direct access to the workpiece.
- For manual coating, he/she must move the gun at the correct distance with regard to the workpiece (see operating manual of the gun).
- The spray gun must be chosen so that no powder gets into the environment.

The booth should be entered with the access points provided for this purpose. If this access point is the manual coating point, powder must be removed from the manual coating platform and the booth floor before entering the booth.

	<b>DANGER</b>
	<p><b>Electrostatic charge!</b> Explosion hazard from electrostatic sparks or flames.</p> <p>→ Before entering the inner part of the booth, the operator must wear the supplied grounding strap on the wrist.</p>

	<b>WARNING</b>
	<p><b>Risk of jam!</b> Risk of injury and damage to the equipment.</p> <p>→ Before entering the booth, secure it against start-up unintentionally!</p>



	<b>WARNING</b>
	<p><b>Slippery booth floor!</b> Danger of fall injuries.</p> <p>→ Before entering the booth, blow off the powder from the booth floor.</p> <p>→ Do not jump on the booth floor.</p>

### 7.3.3 SWITCHING OFF THE PLANT WITHOUT CLEANING

#### Procedure:

1. Select manual mode on the powder center 13.
2. Switch off peristaltic powder conveyor 4.
3. Switch off powder center 13 according to the operating manual of the powder center.
4. Switch off final filter system 2. The screen vibrator and all high-voltage functions are turned off.

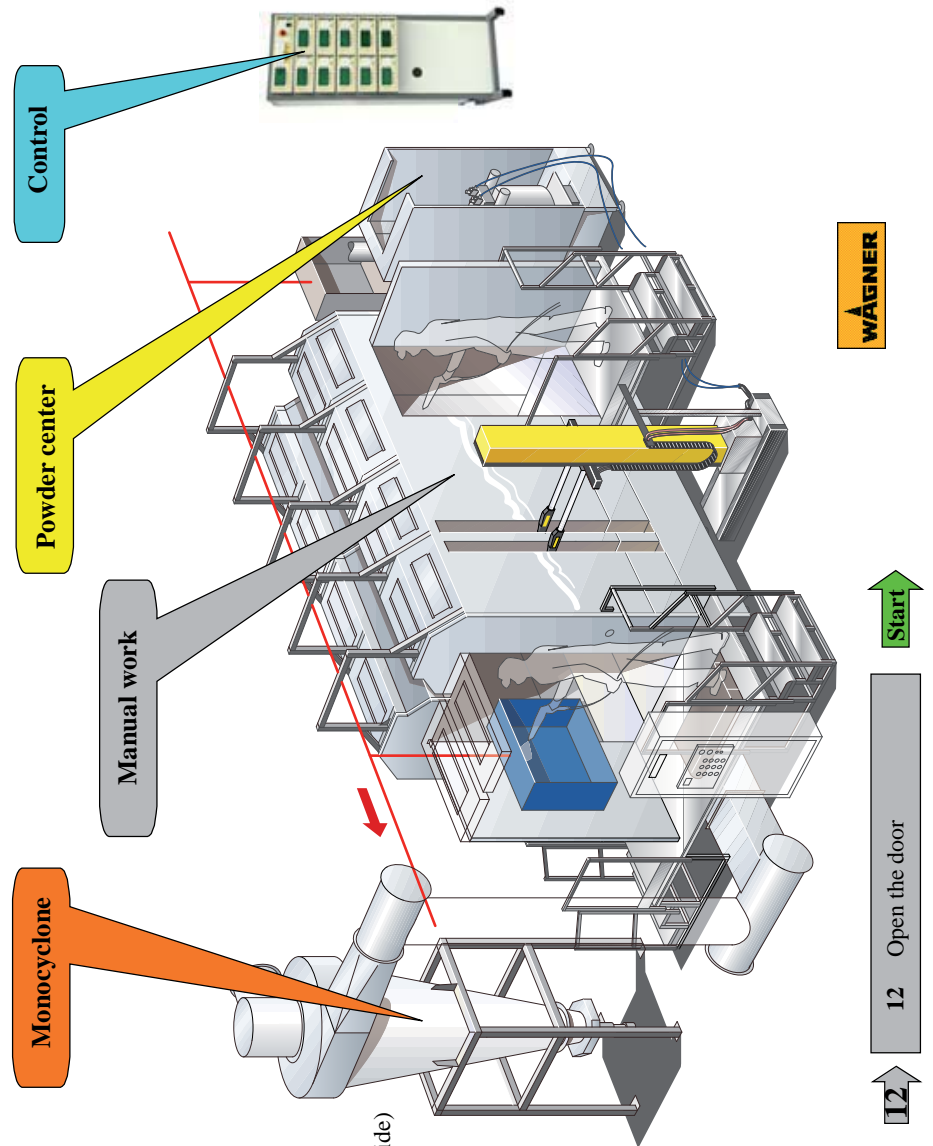
### 7.4 PERFORMING A COLOR CHANGE

	 <b>WARNING</b>
	<p><b>Dust development!</b>  Risk of poisoning.  Danger due to escaping dust, contamination of device and device components.</p> <p>→ During every color change, the suction system of the booth and the filter cleaning system must remain activated!</p>

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In the case of a colour change, powder residues must be thoroughly removed from all the powder-conveying parts throughout the complete coating system. Depending on the nature of the powder center results in a specific cleaning process that can be automated to varying degrees.

The following diagram provides an overview of the cleaning steps in a conventional powder center, such as comfort powder center.



- ↑ 0

0.1 Close doors of the integrated manual coating place
- ↑ 1

0.2 Manual gun in the tubular holder
- ↑ 2

1 Exhaust system UP
- ↑ 2

2.1 Guns OFF
- ↑ 2

2.2 Reciprocators OFF
- ↑ 3

3.1 Remove the container
- ↑ 3

3.2 Exhaust system DOWN
- ↑ 3

3.3 Cleaning of hoses ON
- ↑ 4

4 Blow off the guns ON
- ↑ 5

5 Platform, door, end wall blow out opposite front (from outside)
- ↑ 6

6 Close the door
- ↑ 7

7.1 Blow off inner wall (from outside, opposite walls)
- ↑ 7

7.2 Insert sponge for the belt (if available)
- ↑ 8

8.1 Cyclone cone DOWN
- ↑ 8

8.2 Swivel out the screen
- ↑ 8

8.3 Blow off the screen
- ↑ 9

9.1 Peristaltic conveyor OFF
- ↑ 9

9.2 Open peristaltic conveyor
- ↑ 9

9.3 Cleaning peristaltic conveyor ON  
\* Caution: screen to the outside
- ↑ 10

10.1 Blow out cone
- ↑ 10

10.2 Swivel in the screen
- ↑ 10

10.3 Cyclone cone UP
- ↑ 11

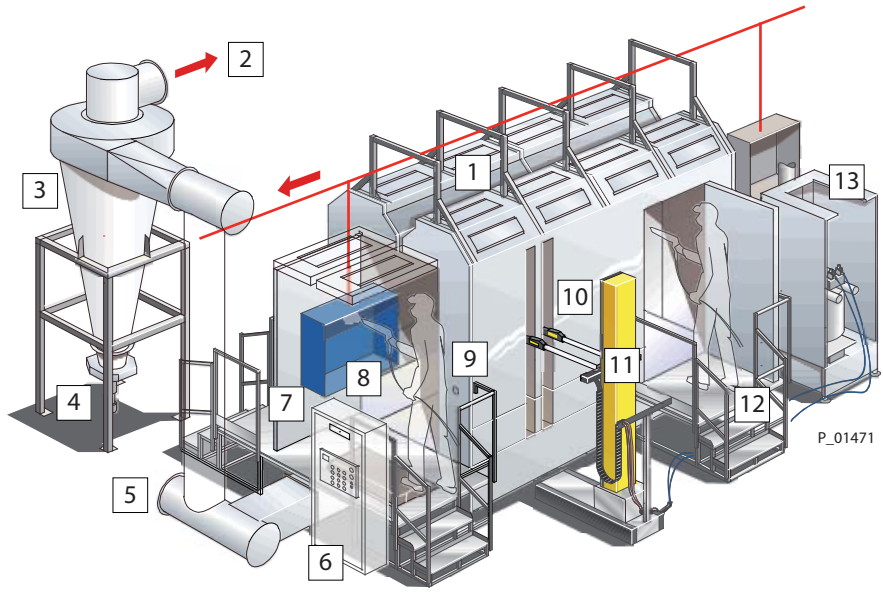
11.1 Feed unit UP
- ↑ 11

11.2 New container
- ↑ 11

11.3 Feed unit DOWN
- ↑ 11

11.4 Peristaltic conveyor ON

Two people are required for a quick color change.  
The numbers indicate the order of the activities of both people.



	<b>Operator 1</b>	<b>Operator 2</b>
<b>1</b>	<p><b>Control cabinet high-voltage 6</b></p> <ul style="list-style-type: none"> <li>● Switch off spray guns 10 and reciprocators 11.</li> <li>● Switch off the high-voltage and secure against unauthorized reactivation.</li> <li>● Switch from "Manual-Auto" to "Manual".</li> <li>● Switch off floor blow-off of booth.</li> </ul>	<p><b>Powder center 13</b></p> <ul style="list-style-type: none"> <li>● Switch off peristaltic powder conveyor.</li> <li>● Switch powder feed center to "Manual".</li> <li>● Position an empty container on the circuit powder vibrator table and hang the hose of the peristaltic conveyor in the container.</li> <li>● Switch on again peristaltic powder conveyor.</li> </ul>
<b>2</b>	<p><b>Manual coating points 8 and 12</b></p> <ul style="list-style-type: none"> <li>● Vacuum manual coating points 8 and 12 or blow fresh powder in the booth (floor, wall and ceiling).</li> <li>● From the exterior manual coating point 8, clean the spray wall and the roof from top to bottom and from the outside to the inside.</li> <li>● Clean the floor from the outside to the inside with the jet blast unit.</li> <li>● Clean the rear wall and the floor with a mop, depending on the degree of dirt.</li> </ul>	<p><b>Powder center 13</b></p> <ul style="list-style-type: none"> <li>● Move powder center suction system downwards.</li> <li>● Switch on the injector cleaning system on the powder center.</li> </ul>







	<b>Operator 1</b>	<b>Operator 2</b>
<b>3</b>	<p><b>Booth</b></p> <ul style="list-style-type: none"> <li>● Close spray wall or door on the exhaust side.</li> <li>● Clean the reciprocators 11 and spray guns 10 roughly from outside with blasting lances.</li> <li>● Take the nozzle systems (deflector cone or fan spray nozzle) from the spray guns and transfer to the operator 2.</li> </ul>	<p><b>Powder center 13</b></p> <ul style="list-style-type: none"> <li>● Clean the powder center roughly with a blasting pistol.</li> <li>● Blow out the nozzle systems received from operator 1 until clean.</li> </ul>
<b>4</b>	<p><b>Control cabinet high-voltage 6</b></p> <ul style="list-style-type: none"> <li>● Switch on the automatic spray gun blasting equipment:                             <ul style="list-style-type: none"> <li>- The spray guns 10 run out off the booth during switching on.</li> </ul> </li> </ul>	<p><b>Powder center 13</b></p> <ul style="list-style-type: none"> <li>● Move powder center suction system upwards.</li> </ul>
<b>5</b>	<p><b>Booth</b></p> <p>Caution: Before entering the booth, the operator must wear the supplied grounding strap on the wrist and ensure that the grounding cable is properly connected to the grounding point of the booth and the grounding strap!</p> <ul style="list-style-type: none"> <li>● Clean the interior of the booth from top to bottom with the blasting lance. Starting from the inlet side of the booth work ahead towards exhaust side.</li> <li>● Clean the booth doors from the inside.</li> <li>● Clean the booth interior again with a mop, depending on the degree of dirt.</li> </ul>	<ul style="list-style-type: none"> <li>● Clean entire interior of powder center with a blasting pistol.</li> <li>● Dismantle the powder injector nozzles on the suction system and blow out both.</li> <li>● Fine clean the fluidizing equipment of the suction system and the circuit powder fitting.</li> <li>● Refit the powder injectors.</li> <li>● Switch off the peristaltic powder conveyor again.</li> <li>● Insert and secure the hose of the peristaltic powder conveyor in the blow-out device.</li> </ul>
<b>6</b>	<ul style="list-style-type: none"> <li>● Powder deposits can form on the exterior when cleaning the booth from the inside out. Subsequent fine cleaning of the booth exterior should therefore be carried out with the blasting lance.</li> </ul> <p><b>Control cabinet high-voltage 6/booth</b></p> <ul style="list-style-type: none"> <li>● Run the spray guns 10 into the booth.</li> <li>● Mount the nozzle systems on the spray guns.</li> </ul>	



	<b>Operator 1</b>	<b>Operator 2</b>
<b>7</b>	<p><b>Control cabinet final filter</b></p> <ul style="list-style-type: none"> <li>● Switch off screen vibrator.</li> <li>● Lower the funnel 4.</li> <li>● Swivel the screen out of the cyclone 3 and blow out the cyclone from bottom to top.</li> <li>● Blow out the funnel and leave in the lowered position.</li> <li>● Close the cyclone 3.</li> </ul>	<ul style="list-style-type: none"> <li>● Switch on the flushing of peristaltic powder conveyor hose.</li> <li>● Remove the container from the fresh powder vibrator table.</li> <li>● Blow out residual dust.</li> </ul> <p><b>Booth</b></p> <ul style="list-style-type: none"> <li>● Fine clean the manual spray guns.</li> <li>● Blow out the suction cover and maintenance hatch.</li> <li>● Insert new color container.</li> </ul>
<b>8</b>	<p><b>Start up with new color:</b>                      Caution!                      The peristaltic conveyor should only be turned on after a coating operation of approx. 3 to 10 minutes!</p>	

## 8 CLEANING AND MAINTENANCE



	 <b>DANGER</b>
	<p><b>Incorrect maintenance/repair!</b> Danger to life and equipment damage.</p> <ul style="list-style-type: none"> <li>→ Maintenance and repair work may only be carried out by trained personnel or by the Wagner Service Team.</li> <li>→ Switch the system off before starting work and secure it against being accidentally turned back on by anyone else (lock the main switch at the controller).</li> <li>→ Insure the proper grounding of all system components.</li> </ul>

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### 8.1 CLEANING INSTRUCTIONS

If these rules are not adhered to the interior of the booth may suffer damage or accumulations of powder deposits due to static charge on walls may occur:

- Use only demineralized water for cleaning.
- Do not use cleaning cloths that produce a static charge (no cotton cloths etc.).
- Use only soft cloths.
- Do not use scouring powder or other abrasives.
- Do not use household cleaning agents.
- For fire and explosion prevention flammable cleaning agents are prohibited!  
Exception: Refresh cleaning of the booth walls according to chapter 8.3.

	 <b>DANGER</b>
	<p><b>Explosive mixtures with air!</b> Danger to life and equipment damage.</p> <ul style="list-style-type: none"> <li>→ Cleaning agents can form explosive mixtures with air!</li> <li>→ Ensure that there is adequate ventilation, by leaving on the exhaust system.</li> </ul>

## 8.2 MAINTENANCE OF THE BOOTH

Designation	Check interval	Remark / Cleaning
Booth interior and manual coating point	Daily	<ul style="list-style-type: none"> <li>● Check if powder has accumulated and blow it off if necessary.</li> <li>● Blow off at least with every shift change.</li> </ul>
Booth exterior	Monthly	<ul style="list-style-type: none"> <li>● Use cleaning agent and demineralized water.</li> </ul>
Booth roof outside, exhaust air channels etc.	Monthly	<ul style="list-style-type: none"> <li>● Vacuum outside and/or wipe to avoid dust deposits.</li> </ul>
Exhaust and filter system	In accordance with the operating manual of the final filter unit.	<ul style="list-style-type: none"> <li>● In accordance with the operating manual of the final filter unit.</li> </ul>
Lateral suction tube	Weekly	<ul style="list-style-type: none"> <li>● For cleaning use cleaning device which does not produce any scratches.</li> </ul>
Exhaust connection	Monthly	<ul style="list-style-type: none"> <li>● Inspection</li> <li>● Remove any powder, which may have accumulated (baked powder).</li> </ul>
Grounding check	In accordance with the specifications and the manufacturer's documentation.	<ul style="list-style-type: none"> <li>● In accordance with the specifications and the manufacturer's documentation.</li> </ul>
Cleaning the booth interior and refurbishing the plastic walls	In accordance with chapter 8.3.	
Pneumatic sliding door	Daily	Lead register for power-operated doors.

### Attention:

When using the booth during a monochrome operation, perform a daily basic cleaning of the booth and the suction tubes, using a damp wiper.

### 8.3 CLEANING THE BOOTH INTERIOR AND FURBISHING THE PLASTIC WALLS

Example for the necessity of cleaning:



Wall without electrical charge

Wall with electrical charge due to insufficient cleaning

P\_01475

	<b>DANGER</b>
	<p><b>Explosive mixtures with air!</b> Danger to life and equipment damage.</p> <ul style="list-style-type: none"><li>→ When using cleaning agents, make sure that the operator is grounded at any time.</li><li>→ Static charge can generate sparks and ignite the solvent vapors.</li></ul>

The following chart indicates the time intervals and the number of individual cleaning processes. The individual procedures are described in chapter 8.3.2.

Application / Time interval	Cleaning procedure / Number							
	1	2	3	4	5	6	7	8
Initial start up	2x	2x	✓	✓	✓	✓	✓	✓
Weekly						✓	✓	
Monthly						✓	✓	✓
Semiyearly	✓	✓						
Yearly				✓	✓			
After a long shutdown period (e.g.: vacation)								✓
After extensive use	2x	2x		✓	✓	✓	✓	

### 8.3.1 REVIVING PLASTIC BOOTH WALLS AFTER EXTENSIVE USE

The use of scrapers and blasting lances for cleaning, and when changing powder, results in very fine powder scaling on the walls of the booth. This should be cleaned off occasionally in order to keep the plastic surface in a condition as good as new.

For this, the "cleaning steps" 1 2 4 5 6 7 mentioned in the overview table in chapter 8.3 must be carried out.

The cleaning steps are described in the following chapter 8.3.2.

Cleaning material:



P\_01476

- Alcoholic cleaning agent with a flash point of 10 K above the ambient temperature
- Industrial paper e.g. Wagner article no. 3311137



P\_01478

- Atomizer
- Demineralized water



P\_01477

- Industrial polishing machine
- Blasting lance (included in the delivery)



P\_01479

- Sponge wiper

During the cleaning:

- Always wear cotton gloves (finger marks cause the powder to stick)!
- Always wear suitable shoe covers!



P\_01480




**8.3.2 CLEANING PROCESSES**

	<b>DANGER</b>
	<p><b>Explosive mixtures with air!</b>                  Danger to life and equipment damage.</p> <ul style="list-style-type: none"> <li>→ Wear respirator.</li> <li>→ Any electrical device used must be protected against explosions!</li> <li>→ The final filter and the cyclone must be switched off.</li> <li>→ All booth doors must be open.</li> </ul>

	<ol style="list-style-type: none"> <li>1. Degrease walls with cleaning agent on paper. Only 0.5 m<sup>2</sup>; 5.38 sf surface per cleaning procedure, otherwise the plastic walls may be damaged.</li> <li>2. Immediately wipe the cleaning agent with a fresh paper before it evaporates.</li> </ol>
P_01481	

	<ol style="list-style-type: none"> <li>3. Polish all inner surfaces with an industrial polishing machine (similar to the polishing attachment used in the automobile industry). This work must be done before initial start-up.</li> </ol> <p>Hint:                  Press the polishing machine lightly to avoid excess material discharge.                  Work with circular movements to avoid overheating of the plastic material.</p>
P_01482	



	<p>4. Remove small PVC parts, which remain after smoothening.</p> <p>5. Moisten the paper with demineralized water. Dab the walls with the moistened paper.</p> <p>Hint: Do not wipe as this causes electrostatic charge.</p>
 <p>P_01483</p>	<p>6. Use the atomizer to apply demineralized water evenly from top to bottom on a small wall surface and take care that no drops are formed. For this work, the booth must be completely free of dust.</p>
 <p>P_01484</p>	<p>7. Dry the walls completely with a sponge from bottom to top. Before using the sponge for the first time, moisten it with demineralized water. Press the sponge well to ensure that it does not contain any water.</p>
 <p>P_01485</p>	<p>8. Cleaning the suction channel (optional)</p> <ul style="list-style-type: none"> <li>● Use the cleaning torpedo with sponge.</li> <li>● Moisten the sponge with demineralized water, do not peruse it!</li> <li>● Wring out the sponge and attach it to the torpedo.</li> <li>● Insert the torpedo in the suction tube and push it along the pipe.</li> <li>● Pull out the cleaning torpedo from the suction tube.</li> <li>● Repeat steps 1 to 5 for the suction tube on the opposite side.</li> </ul>

## **8.4 CLEANING THE INDIVIDUAL COMPONENTS**

Before starting the cleaning work:

- The booth exhaust system must be switched on.
- The gun control must be switched off.

### **8.4.1 BLOWING OUT POWDER HOSES AND GUNS**

- The powder center must be switched on.
- The final filter device must be switched on.

#### **Procedure:**

1. Remove the injector suction tube from the powder center.
2. Separate the powder recovery hose from the powder container and hang it in the powder center.
3. Disconnect the powder container connections from the fluid floor and from the lid exhaust unit, if the latter exists).
4. Take out the powder container from the powder center.
5. Clean the exhaust system with the blasting gun of the powder center towards the floor of the powder center.
6. Lower the injector suction tubes.
7. Start the automatic blow-off mode for the powder hoses and the guns.

### **8.4.2 CLEANING THE POWDER CENTER AND THE FILTER OF THE POWDER CENTER**

#### **Procedure:**

1. Switch on the exhaust system of the powder center or the exterior exhaust system, check whether the floor is clean and clean it if necessary.
2. Switch off the impulse cleaning (if it exists) in the powder center.
3. Switch off the exhaust system of the powder center.
4. Detach and remove the powder collecting container.
5. Vacuum or empty the powder collecting container.
6. Insert again and attach the powder collecting container.

### **8.4.3 CLEANING THE GUNS AND THE BOOTH**

**Procedure:**

1. Vacuum the manual coating point from residual powder (if it exists) or blow air into the booth with the blasting lance.
2. Close the sliding door or spray wall provided for cleaning purposes.
3. Start automatic gun cleaning, first one side and then the opposite side (depending on the accessories, the feed devices automatically move out of the booth).
4. Use the blasting lance to blow off the powder from the booth walls and the roof from the outside.
5. Blow out the exhaust slit with the special jet. Begin with the booth end, which is opposite to you. Insert the transverse tube at the end of the special jet into the exhaust slit and then turn it 60°-90° with regard to the slit direction. Keep the tube in this position and blow off along the exhaust slit. After this, remove the special jet.
6. Open the cleaning door/spray wall.

### **8.4.4 CLEANING THE CYCLONE SCREEN**

**Procedure:**

1. Lower the cyclone funnel.
2. Swivel out the screen from the cyclone.
3. Vacuum or blow off the powder residue.
4. Replace the screen with baked powder with a clean screen.
5. Blow off the funnel.
6. Insert the screen again and raise the funnel.

### **8.4.5 EMPTYING THE RESIDUAL POWDER CONTAINER IN THE FINAL FILTER**

**Procedure:**

1. Switch off the ventilator of the final filter.
2. Lower the filter carriage and move it out.
3. Vacuum or empty the filter carriage.

### **8.4.6 RECOMMISSIONING THE POWDER CENTER**

**Procedure:**

1. Raise the suction system.
2. Place the powder container on the vibrator table.
3. Lock the powder container.
4. Set the suction system to "Auto".
5. The suction system automatically moves into the powder container.
6. Connect the hose of the powder recovery unit to the suction system.

## **9 DECOMMISSIONING**

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### **9.1 DECOMMISSIONING**

Before decommissioning the powder paint booth, all powder paint residue must be removed.

The powder paint booth should be disconnected as much as possible from the energy supplies (electric current, compressed air) when decommissioning.

When a system with mandatory approval requirements according to the BImSchV (German Federal Immission Protection Ordinance) is decommissioning, this action should be reported to the responsible body according to BImSchG (Federal Immission Control Act).

To prevent the booth interior being contaminated, the following is required:

- the cleaning doors should be closed
- the other booth apertures should be sealed with films or paper.

### **9.2 RESTARTING AFTER A LONG SHUTDOWN PERIOD**

Remove all sealing elements from the openings to prevent the booth interior being contaminated.

Before switching on the powder coating system and starting up the booth, the work described in chapter 6 should be carry out.

## **10 DISASSEMBLY AND DISPOSAL**

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We recommend having the system disassembled by the Wagner or another specialist.

Before starting disassembly, all supply media (electric current, compressed air) should be disconnected at the connection points. All powder paint lines must be thoroughly emptied and then rinsed. Paint residues must be disposed of in accordance with statutory requirements.

Before starting disassembly, check whether the supply lines are actually interrupted and have been depressurised and/or de-energised if necessary.

The empty system should be thoroughly cleaned. In particular fire loads such as unused paint in exhaust air pipes etc. should be removed to keep the risk of fire during disassembly as low as possible.

We recommend reporting to the responsible bodies the fact that systems with mandatory approval requirements are decommissioned.

Separate all materials encountered during disassembly as clearly as possible in line with statutory requirements. Take appropriate actions to ensure that no dangerous substances are emitted during disassembly. All waste produced must be separated and disposed of in line with local requirements.

Used materials are:

- steel
- PVC plastic
- cables ...

## 11 ELIMINATION OF FAULTS

Malfunction	Cause	Rectification
The exhaust performance is inadequate (powder cloud outside the booth)	<ul style="list-style-type: none"> <li>● Filter cleaning system not turned on.</li> <li>● Filter cleaning system throttled down.</li> <li>● Maintenance hatch of central exhaust system is not positioned correctly.</li> </ul>	<ul style="list-style-type: none"> <li>● See separate operating manual of exhaust system.</li> <li>● Position maintenance hatch correctly.</li> </ul>
Floor blow-off is not functioning	<ul style="list-style-type: none"> <li>● No compressed air supply.</li> <li>● Control is defective.</li> <li>● Filter cartridges are damaged.</li> </ul>	<ul style="list-style-type: none"> <li>● Check the compressed air connection; set the pressure regulator to 0.25 MPa; 2.5 bar; 36.26 psi.</li> <li>● Check the connections; if necessary, contact our service department.</li> </ul>
Guns are not cleaned sufficiently	<ul style="list-style-type: none"> <li>● Gun blow-off device is set incorrectly or defective.</li> <li>● Powder is highly adhesive.</li> </ul>	<ul style="list-style-type: none"> <li>● Set the blow-off nozzles again.</li> <li>● Check the compressed air settings.</li> <li>● Replace defective nozzles.</li> <li>● Take additional cleaning measures.</li> </ul>
Strong powder sticking to the booth walls	<ul style="list-style-type: none"> <li>● Dirty walls.</li> <li>● Electrostatically loaded walls.</li> </ul>	<ul style="list-style-type: none"> <li>● Clean walls see chapter 8.2.</li> <li>● Refresh walls see chapter 8.3.</li> </ul>

## 12 SPARE PARTS

### 12.1 HOW TO ORDER SPARE PARTS?

Always supply the following information to ensure delivery of the right spare part:

#### Order No., description and quantity

The quantity does not have to be identically to the numbers in the columns "Quantity" of the lists. This number merely indicates how many of the respective parts are used in each module.



The following information is also required to ensure smooth processing of your order:

- Address for the invoice
- Address for delivery
- Name of the person to be contacted in the event of any queries
- Type of delivery required (air freight or mail, sea route or overland route, etc.)

#### Marks in spare parts lists

Note to column "K" in the following spare parts lists.

- ◆ = Wearing parts  
**Hint:** No liability is assumed for wearing parts.
- = Not part of standard equipment, available, however, as additional extra.

	 <b>WARNING</b>
	<p><b>Incorrect maintenance/ repair!</b> Risk of injury and damage to the equipment.</p> <ul style="list-style-type: none"> <li>→ Repairs and part replacement may only be carried out by specially trained staff or a WAGNER service center.</li> <li>→ Before all work on the unit and in the event of work interruptions:             <ul style="list-style-type: none"> <li>- Switch off the energy/compressed air supply.</li> <li>- Ensure that all system components are grounded.</li> <li>- Secure the control unit against being switched back on without authorisation.</li> </ul> </li> <li>→ Observe the operating and service instructions when carrying out all work.</li> </ul>

## 12.2 SPARE PARTS

Order No.	Description	Application	Manufacturer/ Supplier
3303641 **	Joint between the shower nozzle and the gun blow-off (LOC-LINE article no. 49450)	Gun blow-off	LOC-LINE
3158891 **	Solenoid valve for the spray gun blow-off (Festo article no. 161732)	Gun blow-off	Festo
3157599 **	Pressure regulator valve with manometer for blowing off the gun (Festo article no. 159627)	Gun blow-off	Festo
**	Valve for blast rod (Mecair article no. VEP506)	Floor cleaning	Mecair
3916403	Roof light - short	Illumination	Philips
3103450	Roof light - long for illuminating the manual coating point	Illumination	Philips
**	Illuminating means (short tubes) type TLD 18	Lamp 3916403	
**	Illuminating means (long tubes) type TLD 36	Lamp 3103450	
3920048	Manual blasting gun		Wagner
3921960 3920051 3920052 3923041 3927555 3927556	Extension for blasting gun Length 460 mm Length 960 mm Length 1460 mm Length 1960 mm Length 2500 mm Length 3000 mm		Wagner

\* Wearing part



### 12.3 CLEANING ACCESSORIES

Order No.	Description	Application	Manufacturer/ Supplier
3301015	Shoe covers	to be used by operating personnel when they enter the booth	Wagner
3920060	Cyclone cleaning jet unit	Cyclone cleaning	Wagner
3303792	Wrist band for grounding of people who suffer from an allergy	to be used by operating personnel when they enter the booth	Wagner
3303793	ESD grounding cable		Wagner
3313175	ESD grounding connection point		Wagner
3311137	Wiper	Booth cleaning	Wagner
3134544	Sponge for cleaning torpedo	Cleaning	Wagner
3927078	Cleaning torpedo 12000 m <sup>3</sup> ; Ø 320 mm	Cleaning	Wagner
3926518	Cleaning torpedo 16000 m <sup>3</sup> ; Ø 360 mm	Cleaning	Wagner
3926391	Cleaning torpedo 20000 m <sup>3</sup> ; Ø 400 mm	Cleaning	Wagner
3926515	Cleaning torpedo 24000 m <sup>3</sup> ; Ø 440 mm	Cleaning	Wagner

\* Wearing part

\*\* Customers can purchase this part on their own.

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