

User manual

Inocenter

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SAMES KREMLIN SAS operating manuals are written in French and translated into English, German, Spanish, Italian and Portuguese.

The French version is deemed the official text and **SAMES KREMLIN** will not be liable for the translations into other languages.

Inocenter

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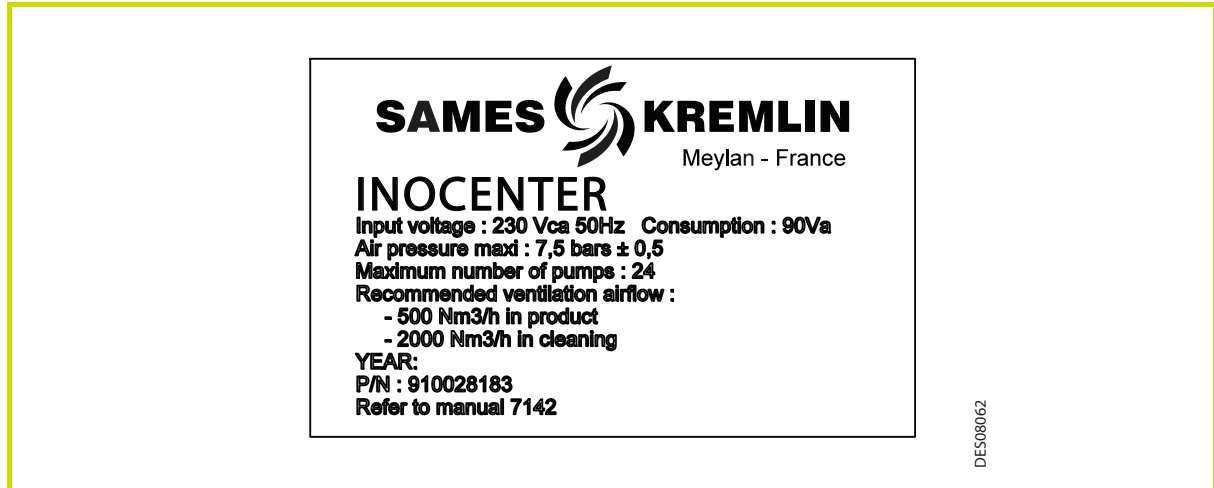
1. Health and safety instructions

This manual contains links to the following instructions manuals:

- [see RT Nr 6454](#) pour l'Inotransfer.
- [see RT Nr 6457](#) pour l'Inomaster Platinum.

1.1. Marking

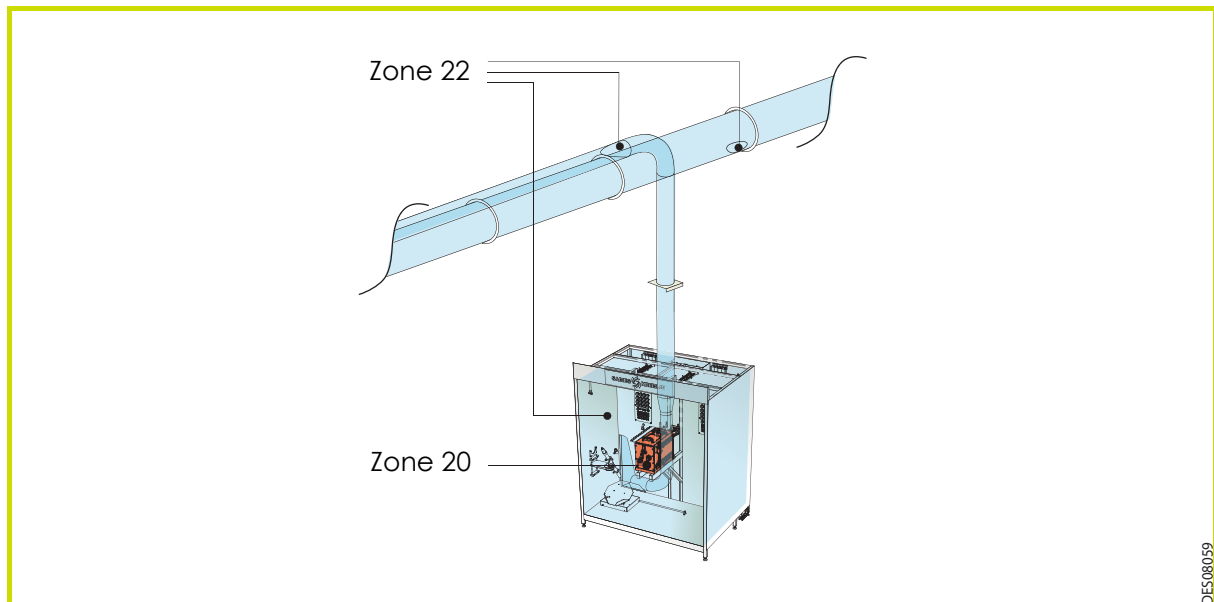
The Inocenter is intended for use out of an explosive atmosphere.



1.2. Compliance with the ATEX directive

According to Directive 1999/92/EC, the responsibility for defining ATEX zones lies with the user. In accordance with the EN 16985 Standard, **SAMES KREMLIN** has designed the **Inocenter** considering the following zones:

- Zone 20 for the inner volume of the powder fluidized tank.
- Zone 22 for the inner volume of the enclosure and the evacuation sheath.



1.3. Precautions for Use

This document contains information that all operators should be aware of and understand before using the **Inocenter**. This information highlights situations that could result in serious damage and indicates the precautions that should be taken to avoid them.



WARNING : Before any use of the equipment, check that all operators:

- have previously be trained by the compagny **SAMES KREMLIN**, or by their distributors registered by them for this purpose.
- have read and understood the user manual and all rules for installation and operation, as laid out below.

It is the responsibility of the operators' workshop manager to ensure these two points and it is also his responsibility to make sure that all operators have read and understood the user manuals for any peripheral electrical equipment present in the powdering area.

1.4. Warnings



DANGER:

It is imperative that anyone wearing a pacemaker does not use the equipment and does not enter the projection area.

High voltage can cause the pacemaker to malfunction.



WARNING : Safety may be jeopardized if this equipment is not operated, disassembled and reassembled in compliance with the instructions given in this manual and in any European Standard or national safety regulations in force.



WARNING : Equipment performance is only guaranteed if original spare parts distributed by **SAMES KREMLIN** are used.



WARNING : During the cleaning cycle of the powder station, it is imperative to block the powder plunger on its support.



WARNING : This equipment should only be used outside of an explosive atmosphere. The equipment should only be used in a well-ventilated area to reduce health, fire and explosion hazards. The effectiveness of the exhaust ventilation system should be checked daily.

- 1 The operator must wear shoes according to standard EN ISO 20344 and the insulation resistance measured must not exceed 100 MΩ.

- 2 The protective clothes, including gloves, must conform to standard EN 1149-5 and the insulation resistance measured must not exceed 100 MΩ.
- 3 Make sure that the pneumatic pressure inside is completely exhausted before adjusting or servicing pressurized systems or parts.
- 4 Using individual protection equipment will limit the risks of contact and/or inhalation of toxic product, gas, vapours, fog or dusts that can be produced while using the equipment. The user has to follow the coating product manufacturer's recommendations.
- 5 Des mesures adaptées doivent être prises pour éviter, durant les périodes de non-utilisation et/ou lorsque le matériel est hors service, qu'une énergie potentielle soit présente dans l'équipement.
- 6 The **Inocenter** powder station must be maintained regularly in accordance with the indications and instructions given by **SAMES KREMLIN**.
Repairs must be carried out in strict accordance with these instructions.
- 7 Unplug, lock out and turn off electrical equipment before servicing electrical equipment.
- 8 Turn off all electrical or electrostatic equipment immediately, even if the operator is exposed to a slight electric shock. Do not restart the equipment until the problem has been diagnosed and resolved.
- 9 The powder station, especially the vibrating table and all conductive structures placed in or near the work place must be electrically connected to the protective grounding system of the power supply.
- 10 All grinding or welding work on metal products carried out at a distance of less than 5 meters from the powder station is prohibited if the following safety measures are not observed
 - The powder station must be protected by a cover made of non-flammable (or hardly flammable) material.
 - A person equipped with a fire extinguisher must monitor the environment of the powder station during the work.
- 11 The powder station must not support a mass other than that of the equipment originally intended to be mounted on or around it. The structure of the powder station is self-supporting. In no case is the powder station designed to support the mass of an operator working on its roof, the mass of a part of the building or any other load.
- 12 The floor on which the power plant is installed must have a strength of more than 400 kN/m².
- 13 Do not bring corrosive products or objects likely to deteriorate its surface into contact with the powder station.

1.5. Important recommendations

1.5.1. Ventilation

Do not start the powder application with the **Inocenter** until the ventilation system of the spray booth is switched on. If the ventilation is turned off, toxic substances or dust may remain in the spray booth and cause a risk of fire, poisoning or irritation.

1.5.2. Ambient temperature

The **Inocenter** powder station is designed to normally operate at an ambient temperature comprised between 0°C and + 40°C.

The storage temperature must never exceed +60°C.



WARNING : This powder distribution plant is usually connected to a filter unit via a ventilation duct. A filter explosion protection system in accordance with the ATEX Directive 2014/34/EU is required. **SAMES KREMLIN** recommends to install a spark detector in the enclosure of the power station connected to a CO2 injection system in the ventilation duct.

1.6. Guarantee

Under the guarantee, which applies only to the buyer, **SAMES KREMLIN** agrees to repair operating faults resulting from a design fault, materials or manufacture, under the conditions set out below.

The guarantee claim must define the exact nature of the fault concerned, in writing. The **SAMES KREMLIN** guarantee only covers equipment that has been serviced and cleaned according to standard procedures and our own instructions, that has been fitted with parts approved by **SAMES KREMLIN** or that has not been modified by the customer.

More precisely, the guarantee does not cover damage resulting from:

- the customer's negligence or inattention,
- incorrect use,
- failure to follow procedures,
- use of a control system not designed by **SAMES KREMLIN** or a **SAMES KREMLIN** control system modified by a third party without written permission from an authorized **SAMES KREMLIN** technical agent,
- accidents such as: collision with external objects, or similar events,
- flooding, earthquake, fire or similar events,
- the use of seals that do not comply with those recommended by **SAMES KREMLIN**,
- pollution of pneumatic circuits by fluids or substances other than air.

The **SAMES KREMLIN Inocenter** is covered by a warranty (refer to the general sales conditions for its application).

The guarantee does not apply to wearing parts.

The guarantee will take effect from the date of the first start-up or of the provisional acceptance report.

Under no circumstances, either in the context of this guarantee or in other contexts, will **SAMES KREMLIN** be held responsible for physical injury or intangible damage, damage to brand image and loss of production resulting directly from its products.

2. Introduction

2.1. General

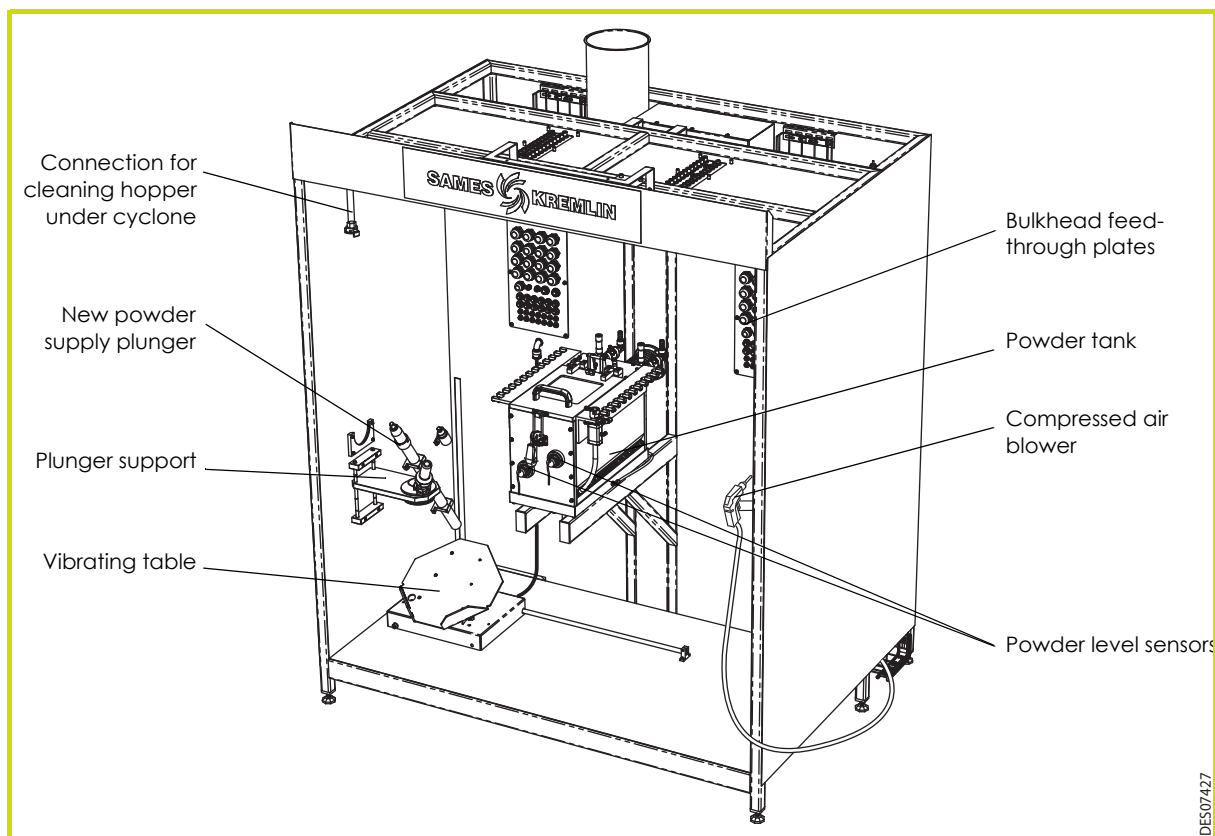
The **Inocenter** powder station is a ventilated powder dispensing enclosure allowing:

- 1 Powder supply to projectors and guns (24 maximum).
- 2 Automatic cleaning of:
 - powder pumps,
 - powder supply hoses,
 - the inside of projectors and guns,
 - powder recycling hose.
 - powder tank.

The powder station can operate autonomously.

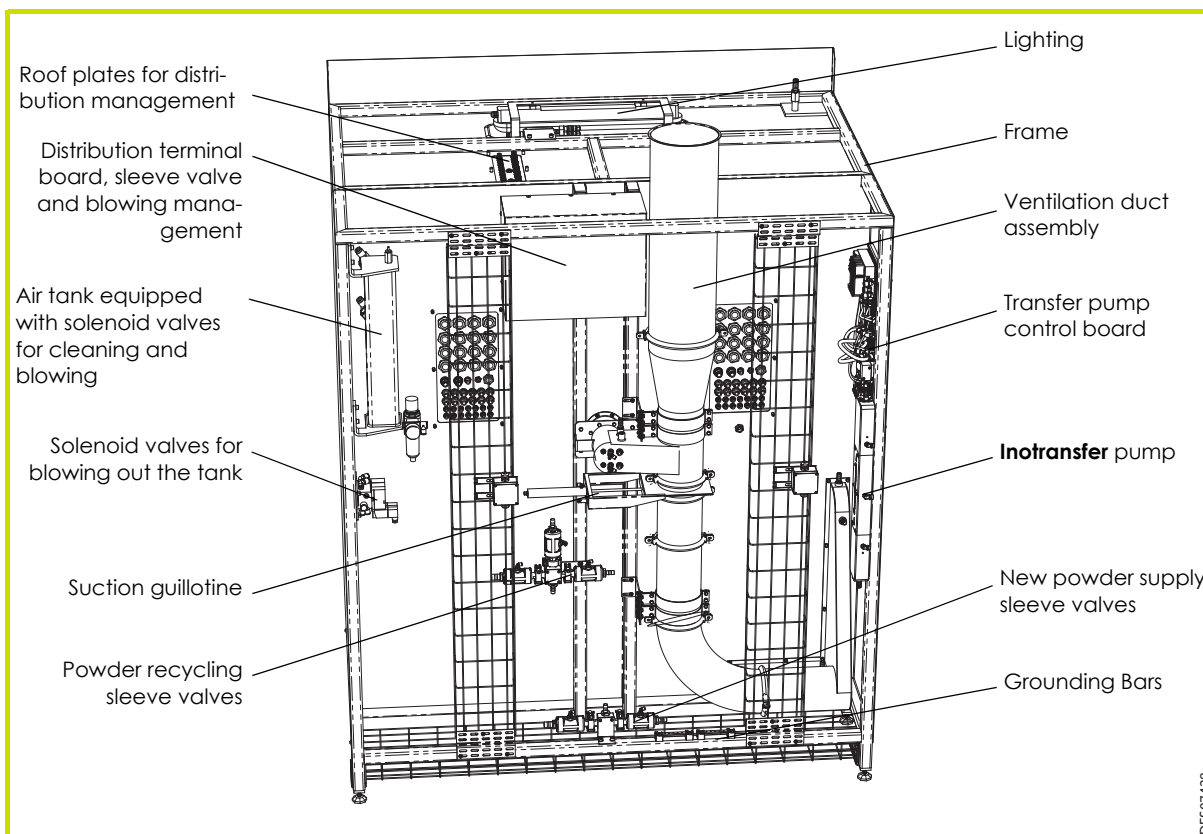
It is then controlled from the keyboard located on the front of the electro-pneumatic cabinet ([see RT Nr 6457](#) for the Inomaster Platinum cabinet). The PLC monitor allows the operator to be guided and to follow his actions in real time. It indicates to the operator the status of the powder unit (defects, cleaning steps, operations to be carried out).

2.2. Front view



Element	Function
Emergency stop push-button	Located on the control cabinet
Bulkhead feed-through plates	Plates equipped with bulkhead bushings and cable glands allowing the passage of cables and hoses on the bottom of the power plant.
Powder tank	Powder tank equipped with maximum 24 powder pumps
Compressed air blower	Allows the cleaning of the powder station
Vibrating table	Moving support of the powder box
New powder supply plunger	New powder suction rod
Plunger support	Quick plunger locking system in cleaning position
Powder level sensors	Indicate high and low levels of powder in the tank
Connection for cleaning hopper under cyclone	Evacuation of cleaning hopper under cyclone

2.3. Rear view



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Element	Function
Lighting	LED Indoor Lighting of Powder station
Frame	Structure of the powder station
Ventilation duct assembly	Ducting of the suction air to the filter unit (operation and cleaning)
Transfer pump control board	Controls the transfer pump
Inotransfer pump	Supplies the plant with new powder
New powder supply sleeve valves	New powder supply circuit management valves
Grounding Bars	Grounding Cable Connectors
Powder recycling sleeve valves	Powder recycling circuit management valves
Suction guillotine	Controls the suction air to the filter unit during operation or cleaning
Solenoid valves for blowing out the tank	Allow cleaning of the tank
Air tank equipped with solenoid valves for cleaning and blowing	Used for cleaning the distribution and recycling cycles
Distribution terminal board, sleeve valve and blowing management	All the distribution terminals which allow the control, the management of the sleeve valves and the blowing.
Roof plates for distribution management	Plates equipped with bulkhead bushings and cable glands allowing the passage of cables and pipes on the top of the power plant.

2.4. Equipment overview

2.4.1. Vibrating table

The table, a 20kg powder box support, is equipped with an electric vibrator to facilitate the flow of the powder during the pumping phase.

During the cleaning phase, the table, which is mobile, must be moved manually under the tank drain valve in order to empty it.

Once cleaning is completed, return the table to its initial position.

Une fois le nettoyage terminé, remettre la table dans sa position initiale.

2.4.2. Powder transfer pump

This pump, equipped with 4 sleeves, allows the transport of new powder from the box to the fluidized tank.

During the production phase, the operation of the pump is managed by the level sensors of the tank.

The transport capacity of this pump, with a new powder box, is around 300 kg/min.

When starting the installation, it is necessary to force the filling of the tank until the information: "central OK" is obtained.

2.4.3. Tank

This fluidized tank allows the distribution of powder to the projectors through a set composed of a sleeve valve and a venturi type pump.

This tank can be equipped with a maximum of 24 pumps. It is equipped with 2 powder level detectors to ensure the management of the filling and to maintain a constant level during the production phase.

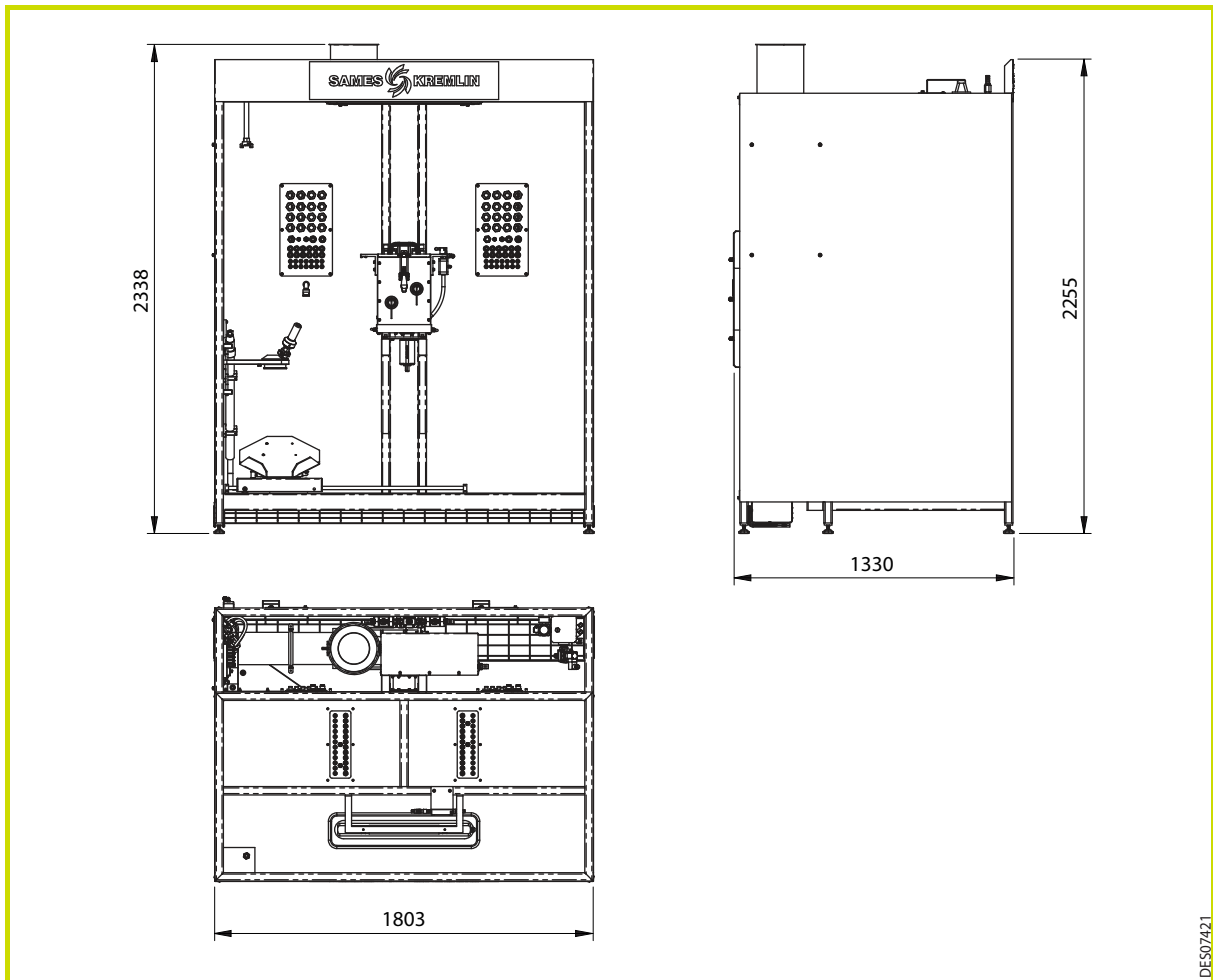
An electric vibrator guarantees a good fluidization for difficult powders.

The tank is connected directly to the ventilation duct via a valve mounted on a pneumatic cylinder. This flap allows to significantly increase the suction flow when it is open during the cleaning phases.

The tank must be emptied every evening at the end of the shift.

3. Characteristics

3.1. Dimensions (mm)



3.2. Characteristics

3.2.1. Electrical Characteristics

Vibrating table and Tank	
Protection class	ATEX II 3 D - Ex tc IIIC T100°C Dc
Classification	group II, category 3D
Supply voltage	230 V / 240 V single-phase + earth
Frequency	50/60 Hz
Power	45 W
Protection class	IP 65
Insulation class	F

3.2.2. Pneumatic characteristics

Powder Station	
Max. input pressure	7.5 bar (100 psi)
Min. input pressure	6 bar (90 psi)
Ventilation required	
Ventilation required	500 Nm ³ /h in operation 2000 Nm ³ /h in cleaning

Max. compressed air consumption	
Venturi pump	100 NL/min in operation 160 NL/min in cleaning
Fluidization	60 NL/min
Inotransfer pump	450 NL/min in operation 650 NL/min in cleaning
Recycling	250 NL/min in recycling 650 NL/min in cleaning
External blowing projector	330 NL/min/projector
Max. compressed air consumption for an installation of 24 projectors	
Operation phase	170 Nm ³ /h
Powder internal circuit cleaning phase	400 Nm ³ /h on average for 5 to 6 minutes
Cleaning phase of projector exteriors	500 Nm ³ /h for about 30 seconds

To limit the pressure drop of the compressor and to maintain the minimum required pressure, it is recommended to install a buffer tank of 1000 to 2000 liters, depending on the number of projectors, upstream of the control cabinet.

Characteristics of compressed air supply according to the standard NF ISO 8573-1	
Maximum dew point at 6 bar (87 psi)	Class 4 i.e + 3°C (37°F)
Maximum particle-size of solid pollutants	Class 3 i.e 5 µm
Maximum oil concentration	Class 1 i.e 0,01 mg/m ³ *
Maximum concentration of solid pollutants	Class 3 i.e 5 mg/m ³ *

*: Values are given for a temperature of 20 °C (68 °F) at an atmospheric pressure of 1 013 mbar

3.2.3. Weight and dimensions

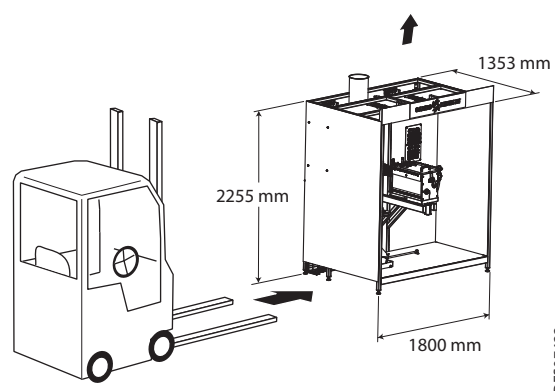
Powder station	
Weight	approx. 550 kg
Width	1800 mm
Depth	1353 mm
Height	2255 mm

3.2.4. Dimensions of the equipment

Tank	
Length	865 mm
Width	414 mm
Height (excluding sleeve valve)	581 mm
Useful volume	33 l
Box (from the powder supplier)	
Min. length	390 mm
Min. Width	320 mm
Height max.	420 mm
Powder pumps	
Maximum number	24

3.2.5. Handling means of the powder station

Use a lifting device (such as a pallet truck or forklift) with sufficient characteristics to move the powder station. It is imperative to respect the position given in the diagram below for gripping the powder station.



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3.3. Noise level

3.3.1. Inocenter in operation phase

The weighted equivalent continuous sound pressure level is 79 dB (A) under the specified operating conditions.

Measuring conditions: the equipment was put into operation at maximum characteristics, the measurements were carried out at different positions at 1 m from the powder station and on the side accessible by the user in the powder laboratory on the **SAMES KREMLIN** site in Meylan, France.

Method of measurement: The weighted equivalent sound pressure level of 79 dB (A) is in LEQ value, measured over observation periods of at least 30 seconds.

3.3.2. Inocenter in cleaning phase

The weighted equivalent continuous sound pressure level is 99 dB (A) under the specified operating conditions.

Measuring conditions: the equipment was put into operation at maximum characteristics, the measurements were carried out at different positions at 1 m from the powder station and on the side accessible by the user in the powder laboratory on the **SAMES KREMLIN** site in Meylan, France.

Method of measurement: The weighted equivalent sound pressure level of 99 dB (A) is in LEQ value, measured over observation periods of at least 30 seconds.

4. Starting up

4.1. Tools

The tools listed below are recommended for installation and maintenance of the equipment.

- Flat-blade screwdriver.
- Phillips screwdriver.
- Allen wrenches.
- Torque wrench.
- Flat wrench.
- Pipe wrench.
- Multi-socket pliers.
- Cutting pliers.
- Stepladder.

4.2. Installation

The location of the **Inocenter** having been defined in relation to the customer's installation, the control cabinet is positioned on the side of the power plant in order to facilitate the electrical and pneumatic connections between the two equipments.

Note: the electrical equipment must be more than one meter away from the opening area of the cabin and must be out of the explosive atmosphere.

4.2.1. Electrical connections **Inocenter** - control cabinet

From the control cabinet, perform the electrical connections of the following equipment:

- Solenoid valves for blowing out the tank.
- Transfer pump control board.
- Roof lighting.
- Inductive detector of the guillotine.
- 2 terminal boxes (vibrating table and tank vibrators).
- Solenoid valves of the distribution terminal board control and blowing.

4.2.2. Pneumatic connections **Inocenter** - control cabinet

Pneumatic connections from the control cabinet are performed on the following equipment:

- Solenoid valves for blowing out the air tank.
- Solenoid valves for cleaning the air tank.
- Transfer pump control board
- Recycling sleeve valve assembly
- New powder sleeve valve assembly.
- Tank cylinder.
- Tank valve position sensor
- Air blower.
- **Inocontroller** control module connections for projectors.
- Connections to the distribution blocks located in the control cabinet.
- Solenoid valves on the control and blower terminal board.

4.2.3. Raccordement de la gaine de ventilation

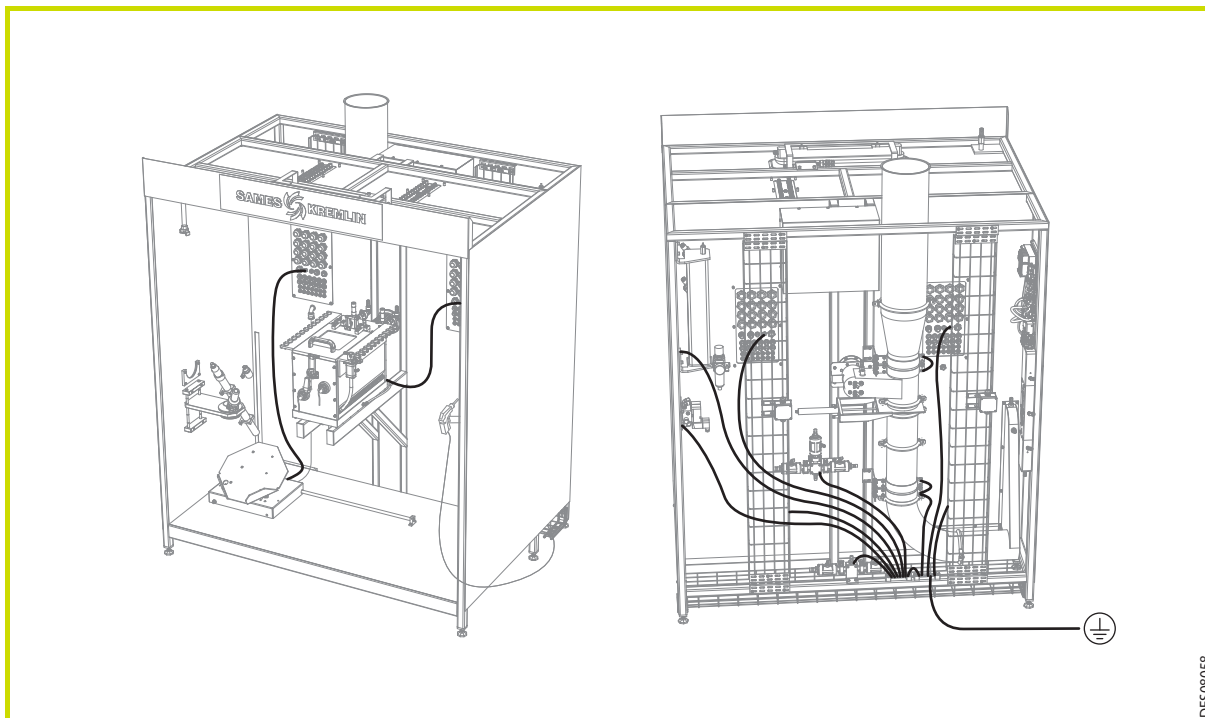
Connect the \varnothing 220 mm ventilation duct with \varnothing 236 mm dropped edge to the duct of the customer's filter unit using a suitable hose clamp.

4.2.4. Vibrating table

Remove the locking plate for carrying the vibrating table.

4.2.5. Ground connection

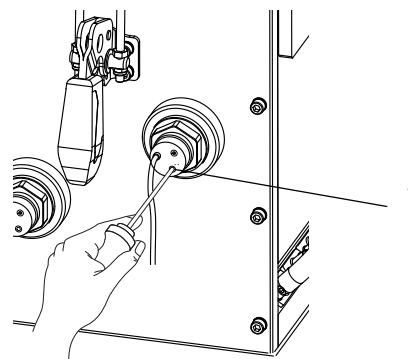
The various equipment of the powder station requiring grounding are connected to the grounding bars located on the frame at the back of the powder station.



WARNING : it is imperative to connect the grounding bars of the control unit to the grounding bar of the control cabinet or to a good quality ground.

4.2.6. Sensitivity adjustment of powder level sensors

Adjust the detection sensitivity of the sensor by turning the adjusting screw (1) with a small flat screwdriver.



5. Maintenance



WARNING : Before any intervention on the powder station, it is imperative to switch off the electrical and pneumatic power supplies. After having cut off the pneumatic supply, it is imperative to empty the air supply at the back of the powder plant by means of the safety valve. Pull on the ring and the pressure drops.

5.1. Maintenance summary table

The soiling and wear of the different elements of the **Inocenter** powder station caused by the passage of the powder depends on the nature of the powder and the operating conditions.

Therefore, the periodicity of maintenance indicated in the procedures below is only indicative. The user will have to create his own maintenance range as he uses the **SAMES KREMLIN** equipment.

Procedure		Detail	Duration	Frequency
Cleaning				
A	A1	Checking the condition of the powder pumps (injector, porous tube, ejector and sleeve valves)	10 min	Every 40 hours of use
	A2	Checking the condition of the cover seal of the tank	1 min	1 time per month
	A3	Checking the condition of the sleeve valves	30 min	Every 3 months
	A4	Checking the state of the transfer pump (sleeves and tubes) (see RT Nr 6454)	-	-
Replacement				
B	B1	Sleeve replacement	30 min	-
C	C1	Replacement of the ejector, injector, porous tube and sleeve valve of the powder pump	10 min	-
	C2	Replacement of a powder pump	5 min	-
D	D1	Replacement of the vacuum generator	10 min	-
	D2	Replacement of sleeves and porous tubes of the transfer pump (see RT Nr 6454)	-	-
	D3	Replacement of the transfer pump(see RT Nr 6454)	-	-

5.2. Cleaning



WARNING : All cleaning operations must be carried out using compressed air only. Water should never be used to clean the equipment.

5.2.1. **Procedure A1:** Checking the condition of the powder pumps
Every 40 hours:

- Follow the disassembly and reassembly instructions ([see § 5.3.2 page 25](#))
- Check the ejector, injector, porous tube and sleeve valve of the powder pump for cleanliness and wear, clean or replace if necessary.

5.2.2. **Procedure A2:** Checking the condition of the tank lid seal
Once a month:

- Check the condition of the cover seal and replace it if necessary.

5.2.3. **Procedure A3:** Checking the condition of the sleeve valves
Every 3 months:

- Follow the disassembly and reassembly instructions ([see § 5.3.1 page 22](#)).
- Check the flexibility of the sleeve and replace it if necessary.

5.3. Replacement

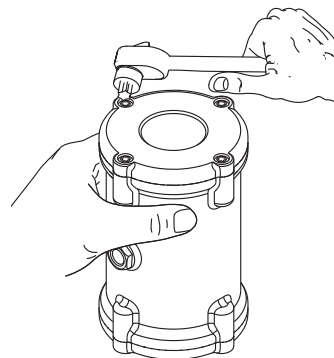


WARNING : Before any intervention on the powder station, switch off the electrical and pneumatic power supplies. Bleed the compressed air circuit by activating the air blower.

5.3.1. Procedure B1: Sleeve replacement

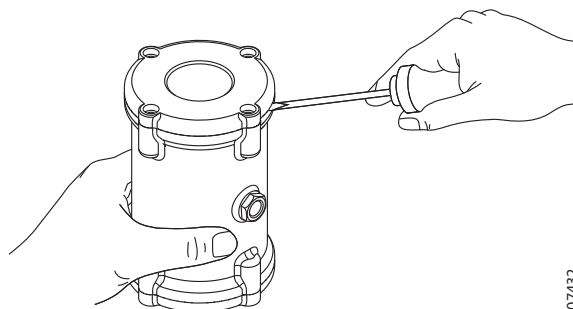
Disassembling:

Hold the sleeve valve firmly upwards and loosen the Torx T30 screws of the fitting. Turn the valve over and repeat the operation on the second fitting.



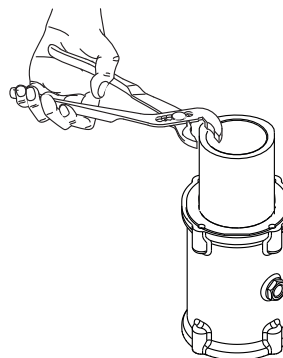
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Remove both fittings from the body using a flat screwdriver if necessary.



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Remove the sleeve from the body by pushing or pulling it through the pressure ring. If necessary, apply assembly paste between the sleeve and the pressure ring to facilitate removal of the sleeve.

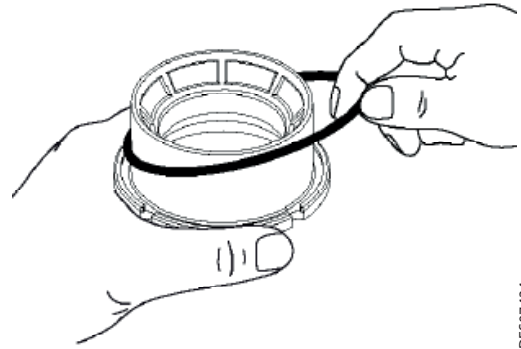


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Carry out the cleaning of the parts and check their wear and porosity.

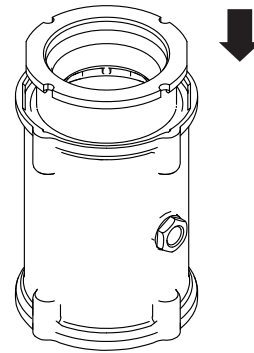
Re-assembling:

Position and press the O-ring into the groove on the pressure ring.
Perform the same operation on the second pressure ring.



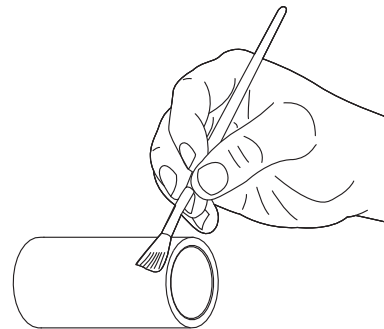
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Insert the pressure rings with their seals into the valve body.



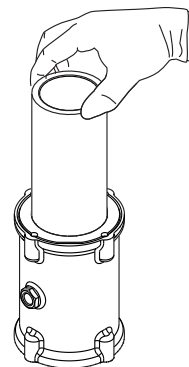
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Apply a thin layer of Vaseline to the ends of the sleeve.



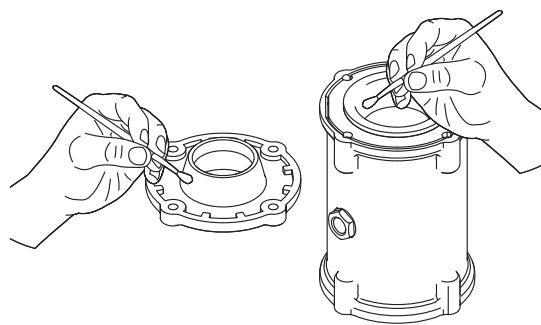
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Position the valve body vertically. Insert the sleeve through the top pressure ring until it passes through the bottom ring, aligned with the lower edge of the body.



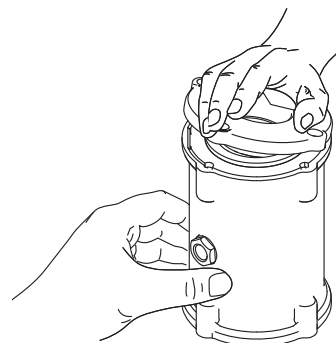
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Apply a thin layer of Vaseline inside the end of the sleeve for about 1 cm and on the cone of the fitting.



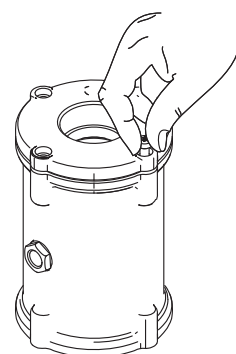
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Hold the valve firmly in a vertical position. With the other hand, position the fitting at an angle in the sleeve and press the fitting.



DES07439

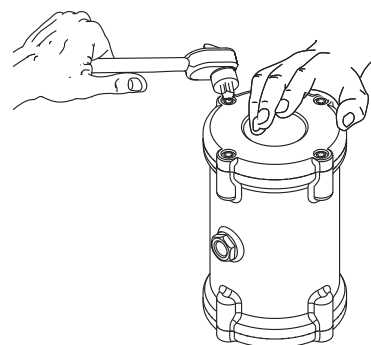
Position the fitting correctly so that the holes in the fitting align with the holes in the body. Place the Torx T30 screws.



DES07440

Press firmly on the fitting and tighten the screws until the fitting closes the body securely. Turn the valve over and proceed in the same way for the second fitting.

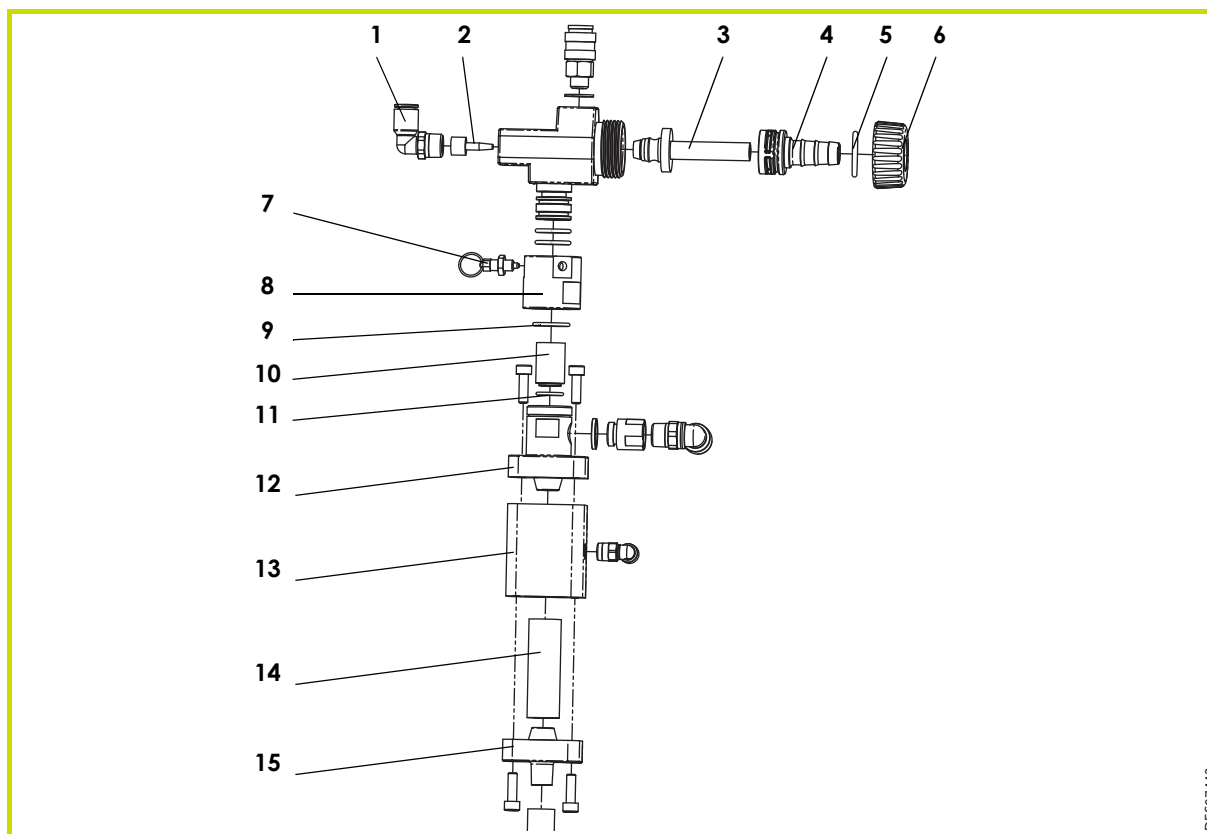
Check the tightening torque of all screws (4 Nm).



DES07441

Check the correct operation of the valve by closing it with a minimum control pressure.

5.3.2. **Procedure C1:** Replacement of the ejector, injector, porous tube and sleeve valve of the powder pump



Disassembling the powder pump:

- Disconnect the compressed air and powder supply hoses from the pump.
- Remove the pump from its holder (8) by pulling the locking finger (7).

Replace the ejector:

- Unscrew the ejector nut (6) and remove the powder outlet nozzle (4) with its seal (5).
- Remove the ejector (3) with its seal from the pump body and replace it.
- Proceed in reverse order for reassembly.

Replace the injector:

- Unscrew the elbow fitting (1), remove the injector (2) from the pump body and replace it.
- Proceed in reverse order for reassembly.

Replace the porous tube.

- Unscrew the pump holder (8) from the upper flange (12).
- Remove the seal (9), the porous tube (10) and the seal (11) and replace them.
- Proceed in reverse order for reassembly.

Replace the sleeve valve.

- Unscrew the upper flange (12) and lower flange (15) from the body (13).
- Pull out the sleeve (14) and replace it.
- Proceed in reverse order for reassembly.



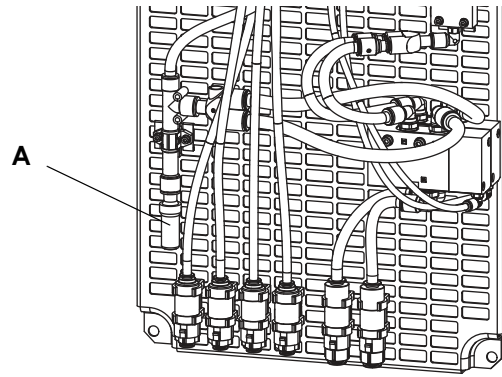
WARNING : When replacing the porous tube, it is imperative to also replace the associated seals (Items 9 and 11).

5.3.3. **Procedure C2:** Replacement of a powder pump

- Disconnect the compressed air and powder supply hoses from the pump.
- Remove the pump from its holder by pulling the locking finger.
- Insert the new pump into its holder and secure it with the locking finger.
- Reconnect the compressed air and powder supply hoses to the pump.

5.3.4. **Procedure D1:** Replacement of the vacuum generator

- Disconnect the compressed air hoses.
- Uncouple the vacuum generator (**A**) from its support fixed on the plate.
- Proceed in the reverse order for reassembly.



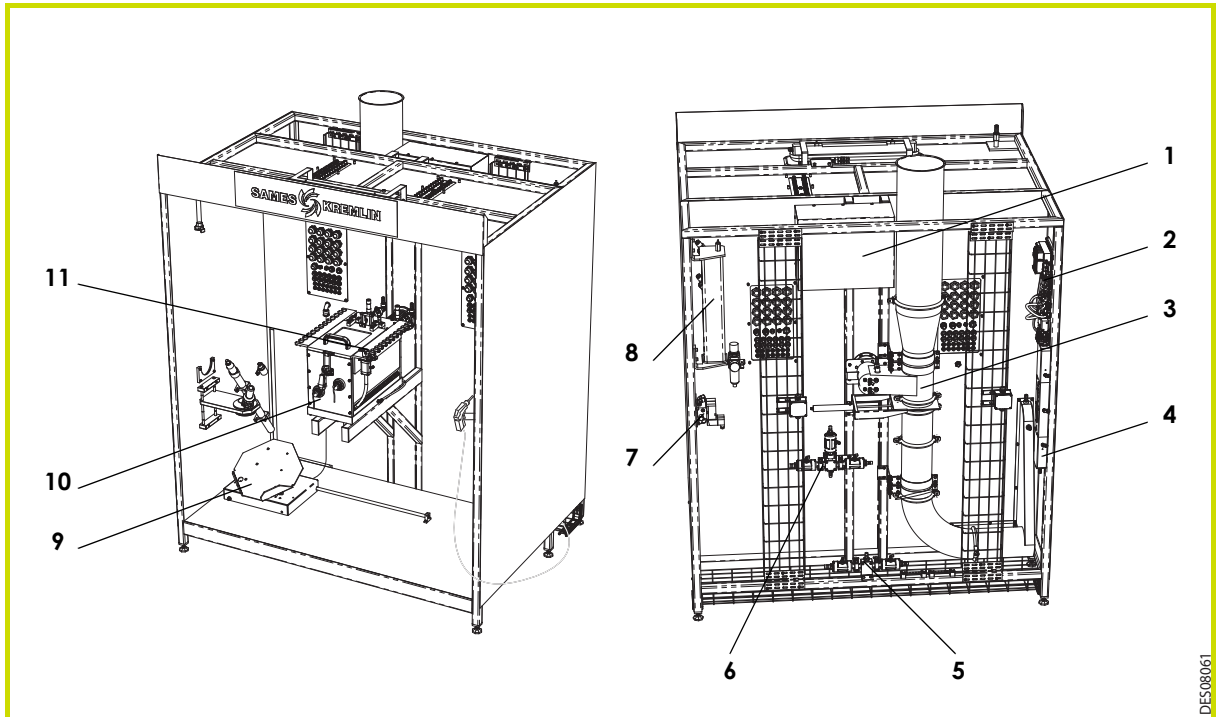
DES08060

6. Trouble shootings

Symptoms	Probable causes	Remedies
Insufficient suction air flow	Wrong position of the suction knife valve	Check and adjust the position of the suction knife valve
	Incorrect operation of the ventilation unit	Refer to the user manual of the filter unit
The projector does not project powder	Empty powder tank	Fill the powder tank.
	Insufficient injection air flow rate	Check the operation of the powder level sensors and supply powder.
	Insufficient air flow supplied by the compressed air network	Check the compressed air supply to the Inotransfer.
	The powder transport hose is clogged or bent	Clean the powder transport hose with compressed air.
	The powder pump is not correctly connected on its support	Replace the powder pump by pushing it fully on its support.
Insufficient powder comes out	The powder pump ejector is worn.	Replace the ejector.
	The powder transport hose is clogged or bent	Clean the powder transport hose with compressed air.
	The powder transport hose is not suitable.	Increase the diameter and reduce the length of the powder transport hose.
	Dilution air flow rate is too high	Decrease the dilution air flow rate.
The powder spray is irregular	Worn parts	Change the injector and ejector of the powder pump
	Fluidization is not sufficient or too strong	Adjust the fluidization pressure to obtain a homogeneous powder bed.

7. Spare part list

7.1. Inocenter Powder Station



DES08061

Item	Part Number	Description	Qty	Unit of sale	Maintenance level for spare parts (*)
	910028183	Inocenter powder station	1	1	3
1	910029605	Control and blower terminal boards (see § 7.1.1 page 30)	1	1	3
2	910028861	Transfer pump management board (see § 7.1.2 page 31)	1	1	3
3	910027665	Ventilation duct assembly (see § 7.1.3 page 32)	1	1	3
4	910023986	Inotransfer pump (see RT Nr 6454)	1	1	3
5	910028081	New powder supply sleeve valve assembly (see § 7.1.4 page 33)	1	1	3
6	910028082	Recycling sleeve valve assembly (see § 7.1.4 page 33)	1	1	3
7	910028125	Solenoid valve assembly for blowing out the tank (see § 7.1.5 page 34)	1	1	3
8	910028124	Solenoid valve assembly for distribution cleaning (see § 7.1.5 page 34)	1	1	3
9	910024392	Vibrating table (see § 7.1.6 page 35)	1	1	3
10	910027997	Tank (see § 7.1.7 page 36)	1	1	3
11	910028786	Powder pump (see § 7.1.8 page 38)	24 max	1	3

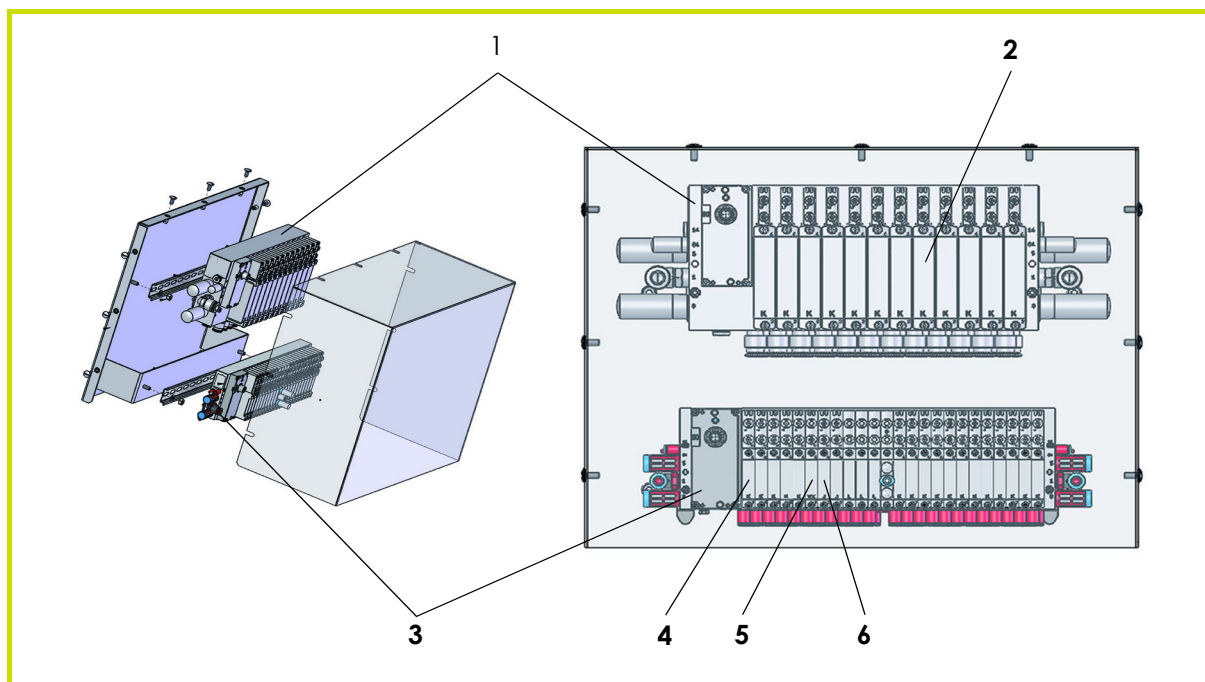
(*)

Level 1: Standard preventive maintenance

Level 2: Corrective maintenance

Level 3: Exceptional maintenance

7.1.1. Control and blower terminal boards



Item	Part Number	Description	Qty	Unit of sale	Maintenance level for spare parts (*)
	910029605	Control and blower terminal boards	1	1	3
1	220000585	Distributor terminal (control)	1	1	3
2	220000673	Distributor 2x3/2 type K	1	1	3
3	220000584	Distributor terminal (blowing)	1	1	3
4	220000670	Distributor 2x3/2 type K	1	1	3
5	220000671	Distributor 3/2 type VX	1	1	3
6	220000672	Distributor 2x3/2 type VH	1	1	3

(*)

Level 1: Standard preventive maintenance

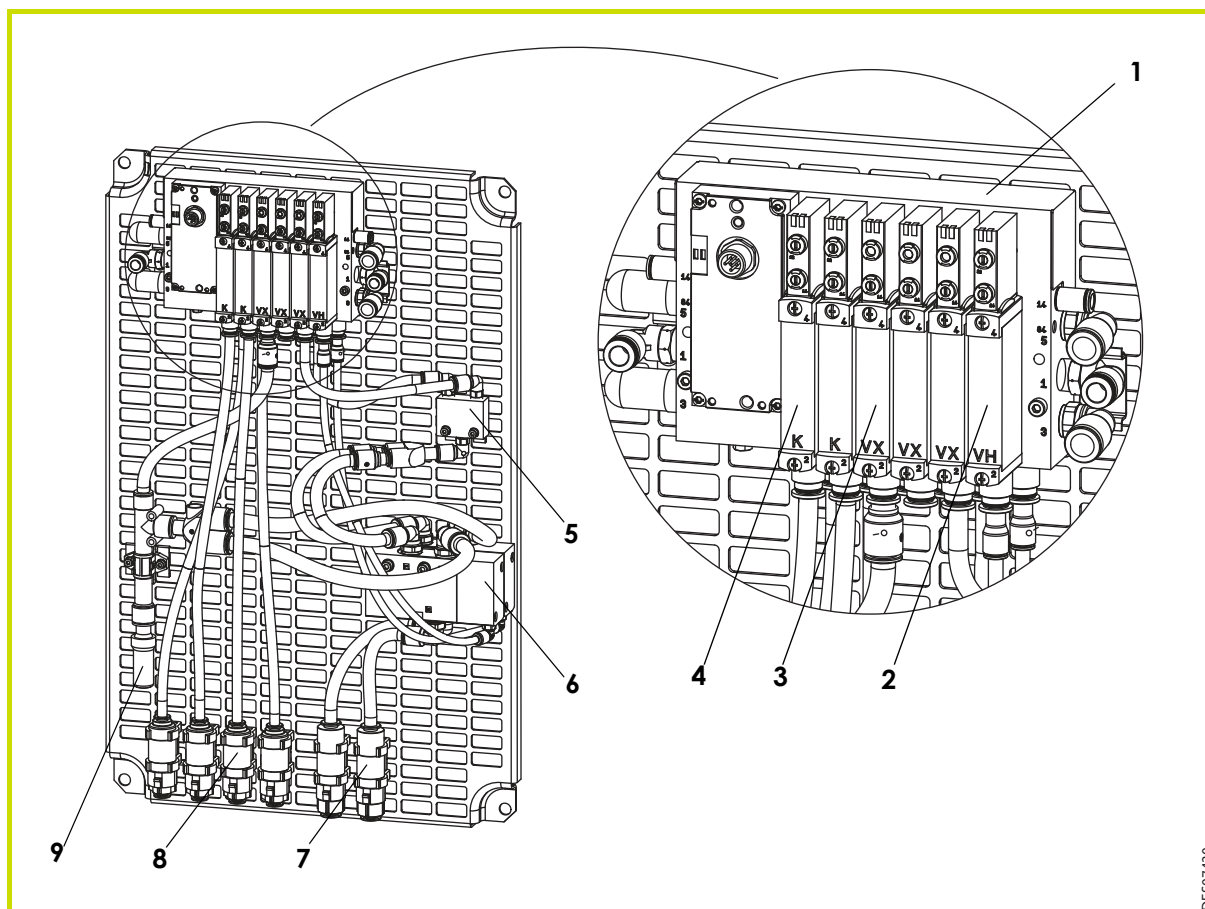
Level 2: Corrective maintenance

Level 3: Exceptional maintenance

References of the distribution units:

Part Number	Description
220000584-4 & 220000585-4	Units up to 6 projectors
220000584-8 & 220000585-8	Units up to 8 projectors
220000584-XX & 220000585-XX	Units up to XX = 10/12/14/16/18/20/22/24 projectors

7.1.2. Transfer pump management board



Item	Part Number	Description	Qty	Unit of sale	Maintenance level for spare parts (*)
	910028861	Transfer pump management board	1	1	3
1	220000570	Distributor terminal	1	1	3
2	220000672	Distributor 2x3/2 type VH	1	1	3
3	220000671	Distributor 3/2 type VX	1	1	3
4	220000670	Distributor 2x3/2 type K	1	1	3
5	130001279	Cell	1	1	3
6	220000607	Distributor 3-2	2	1	3
7	160000248	Filter Dia. : 8	4	1	3
8	160000249	Filter Dia. : 10	2	1	3
9	130001927	Vacuum generator	1	1	3

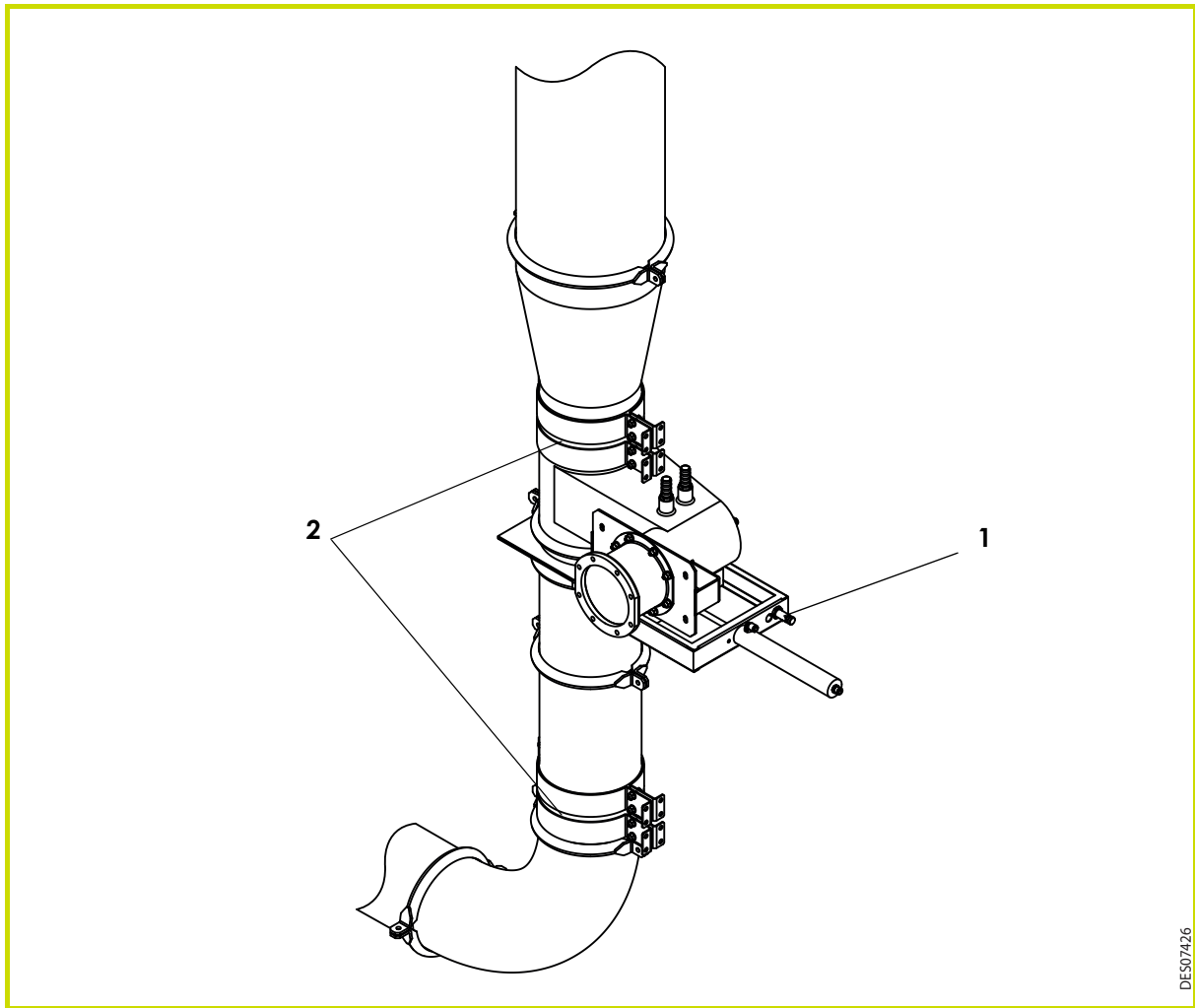
(*)

Level 1: Standard preventive maintenance

Level 2: Corrective maintenance

Level 3: Exceptional maintenance

7.1.3. Ventilation duct assembly



DE507426

Item	Part Number	Description	Qty	Unit of sale	Maintenance level for spare parts (*)
	910027665	Ventilation duct assembly	1	1	3
1	110002655	Inductive sensor	1	1	2
2	900016064	Flexible sleeve for sheath Dia.: 150	2	1	2

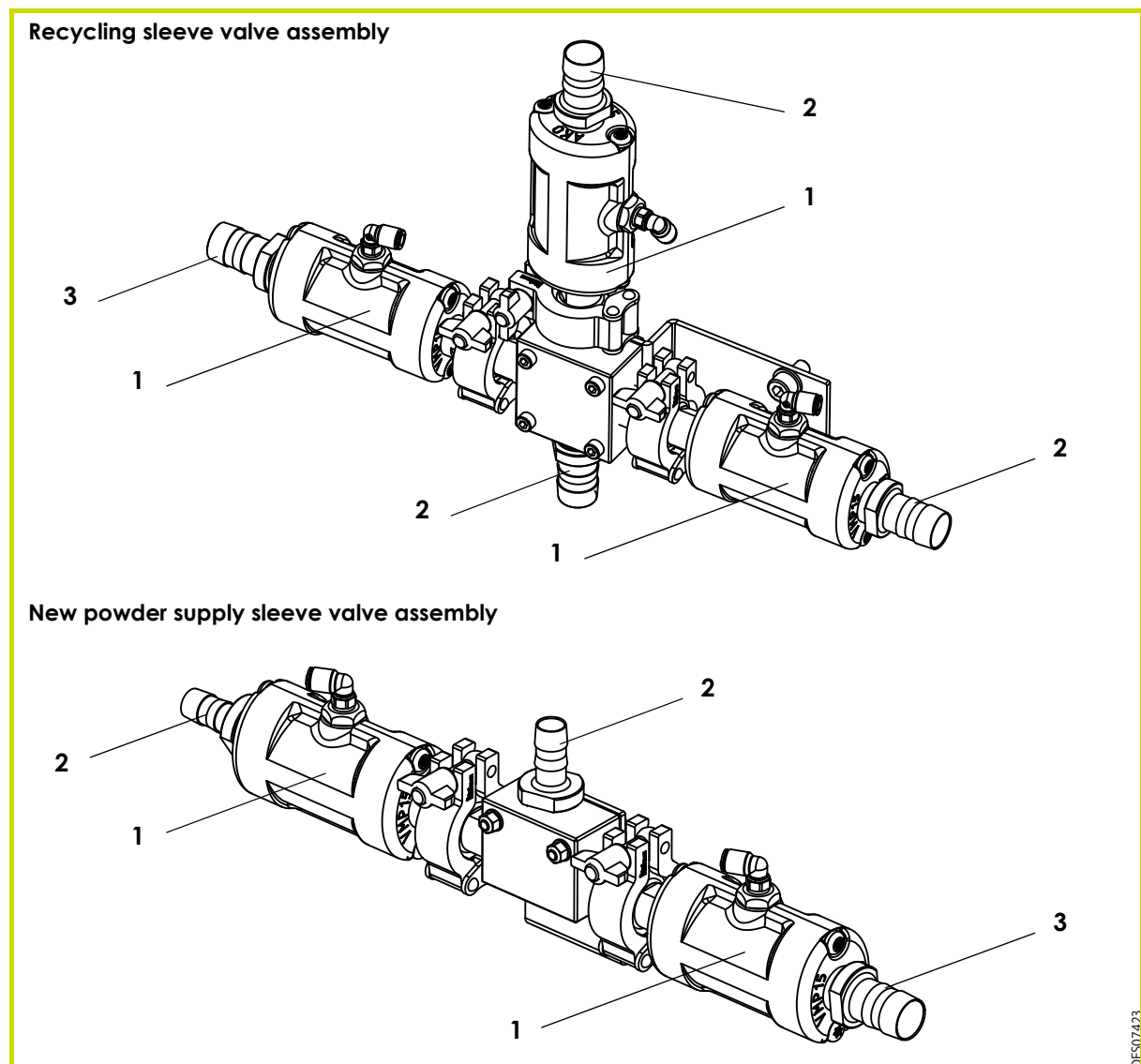
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Level 1: Standard preventive maintenance

Level 2: Corrective maintenance

Level 3: Exceptional maintenance

7.1.4. Recycling and new powder sleeve valve assemblies



Item	Part Number	Description	Qty	Unit of sale	Maintenance level for spare parts (*)
	910028081	New powder supply sleeve valve assembly	1	1	3
	910028082	Recycling sleeve valve assembly	1	1	3
1	220000532	Sleeve	2	1	2
2	900018417	Annular connection Dia.: 13	5	1	2
3	900018416	Annular connection Dia.: 19	2	1	2

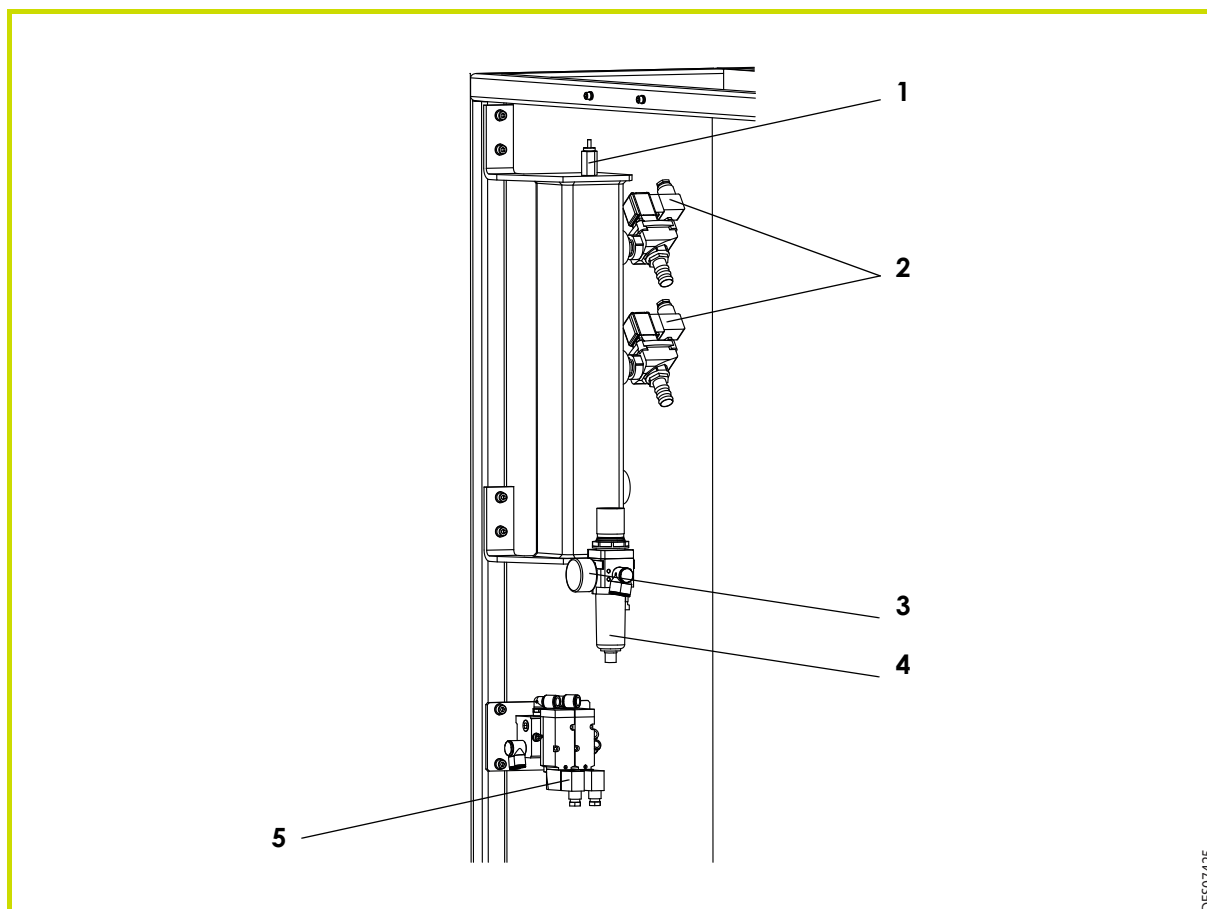
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Level 1: Standard preventive maintenance

Level 2: Corrective maintenance

Level 3: Exceptional maintenance

7.1.5. Set of solenoid valves for cleaning and blowing out



DE507425

Item	Part Number	Description	Qty	Unit of sale	Maintenance level for spare parts (*)
	910028124	Solenoid valve assembly for distribution cleaning	1	1	3
1	F1SSRL020	Safety valve	1	1	2
2	1300001792	Cleaning solenoid valve	2	1	2
3	220000431	Pressure gauge 0-12 bar	1	1	2
4	220000430	Regulator filter	1	1	2
	910028125	Solenoid valve assembly for blowing out the tank	1	1	3
5	220000538	Solenoid valve	2	1	2

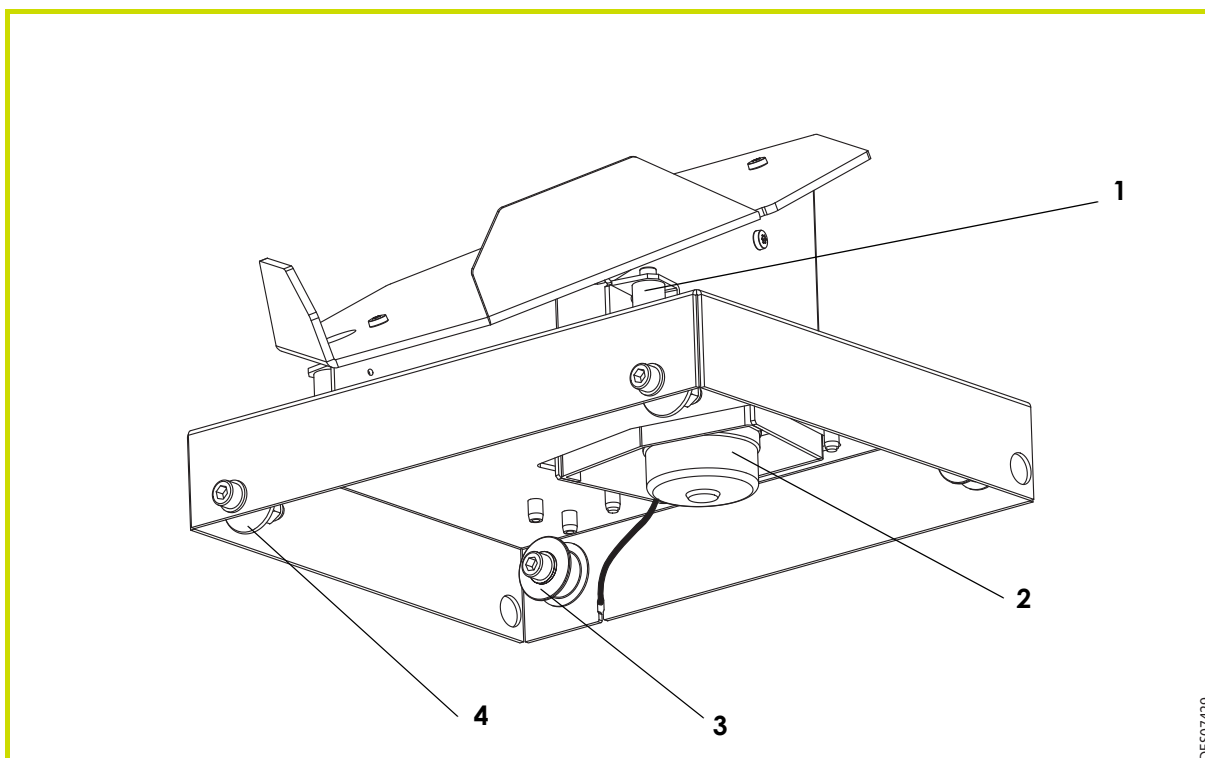
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Level 1: Standard preventive maintenance

Level 2: Corrective maintenance

Level 3: Exceptional maintenance

7.1.6. Vibrating table



Item	Part Number	Description	Qty	Unit of sale	Maintenance level for spare parts (*)
	910024392	Vibrating table	1	1	3
1	200000416	Silent block	4	1	3
2	11002495AT	Vibrator	1	1	2
3	900018046	Guide roller	2	1	2
4	900017070	Support roller	2	1	2

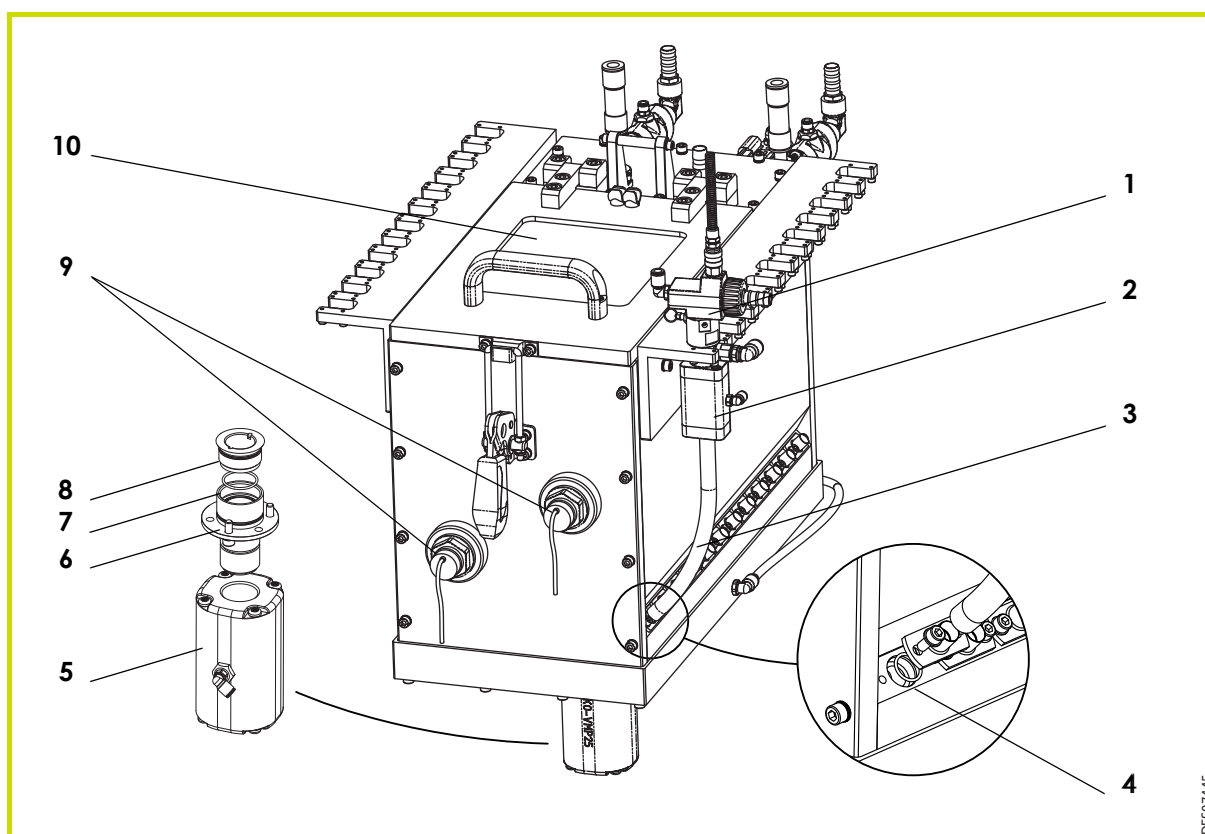
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Level 1: Standard preventive maintenance

Level 2: Corrective maintenance

Level 3: Exceptional maintenance

7.1.7. Tank
Front side :



Item	Part Number	Description	Qty	Unit of sale	Maintenance level for spare parts (*)
	910027997	Tank	1	1	3
1	910028786	Powder pump	24 max	1	3
2	910028325	Plunger supply sleeve valve	24 max	1	3
3	130001649-1	Antistatic powder tube	24 max	1	2
4	J2FTCF029	O-ring	24 max	1	1
5	220000539	Sleeve valve	1	1	3
6	J2CTPB364	O-ring	1	1	1
7	160000121	O-ring	1	1	1
8	J2FTDF341	O-ring	1	1	1
9	110001075AT	Capacitive sensor	2	1	2
10	900019767	Porous cover plate	1	1	1

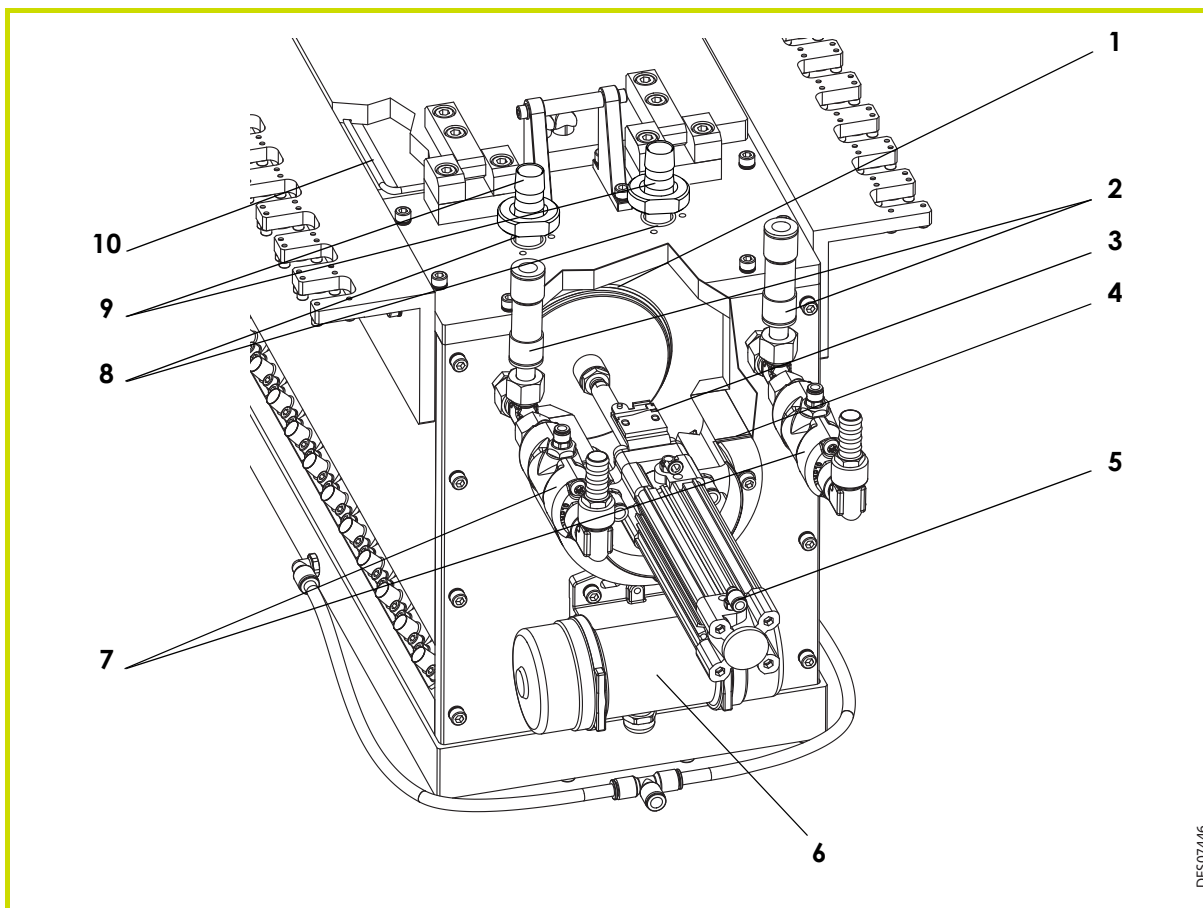
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Level 1: Standard preventive maintenance

Level 2: Corrective maintenance

Level 3: Exceptional maintenance

Rear side:



DES07446

Item	Part Number	Description	Qty	Unit of sale	Maintenance level for spare parts (*)
	910027997	Tank	1	1	3
1	J2CTPB660	O-ring	1	1	1
2	130001802	Non-return valve	2	1	3
3	130001929AT	Position switch	1	1	3
4	900018554	Flat seal	1	1	1
5	180000522AT	Cylinder	1	1	3
6	110002495AT	Vibrator	1	1	2
7	220000531	Sleeve valve	2	1	3
8	J2FTDF239	O-ring	2	1	1
9	900019765	Nipple	2	1	3
10	900017290	Cover seal	1	1	1

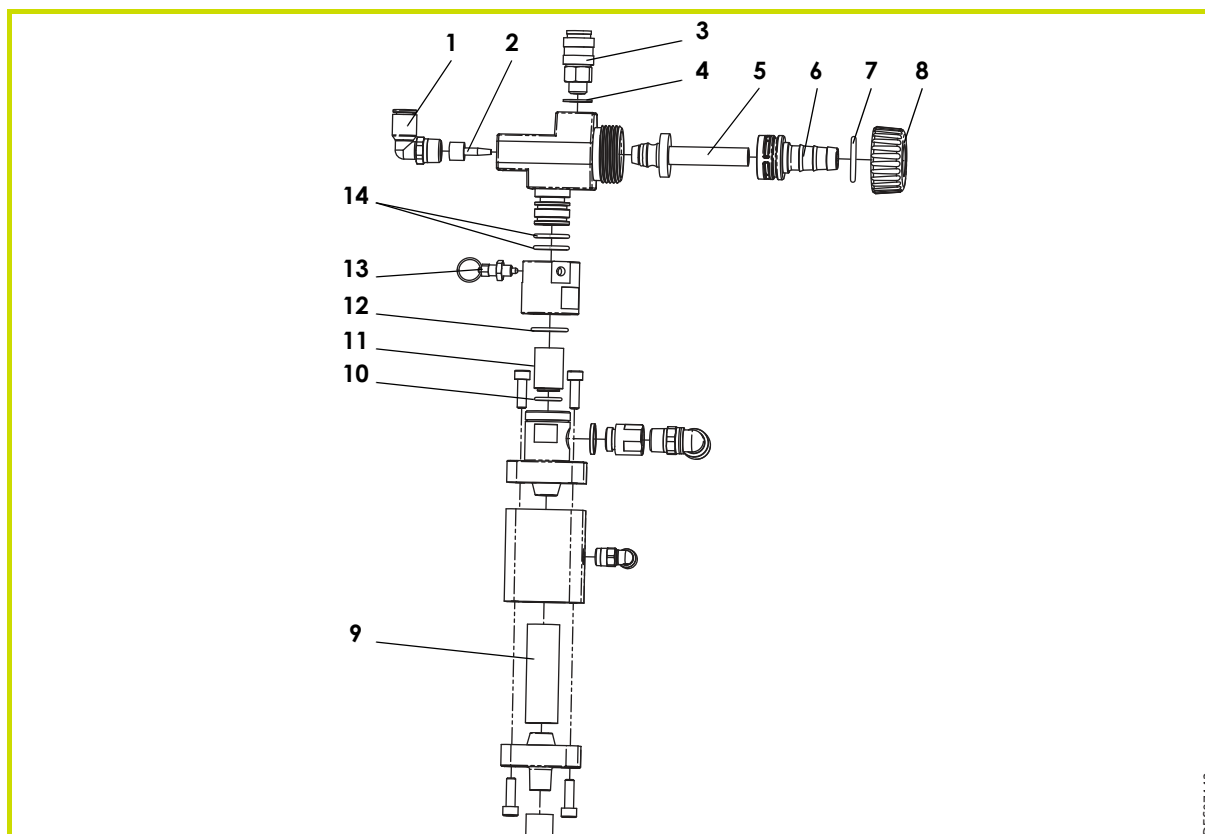
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Level 1: Standard preventive maintenance

Level 2: Corrective maintenance

Level 3: Exceptional maintenance

7.1.8. Powder Pump assembly



Item	Part Number	Description	Qty	Unit of sale	Maintenance level for spare parts (*)
	910028786	Powder pump	1	1	3
1	544808	Injector	1	1	1
2	F6RLCS393	Right-angle connector	1	1	2
3	F6RAJR025	Coupling fitting 1/8 BSP	1	1	3
4	EU9000854	Blue washer 1/8 BSP	1	1	3
5	910014388	Ejector	1	1	1
6	900008907	Powder exit nozzle	1	1	3
7	J2FTDF273	O-ring	1	1	1
8	900008904	Powder tip nut	1	1	3
9	220000533	Sleeve	1	1	2
10	J2FTDF155	O-ring	1	1	1
11	900017562	Porous tube	1	1	1
12	J2CTPB216	O-ring	1	1	1
13	200000408	Key	1	1	3
14	J2CTCN034	O-ring	2	1	1

(*)

Level 1: Standard preventive maintenance

Level 2: Corrective maintenance

Level 3: Exceptional maintenance

8. Revision index History

Rev.	Date	Description	Modification locating
A	02/2021	First Issue	