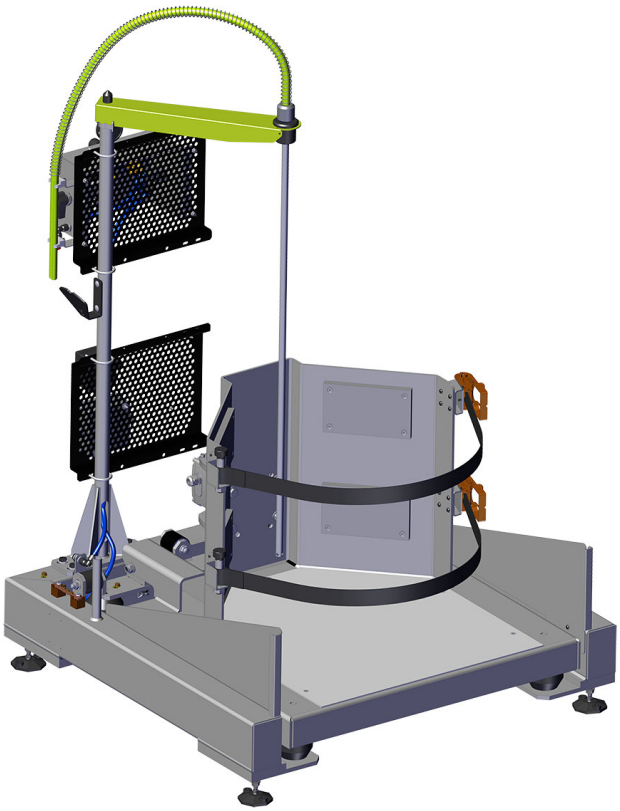
sames inocoat



200 L barrel vibrating table

Powder installation

Instruction manual

DRT7199

B - 2025/09

Services

Certification and referencing

Sames is certified as a training center by the DIRRECTE of the Auvergne Rhône Alpes region under the number 84 38 06768 38.
Our company provides, throughout the year, training courses allowing you to acquire the essential know-how for the implementation and maintenance of your equipment in order to guarantee its performance in the long term.
A catalog is available on request.

www.sames.com/france/fr/services-training.html

Line audits

As part of a technical assistance program for our customers using **Sames** equipment, the line audits are intended to help you optimize and control your production tool.
Our network of experts is continuously trained and qualified to provide our customers with technical expertise on the liquid or powder installations in which our equipment is integrated. The global environment of the production lines is taken into account during this technical audit.
A brochure is available for download:

www.sames.com/france/fr/services-service-contract.html

Maintenance program

An annual maintenance program (including or not the consumables to be replaced during each intervention) can be considered with the partnership of **Sames**. It is associated with a preventive maintenance plan established during a first audit visit which details the control points necessary to guarantee the performance of the installed equipment.

www.sames.com/france/fr/services-service-contract.html

Hotline

www.sames.com/france/fr/services-service-contract.html

sames inocoat

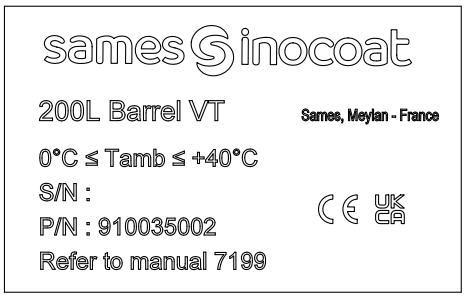
200 L barrel vibrating table

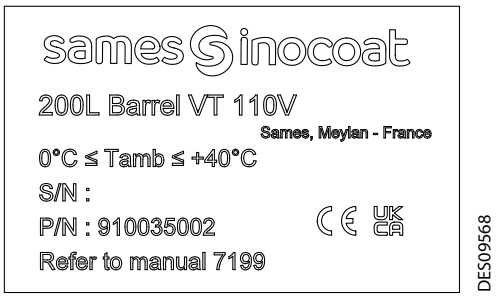
Inobooth Installation

1. Health and safety instructions

1.1. Marking

The **200 L barrel vibrating table** is intended for use out of an explosive atmosphere.





1.2. Meaning of pictograms

 Warning electricity	 Warning Automatic start-up	 Warning Hot surface	 Warning Explosive material	 General warning sign
 Warning High pressure	 Warning Crushing of hands	 Warning for explosive atmospheres	 Warning Flammable material	 Warning Corrosive subtance
 Warning Toxic material	 Warning Harmful products	 No access for people with active implanted cardiac devices	 Wear ear protection	 Wear a face shield
 Wear respiratory protection	 Wear safety footwear	 Wear protective clothing	 Wear protective gloves	 Wear head protection
 Opaque eye protection must be worn	 General mandatory action sign	 Connect an earth terminal to the ground	 Refer to Instruction manual	

1.3. Precautions for Use

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

Before any use of the equipment check that all operators:

• have previously be trained by the company **Sames**, 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

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.

This equipment may be hazardous if it is not used, disassembled and reassembled in accordance with the rules indicated in this manual and in any applicable European Standard or national safety regulations.

Equipment performance is only guaranteed if original spare parts distributed by Sames are used.

To guarantee an optimal assembly, spare parts must be stored in a temperature close to their temperature of use. Should the opposite occur, a sufficient waiting time must be observed before the installation, so that all the elements are assembled in the same temperature.

Wear ear protection must be worn when operating the vibrating table.

This equipment is intended for spraying powder paint only.

The equipment should only be used in an appropriate, unventilated area.

Within explosive atmospheres produced by the spraying process, only appropriate explosion-proof electrical equipment has to be used.

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 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.

4 Contact or inhalation of the products used with this equipment may be dangerous for personnel (see: safety data sheets for the products used). The pressure coating material or compressed air must not be directed at people or animals.

5 All conductive structures such as floors, powder spray station walls, ceilings, barriers, barriers, parts to be painted, powder dispensing tank placed in or near the work area and the ground terminal of the electro-pneumatic control module must be electrically connected to the grounding system for protecting the power supply.

6 The floor on which the operator works must be dissipative (bare concrete floor or metal grating). Never cover the floor with an insulating covering. In potentially explosive locations, floor assemblies must be dissipative in accordance with EN 61340-4-1.

7 The ambient operating temperature must be between 0 and 40°C.

8 It is imperative to connect the earth terminal of the vibrating table to the earth terminal of the powder coating installation (or of the powder coating booth) in order to ensure the safety of the operators and the correct operation of the powder coating equipment.

9 Use a lifting device (such as a pallet truck or forklift) with sufficient capacity to move the vibrating table. **It is imperative to carry out the handling from the rear of the vibrating table.**

A warning sign in a language understood by the operator, summarizing the safety rules described above, must be prominently displayed in the vicinity of the powder spray station.

1.5. Important recommendations

1.5.1. Ventilation

In general, powder coating equipment should only be put into operation when the ventilation of the installation is in operation. If the ventilation is switched off, toxic substances or dust may remain in the environment and cause a risk of fire, poisoning or irritation.

1.5.2. Ambient temperature

The equipment is designed to normally operate at an ambient temperature comprised between 0°C and + 40°C.
The storage temperature must never exceed +60°C.

1.5.3. Sound level

The equivalent weighted sound pressure level at the workstation is **86.5 dB**.

The weighted sound power level emitted by the machine when the value at the workstation is > 80 dB is equal to **89.8 dB.**

Measurement conditions: the equipment was operated with a 150 powder barrel.
Measurements were taken at different positions 1 m from the center of the vibrating table and at a height of 1 m in the production hall at **Sames** Meylan site in France.

Measurement method: the weighted equivalent sound pressure level indicated is in LEQ values, measured over observation periods of at least 30 seconds.

1.6. Guarantee

Under the guarantee, which applies only to the buyer, **Sames** 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** 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** 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** or a **Sames** control system modified by a third party without written permission from an authorized **Sames** technical agent,
- accidents such as: collision with external objects, or similar events,
- flooding, earthquake, fire or similar events,
- use of seals not complying with **Sames** recommendations,
- pollution of air circuits by fluids or substances other than air.

The **Sames** equipments are covered by a warranty (refer to the general sales conditions for its application).

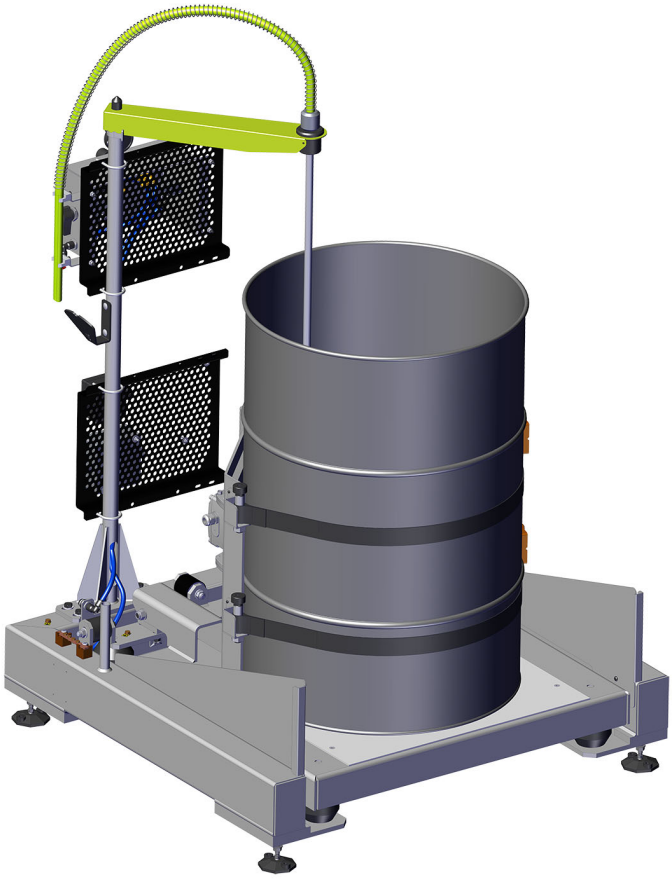
The guarantee does not apply to wearing parts.

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** be held responsible for physical injury or intangible damage, damage to brand image and loss of production resulting directly from its products.

2. Description

The **vibrating table** allows to support containers of new powder intended to continuously supply distribution tanks (or **Inosieve**) or **Inocenter** powder station.
The 200 L barrel is vibrated to facilitate powder flow during the pumping phase.



3. Characteristics

3.1. General

Dimensions	
Length	1150 mm
Width	1000 mm
Height	1415 mm
Empty weight	230 kg
Electrical data	
Vibrator supply voltage	230 VAC - UE version
	110 V - US version
Max. vibrator power	280 W
Frequency (Hz)	50 Hz - UE version
	60 Hz - US version
Pneumatical data	
Inlet pressure	7 bar +/-1
Air consumption	5 l for each use

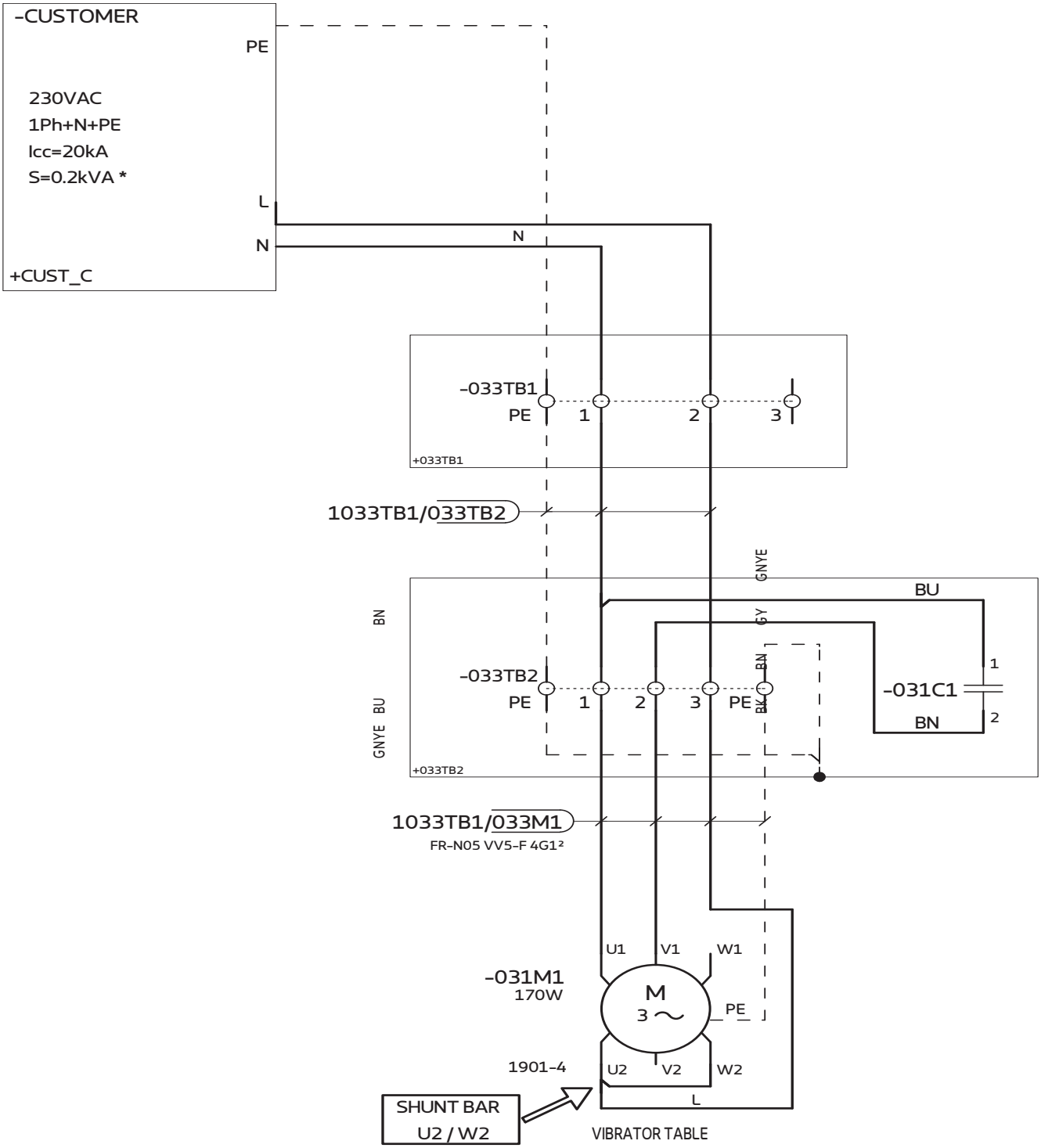
3.2. Operating principle

This assembly allows a continuous supply of new powder, via a transfer pump, to enable operation at constant powder level and also to reduce manual filling operations as much as possible.
The container is positioned on an inclined support, allowing maximum powder extraction when empty.
This support is equipped with an electric vibrator which facilitates the flow of the powder towards the bottom of the containers. A suction rod or plunger is immersed in the container to ensure the transport of the powder to the distributing tank.

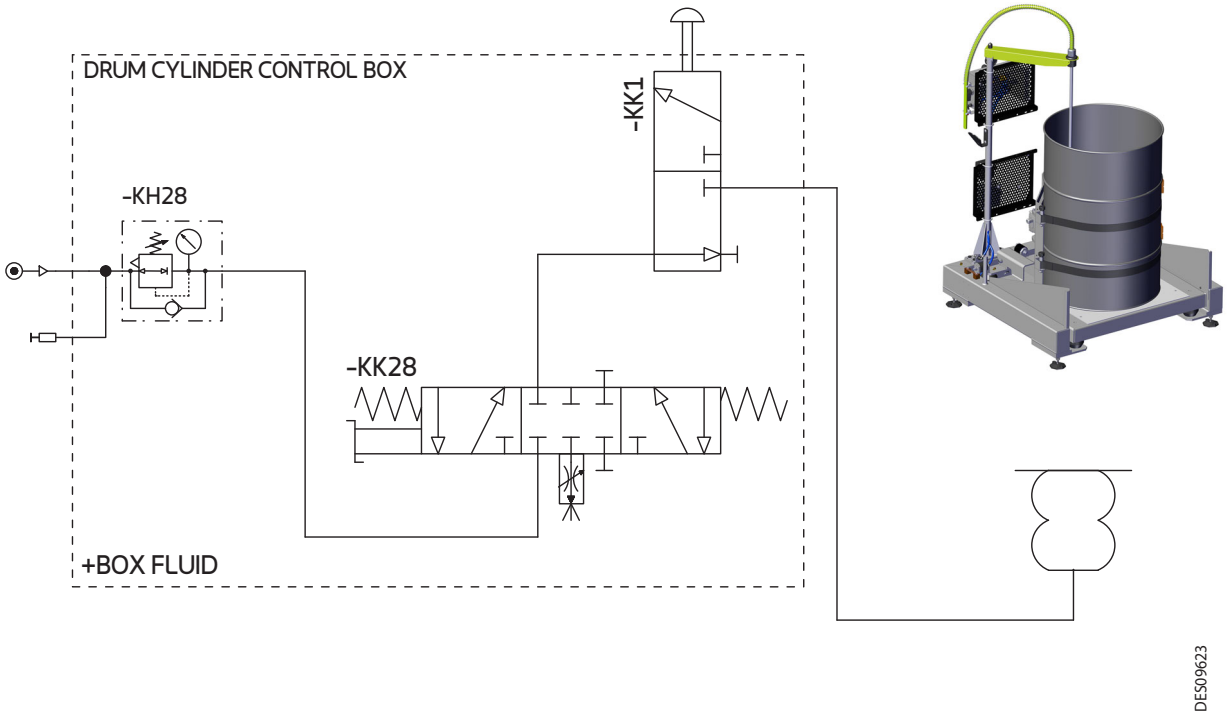
It is recommended to lift the barrel when less than a quarter of the contents remain.

4. Diagrams

4.1. Electrical diagram



4.2. Fluid diagram



5. Startup

5.1. Tools

The tools listed below should be available for product

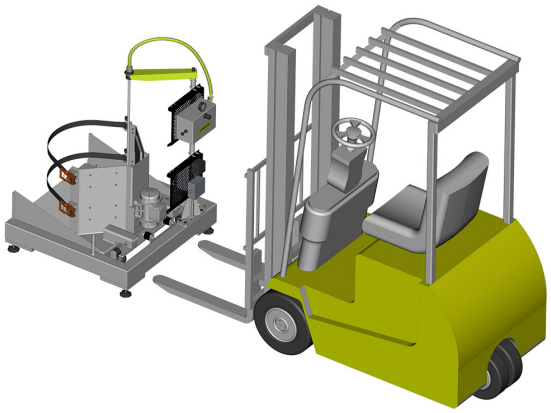
- Torx screwdriver.
- Flat wrench 10 mm.
- Pipe wrench 10 mm.
- Torque wrench.
- Blue threadlocker (normal) P/N: H2CPAL046.

5.2. Installation

5.2.1. Vibrating table handling equipment

Use a lifting device (such as a pallet truck or forklift truck) with sufficient capacity to move the vibrating table.

It is imperative to respect the position given in the diagram below when gripping the vibrating table.



5.2.2. Ground connection

It is imperative to connect the vibrating table to an earth ground at the customer's installation.

Connect the green/yellow protective earth cable attached to the vibration table to the customer's installation.

5.2.3. Electrical connection

Connect the terminal box to the power supply.

5.2.4. Pneumatic connection

Pneumatically connect the cylinder to the system's air supply.

5.2.5. Connection of weigh sensors (optional)

Connect the cable from the load cell control unit to the display.

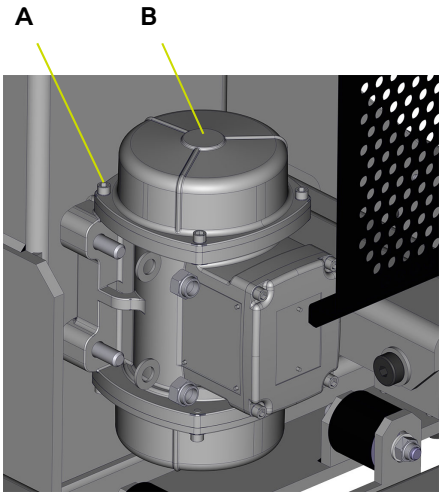
5.2.6. Connection from suction tube to transfer pump

Before starting up the **200 L Barrel Vibrating Table**, the suction tube must be connected to a transfer pump or pumping equipment by a conveying hose of a length defined by the user.

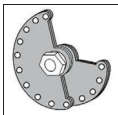
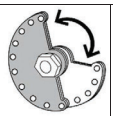
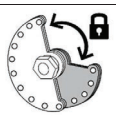
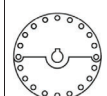
Using a hose not supplied by Sames may cause electrostatic discharge problems.

5.2.7. Vibrator power setting

By fault, the vibrator is set to 77%.



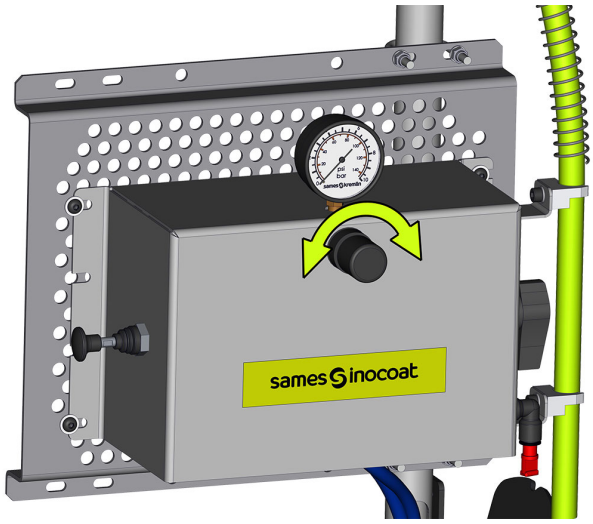
- **Step 1**: Remove vibrator from frame (see § 6.3.1 page 20).
- **Step 2**: Unscrew the 4 screws (A) on the top cover (B) and remove.
  Do the same for the lower cover.
- **Step 3**: Rotate the weights according to the power required.

 Nbre total de masses	 Nbre de masses à déplacer	 Nbre de masses fixes										
6	3	3	MAX	99 %	94 %	87 %	77 %	64 %	50 %	35 %	18 %	0

5.2.8. Cylinder pressure setting

- Adjust the raising cylinder pressure by turning the restrictor knob located in the cylinder control box.

  The pressure recommended by **Sames** is 2 bar.



6. Maintenance

Preventive maintenance is an essential part of production and ensures the reliability of the installation. As a reminder, the performance of equipment can only be guaranteed if a minimum of control and cleaning operations are performed on this equipment.

6.1. Periodic maintenance and checks

All cleaning operations should only be carried out using compressed air, cloth or possibly a brush. Water should never be used to clean the equipment.

Soiling and wear of the equipment 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 **Sames** equipment.

Procedure		Detail	Duration	Frequency
Cleaning				
A		Cleaning the vibrating table	2 min	8 hours
Replacement				
B	**B1**	Replacement of the vibrator	15 min	-
	B2	Replacement of the cylinder	30 min	-
	B3	Replacement of the weigh sensors (option)	30 min	-

6.2. Cleaning

6.2.1. Procedure A: Cleaning the vibrating table
Always refer to the health and safety instructions before carrying out any work on this equipment (see § 1 page 6).

Always wear safety glasses.
When handling solvents, wear gloves of a suitable resistant material.
Work in a well ventilated area when using solvents.

All cleaning operations must be carried out using compressed air at a maximum pressure of 2.5 bar, a cloth or, if necessary, a brush.
Never use water or solvents to clean the equipment.

- Clean vibrating table with compressed air every 8 hours.

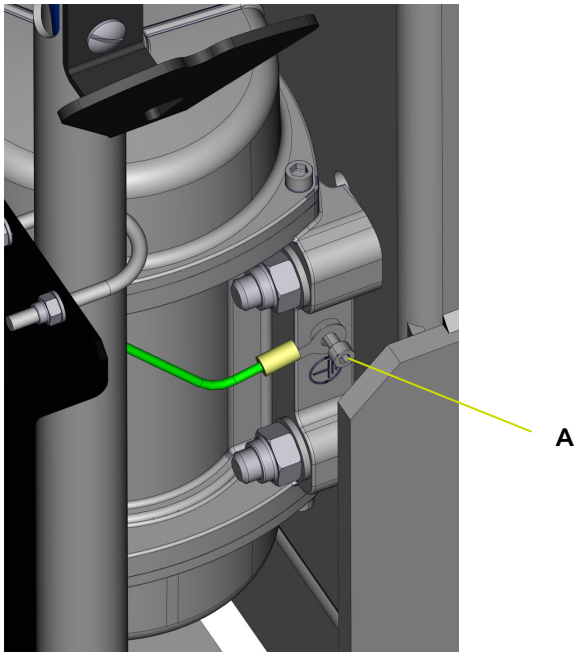
6.3. Replacement

6.3.1. Procedure B1: Replacement of the vibrator

Disassembling:

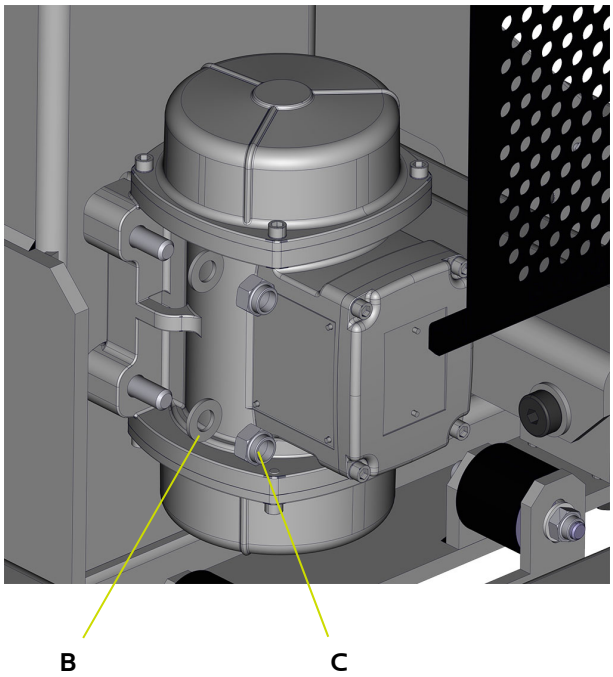
- **Step 1**: Disconnect the vibrator cable

- **Step 2**: Disconnect the ground wire on the side of the vibrator by unscrewing screw (**A**).



- **Step 3**: Unscrew the 4 vibrator fixing nuts (**C**) and remove the 4 washers (**B**).

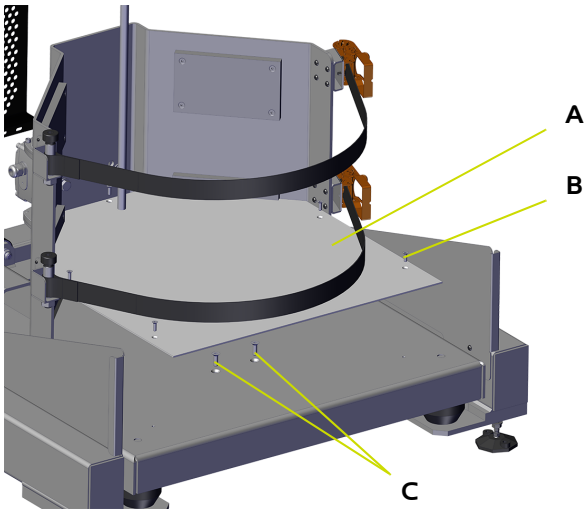
- **Step 4**: Remove the vibrator



To reassemble, proceed in reverse order, taking care to tighten the nuts crosswise as the approach is made, then tighten to a torque of 10 N.m.

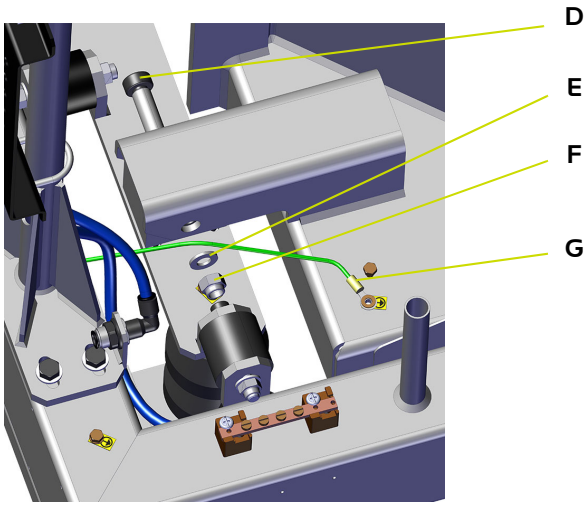
6.3.2. Procedure B2: Replacement of the cylinder

- **Step 1**: Remove the plate (**A**) by unscrewing the 5 M6x18 screws (**B**) from the floor, then unscrew the 2 M6x25 screws (**C**) securing the cylinder at the top.

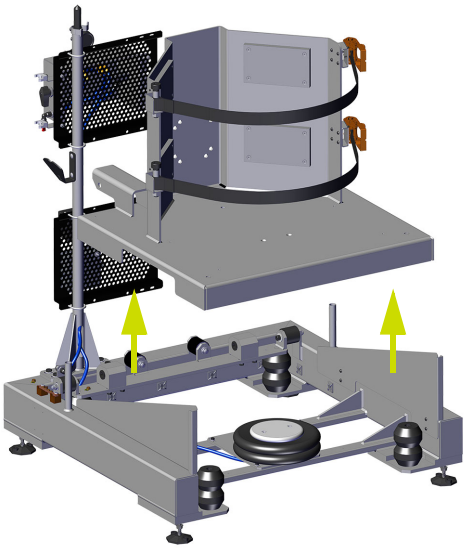


- **Step 2**: On the 2 connecting arms between the floor and the vibrating table frame, unscrew the nuts (**D**) and remove the washers (**E**), then remove the axles (**F**).

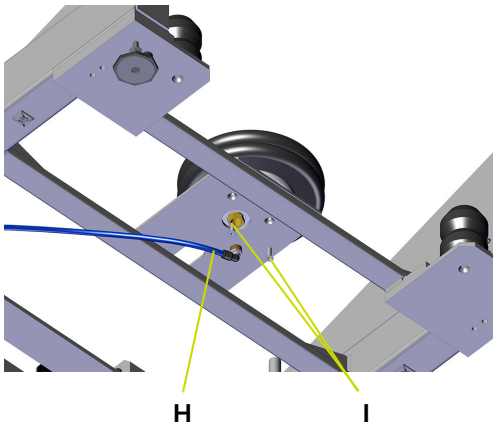
- **Step 3**: Disconnect the ground cable by unscrewing the grounding screw (**G**).



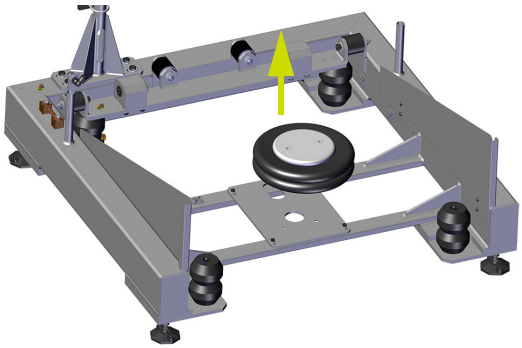
- **Step 4: Remove the floor assembly (95 kg) using suitable lifting equipment.**



- **Step 5**: Unscrew the 2 M6x25 screws (**I**) securing the bottom of the cylinder, then disconnect the air hose (**H**).



- **Step 6**: Remove and replace bellows cylinder.



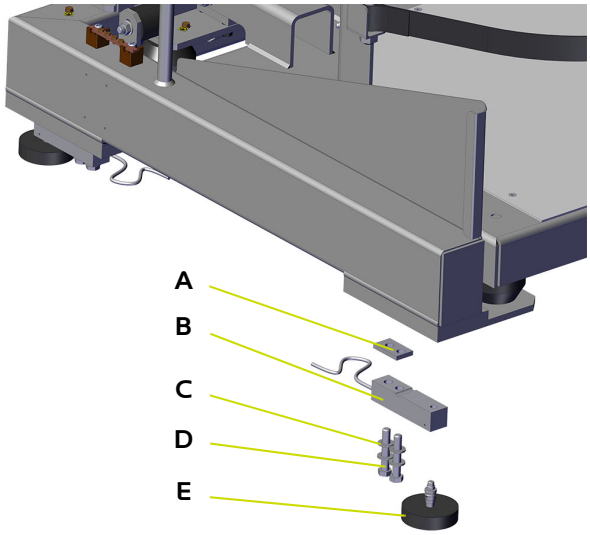
For the reassembly, proceed in the reverse order.

6.3.3. Procedure B3: Replacement of weigh sensors (option)

First, use a lifting device (such as a pallet truck or forklift truck) with sufficient capacity to raise the vibrating table.

It is essential to observe the vibrating table's gripping direction (see § 5.2.1 page 16).

- **Step 1**: Remove the adjustable foot (**E**) from the vibrating table.
- **Step 2**: Unscrew the 2 M12x65 screws (**D**) and remove the 4 washers (**C**) and wedge (**A**).
- **Step 3**: Remove sensor (**B**) and replace.



For the reassembly, proceed in the reverse order.

7. Troubleshooting

Symptoms	Probable Causes	Remedies
Powder comes out in jerks	Insufficient or too strong fluidization of the powder	Adjust the fluidization pressure
Powder does not come out	The hose is blocked	Blow hose if necessary. Avoid curves and rising/falling powder.
	Clogging at suction tube	Unclog the suction tube or pipe
Electrostatic discharges in contact with the tank	The powder hose is non-dissipative	Check that the tank is properly grounded. Check powder hose for dissipative properties

8. Spare parts list

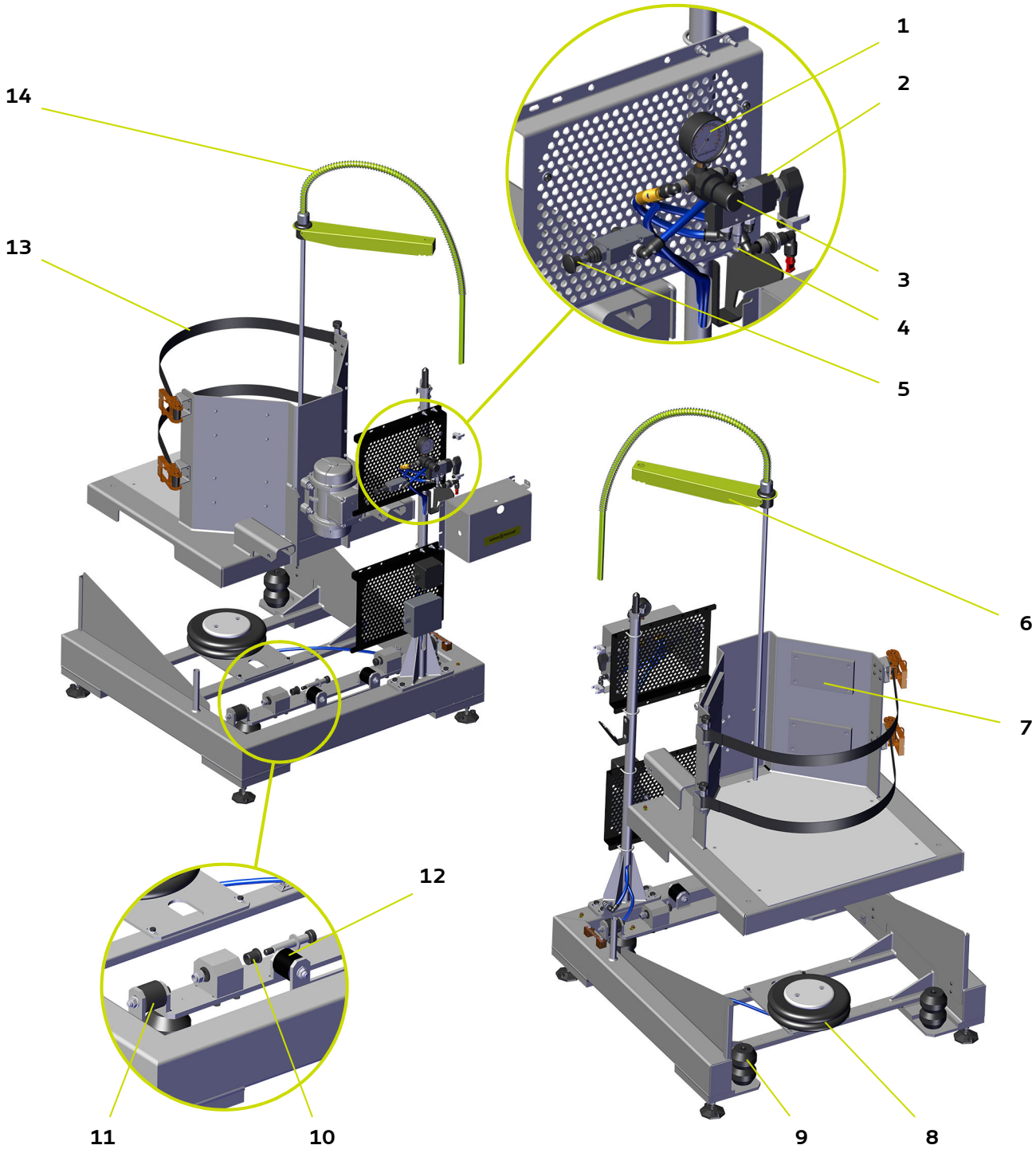
The spare parts are classified in 2 different types:

- **1st emergency parts**:
  The 1st emergency parts are strategic components which are not necessarily consumables but which in case of failure prohibit the operation of the equipment.
  Depending on the production line's commitment and the production rates imposed, the first emergency parts are not necessarily kept available in the customer's stock.
  Indeed, if an interruption of the production flow is possible, storage is not necessary.
  On the other hand, if the stop is not possible, the 1st emergency parts will be kept in stock.

- **Wearing parts**:
  Wearing parts are consumable components such as O-rings that undergo regular degradation over time during normal operation of the installation. It is therefore advisable to replace them according to a defined frequency and adapted to the operating time of the installation.
  The wearing parts must therefore be kept in the customer's stock.

To guarantee an optimal assembly, spare parts must be stored in a temperature close to their temperature of use. Should the opposite occur, a sufficient waiting time must be observed before the installation, so that all the elements are assembled in the same temperature.

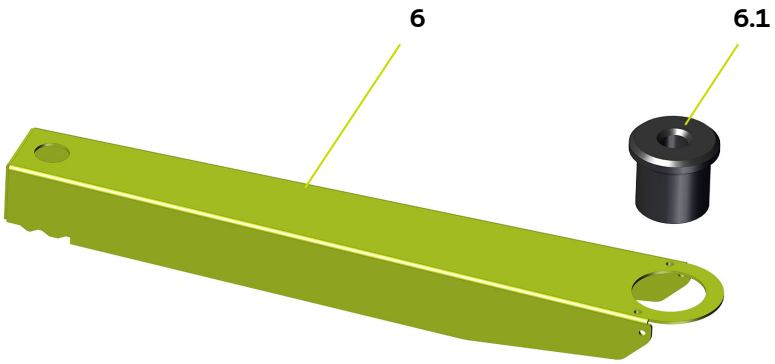
8.1. Vibrating table for 200 L barrel



Item	Part Number	Description	Qty	Unit of sale	Maintenance level for spare parts (*)
	910035002	**Vibrating table for 200 l barrel**	**1**	**1**	-
1	151080094	Manometer 0-10 bar	1	1	-
2	220000809	Manual distributor	1	1	-
3	91551	Regulator 1/4" 0.3-7 bar	1	1	-
4	F6RRAD080	Flow control fitting	1	1	-
5	151080093	Distributor 3/2 NF	1	1	-
6	**910037967**	**Suction tube support arm** (see § 8.1.1 page 27)	**1**	**1**	-
7	900020771	Barrel stop plate	4	1	-
8	180000615	Bellows cylinder	1	1	-
9	200000513	Silent block	4	1	-
10	200000549	Plain bearing	4	1	-
11	200000548	Elastic pad	2	1	-
12	Q4BPGS043	Elastic pad	2	1	-
13	240000553	Flange	2	1	-
14	900017738#	Antistatic hose POE green ∅ 13	not supplied	50 m	2

(*)
Level 1: 1st emergency parts
Level 2: Wearing parts

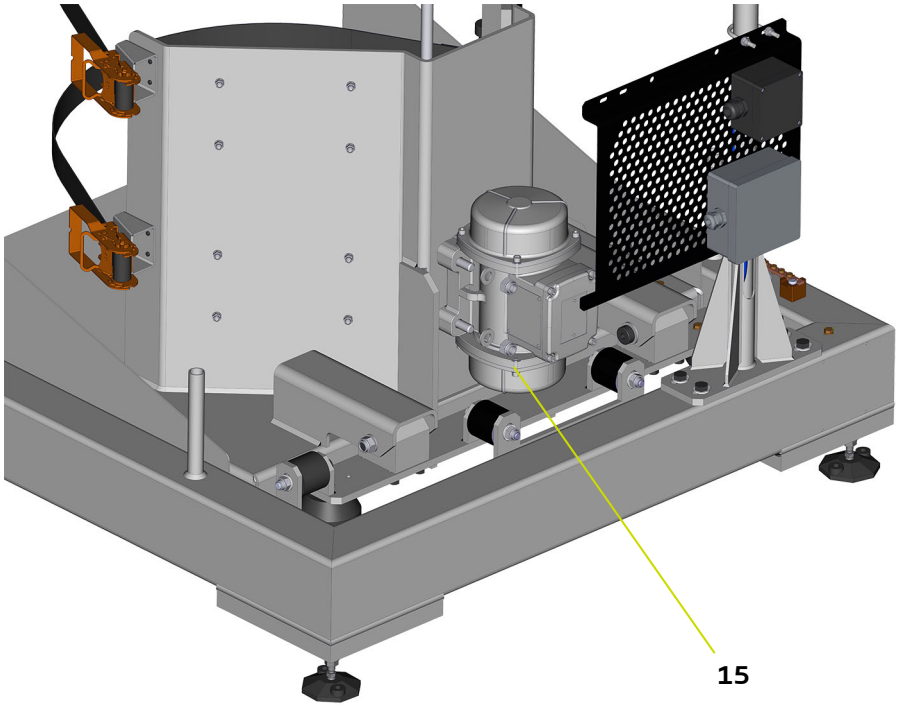
8.1.1. Suction tube support arm



Item	Part Number	Description	Qty	Unit of sale	Maintenance level for spare parts (*)
6	**910037967**	**Suction tube support arm**	**1**	**1**	**-**
6.1	900019619	Plunger tube guide	1	1	-

(*)
Level 1: 1st emergency parts
Level 2: Wearing parts

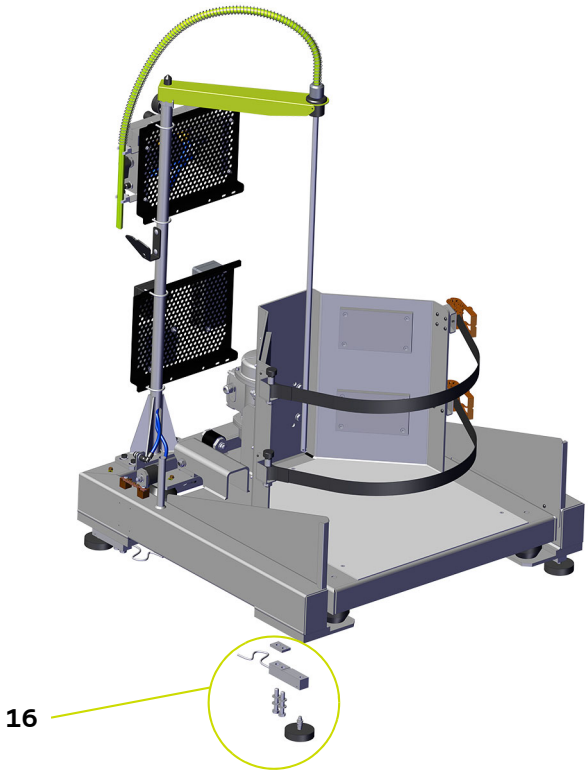
8.2. Vibrators



Item	Part Number	Description	Qty	Unit of sale	Maintenance level for spare parts (*)
15	180000619AT	Vibrator version Europe 230 V	1	1	1-2
	180000641AT	Vibrator version US 110 V	1	1	1-2

(*)
Level 1: 1st emergency parts
Level 2: Wearing parts

8.3. Weighing option



Item	Part Number	Description	Qty	Unit of sale	Maintenance level for spare parts (*)
16	910036365	Weighing option	1	1	-

(*)
Level 1: 1st emergency parts
Level 2: Wearing parts

9. Revision index History

Created by:		Checked by: S. Tadem	Approved by: S. Court	
Date	**By:**	**Index**	**Purpose of the modification and location**	
2024/10	O. Aubin	A	First issue	
2025/09	S. Court	B	Changing the marking label	§ 1.1

For almost a century, **Sames** has provided services and equipment
for the application of liquid and powder paints, adhesives and sealants
to bond, protect and beautify all types of surfaces.

We design, produce and market complete solutions - manual guns, automatic
and robotic applicators, pumps and dosing machines...

We offer solutions at the cutting edge of technological innovation, serving
industrial efficiency for the most challenging customers,
and environmentally friendly.

Sames bonds, protects and beautifies all materials.

More than a supplier, **Sames** is the partner of your performance.

We *Simply Apply the Most Efficient Solutions*.

Enjoy being the best together

sames

Headquarter: 13, Chemin de Malacher - CS70086 - 38243 Meylan Cedex - France
☎ +33 (0)4 76 41 60 60 - www:sames.com