



# **Inobell**

## Powder Projector

### Instruction manual

**DRT7061**

F - 2023/03

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## 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/en/services-training.html](http://www.sames.com/france/en/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/en/services-service-contract.html](http://www.sames.com/france/en/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/en/services-service-contract.html](http://www.sames.com/france/en/services-service-contract.html)



### Hotline

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## Inobell

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## 1. Health and Safety Instructions

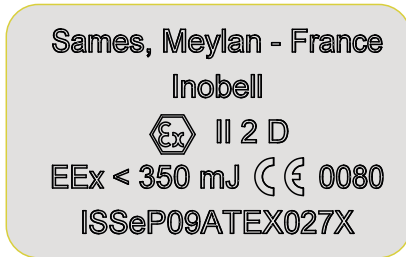
This document includes links to the following instruction manuals:

- [see DRT7060](#) for high voltage unit UHT165.
- [see DRT7062](#) for TCR control module.

### 1.1. Configuration of certified equipment

These user manuals define the configuration of certified equipment.

### 1.2. Marking on projector



P/N: \*

(Serial number)

**Note:** the first 2 digits correspond to the year of manufacture.

The X sign behind the EU type examination certification indicates that this equipment is subject to special conditions of use:

- The observance of the safety distance (between the HT parts of the projector and any earthed parts) specified in this instruction manual ensures the safe use of this equipment.

### Inobell ATEX configuration:

<b>Inobell Projector – P/N: 910007600</b> Powder Turbine – P/N: 910007593 Powder Bell cup – P/N: 910007602 Powder tube assembly – Réf.: 910007751	<b>High Voltage Unit UHT165 – P/N: 910007590</b>	<b>P/N Inobell</b>	<b>TCR Module P/N: 900005533</b>
<b>X</b>	<b>X</b>	<b>910007600</b>	<b>X</b>

### 1.3. Meaning of pictograms

				
Warning electricity	Warning Automatic start-up	Warning Hot surfaces	Warning Explosive material	General warning sign
				
Warning High pressure	Warning Crushing of hands	Warning for explosive atmospheres	Danger Matières inflammables	Danger Substance corrosive
				
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	

## 1.4. Precautions for Use

This document contains information that every operator must be familiar with and understand before using the **Inobell** powder projector. Its aim is to highlight situations that could result in serious damage and show precautions that should be taken to avoid them.



**Before using Inobell equipment, please ensure 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 spraying area.**

## 1.5. 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 dangerous if not used, disassembled and reassembled in accordance with the rules specified in this manual and any applicable European Standard or national safety regulations.**



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



**In order to ensure optimum assembly, spare parts should be stored at a temperature close to their operating temperature. If not, a sufficient waiting time must be observed before installation, so that all parts are assembled at the same temperature.**





This equipment must only be used in projection areas in accordance with standards EN 50176, EN 50177, EN 50223, or under equivalent ventilation conditions. It must be used only in well-ventilated areas, in order to reduce health, fire and explosion hazards. Daily checks that the ventilation system is working properly must be carried out.

**Only appropriate explosion-proof electrical equipment may be used in the potentially explosive atmospheres generated by the projection process.**

Before carrying out any cleaning or general work on projectors in the projection area, the high voltage generator must be switched off and the projector HV circuit discharged to the ground.

Never point coating product or compressed air towards persons or animals.

Suitable measures must be taken to prevent the presence of potential energy (air pressure or electrical) in the equipment during downtimes and/or periods when the equipment is not being used.

The use of personal protective equipment can limit the risks caused by contact with and/or inhalation of toxic products, gases, vapours, mist and dust likely to be generated by the equipment in use. The operator must follow the manufacturer's instructions for the coating product.

Electrostatic projection equipment must be serviced regularly in accordance with information and instructions given by **Sames**.

Equipment must only be used by personnel trained by **Sames**.

Powder projection must be carried out in a booth designed for the purpose. The ventilation system and powder-coating equipment must be interlocked such that powder cannot be projected if the ventilation is not working.

No naked flame, incandescent objects, devices or items likely to produce sparks should be used inside the paint booth.

No storage of inflammable products or their containers close to the booth or near the doors.



**The surrounding area must be kept clear and clean.**



The use of very high voltage increases the risk of sparks. The mechanical and electrical characteristics of Sames projectors and high voltage electrostatic generators are designed to minimize this risk. Although the HV electrode is the only accessible part, the HV part of the projector head must be isolated from any grounded parts by at least X mm (cf. table [see § 3.3 page 16](#)).

A careful check must be performed to ensure that any conductive or semi-conducting part closer than 2.5 m to the projector is correctly grounded.

Each substrate must have a ground resistance of less than or equal to 1 MΩ (measurement voltage of at least 500V). This resistance value must be regularly checked.

All conductive enclosures of electrical equipment and conductive components in potentially explosive atmospheres must be grounded by connecting them to the grounding terminal.

Finally, for the same reasons, the projection area must have an anti-static floor, such as concrete, metal duckboard, etc.

Correct operation of the overcurrent protection (**di/dt**) must be checked daily. This check must be carried out in a non-explosive atmosphere, by placing a ground wire near the projector electrode with the projector switched on (the operator must be grounded). The control module should switch to fault state.

All projector equipment must be located outside hazardous areas, and its operation must be interlocked with that of the booth extraction fan. Correct operation of the control system must be checked once a week.

A warning sign must be placed in full view near the projection area.

## 1.6. Important recommendations

### 1.6.1. Compressed air quality

The air must be filtered so as to provide long service life and prevent contamination during painting.

The warranty does not cover faults caused by unclean, unfiltered bearing air resulting from non-compliance with the technical recommendations ([see § 3.2.3 page 16](#)).



**If air is not correctly filtered, the bearing may become fouled leading to a turbine operating fault.**

### 1.6.2. Locking

The TCR module does not allow powder projection if the bell cup rotation speed is less than 3000 rpm.

### 1.6.3. High Voltage

Disable the high voltage if the Inobell projector is not operated for a prolonged period (in the event of conveyor shutdown, no objects to be painted, missing parts, etc.) to prevent excessive air ionisation.

### 1.6.4. Maximum speed

The TCR module permits a maximum setpoint of 8500 rpm. If the speed reaches 12,000 rpm, the module stops projection.

## 1.6.5. Powder



**The use of sifted powder is preferable.**

## 1.6.6. Sound level

The weighted equivalent continuous sound pressure level is  $67 \pm 1.5$  dB(A).

### **Measurement conditions:**

The apparatus was operated to maximum capacity and the measurements were taken in the 'API' paint test booth (sealed booth with glass panels) in the **Sames** R&D laboratory in Meylan, France.

### **Measurement method:**

The weighted equivalent sound pressure level ( $67 \pm 1.5$  dB(A)) is a LEQ value measured during observation periods of at least 30 seconds.

## 1.7. Guarantee

Under the guarantee, which applies only to the buyer, **Sames** undertakes to repair malfunctions resulting from design, materials or manufacturing faults, within the limits of the provisions 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 specifically, the guarantee does not cover damage resulting from:

- customer 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,
- starting up rotating parts that are unbalanced (excess powder on bell cup, damaged bell cups),
- contamination of air circuits by fluids or substances other than air.

The **Sames Inobell** projector is covered by a one-year guarantee for use in two 8-hour shifts under normal operating conditions.

The guarantee does not apply to wearing parts such as atomizing bell cups, seals, etc.

The guarantee start date shall be deemed to be the date of first operation or of the provisional acceptance report.

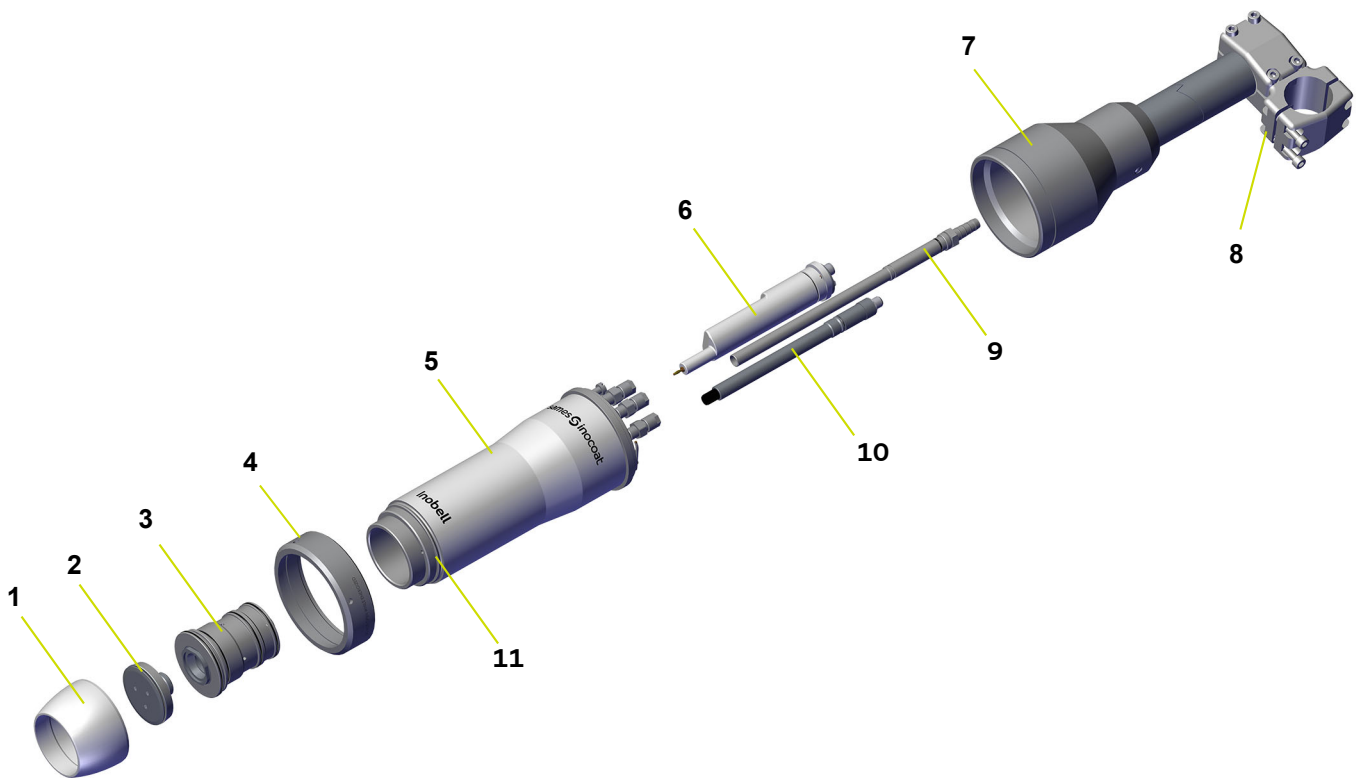
Under no circumstances, either in the context of this warranty or in other contexts, shall **Sames** be liable for physical injury, property damage, damage to brand image or loss of production resulting directly from its products.

## 2. Description

### 2.1. General

The Inobell projector is an automatic, electrostatic powder-coating projector equipped with a rotating bell cup specially designed for application of powder to all surface types and particularly for flat surfaces. It can apply different powders with excellent thickness consistency and high transfer efficiency, with high powder flow rates. The Inobell projector has been designed for easy maintenance (easily removable powder turbine and bell cup, integrated HVU and simplified wiring, etc).The whole assembly is easy to clean.

#### Main components:



Item	Description
1	Cover
2	Bell cup
3	Powder turbine
4	Turbine nut
5	Body
6	High Voltage Unit "UHT165"
7	Support tube
8	Fixing nut
9	Powder pipe
10	Speed detector
11	Counter-electrode

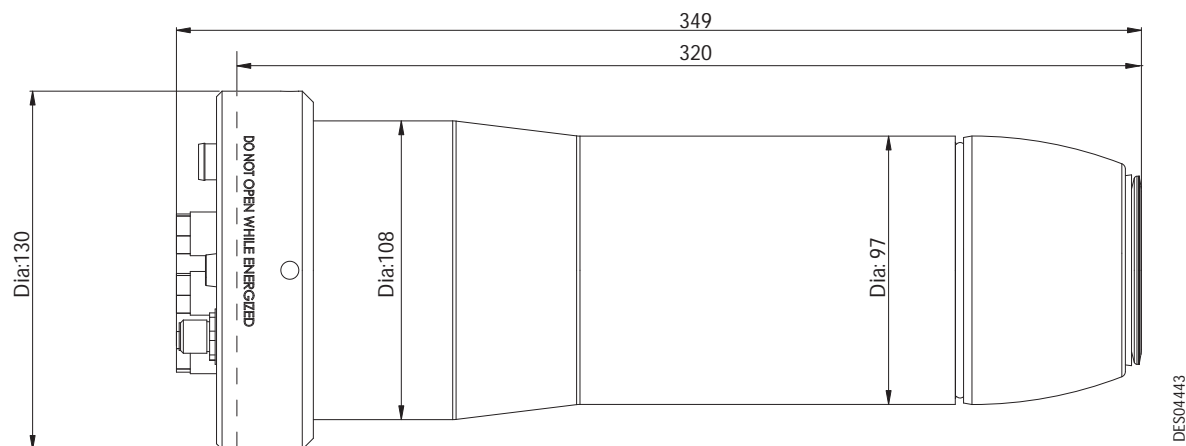
## 2.2. Component functions

Part	Function
Cover	Directs shaping air from the distributor, shapes the powder cloud and promotes powder transfer to the part to be painted. Prevents return of powder to the projector. Secures the turbine in place.
Bell cup	Projects different types of powder. The bell cup has two main functions: - Forms a homogeneous cloud with the powder spray. - Charges powder cloud efficiently, regardless of powder flow rate. This provides excellent application quality and high application transfer efficiency for high flow rates
Powder turbine	Bell cup rotation is driven by a pneumatic motor fitted with a speed measuring device.
Body assembly	This unit houses the air, powder and HV circuits.
High Voltage Unit UHT165	High voltage power is supplied to the projector via the High Voltage Unit. Projected particles are electrically charged and thus attracted to the surface to be painted, which is grounded.
Support tube	Secures the projector to a fixed or mobile arm.
Fixing nut	Allows to fix the support tube to the robot
Powder pipe	Powder travels through the powder pipe to reach the bell cup.
Speed detector	Measures turbine rotation speed.
Counter-electrode	It is grounded with a high resistance and collects excess ions which are not required for powder charging.

### 3. Technical characteristics

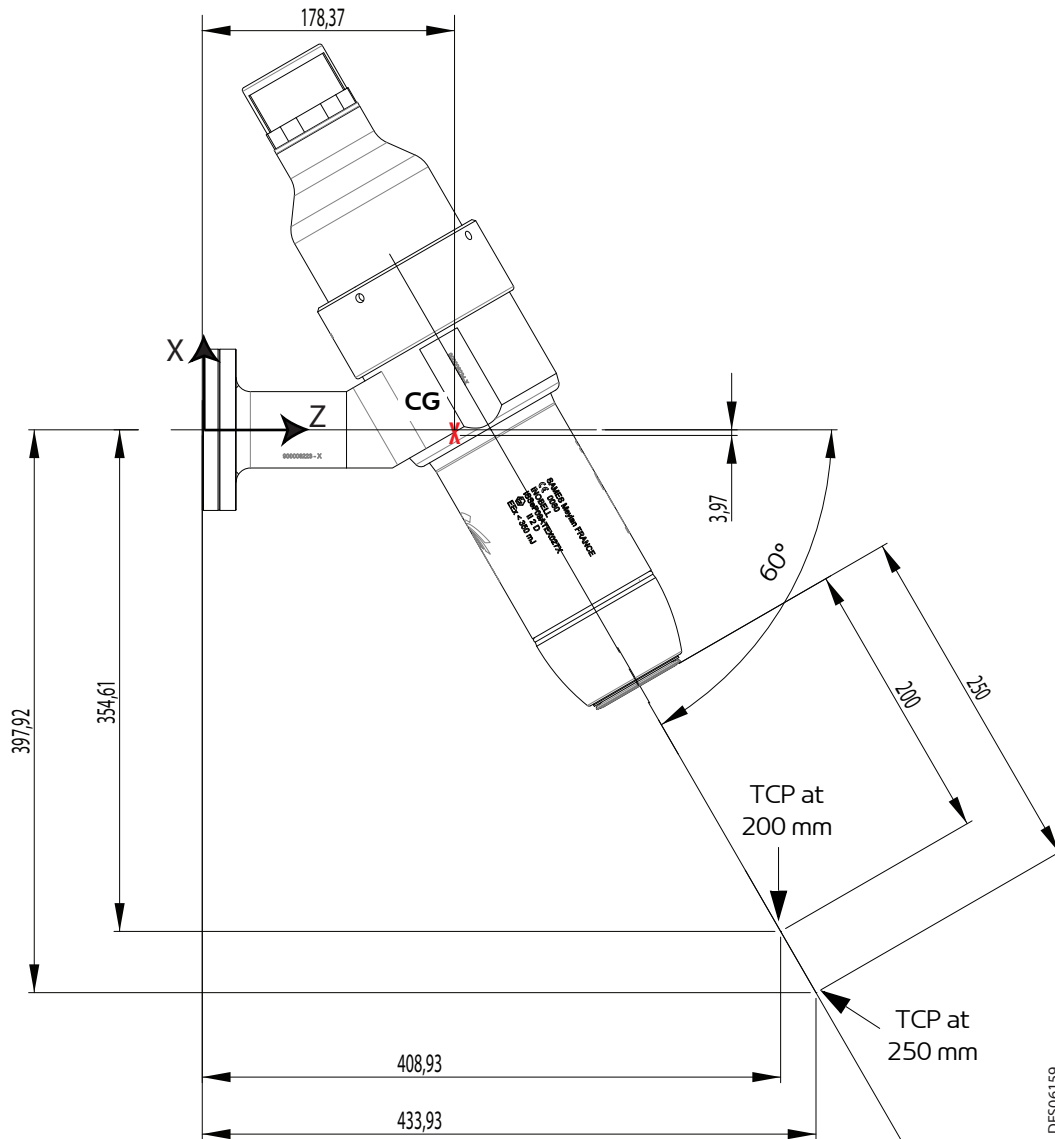
#### 3.1. Dimensions

##### 3.1.1. Straight version



**Weight:** 3.6 Kg

3.1.2. Robotic version



DES06159

Output CS: Wrist Payload CG location

**TCP** : Tool Center Point

**Weight:** 5.2 kg

Gravity center (**CG**) in millimeters

(X,Y,Z) = (-3.97; 0.61; 178.37)

**Main inertia axis (mm) and moments (kg x mm<sup>2</sup>), measured to the gravity center:**

$I_x = (-0.73, -0.00, 0.69)$	$P_x = 20378.65$
$I_y = (0.69, 0.02, 0.73)$	$P_y = 61039.55$
$I_z = (0.01, 1.00, -0,01)$	$P_z = 73499.91$

**Inertia moments (kg x mm<sup>2</sup>), measured to the output C.S:**

$I_{xx} = 39511.13$	$I_{xy} = 232.69$	$I_{xz} = -20296.28$
$I_{yx} = 232.69$	$I_{yy} = 73496.64$	$I_{yz} = 41.40$
$I_{zx} = -20296.28$	$I_{zy} = 41.40$	$I_{zz} = 41910.34$

### 3.2. Operating and Setting Characteristics

#### 3.2.1. General

Maximum operating voltage	75 kV
Recommended effective rotation speed	V (7500 rpm)
Max. rotation speed under normal conditions	V+ (8500 rpm)
Min. rotation speed under normal conditions	V- (6500 rpm)

**Paint:**

Recommended max. powder flow rate	30 kg/h max.
-----------------------------------	--------------

#### 3.2.2. Air consumption

Air flow required for bell cup rotation	About 40 NL/min under stable conditions (regardless of speed setpoint) 110 NL/min max. under transient acceleration conditions
Shaping air flow	0 to 80 NL/min (proportion of 0% to 100% at setpoint)
Bearing protection air flow	60 NL/min

#### 3.2.3. Pneumatic characteristics

**Required characteristics for compressed-air supply according to standard NF ISO 8573-1:**

Dew point at 6 bar (87 psi)	Class 4, i.e. 3°C (37°F)
Maximum oil concentration	Class 1, i.e. 0.01 mg/m <sup>3</sup>
Maximum particle size of solid contaminants	Class 3 i.e. 5 μm
Maximum concentration of solid contaminants	5 mg/m <sup>3</sup>

**Note:** m<sub>0</sub><sup>3</sup>: values given for a temperature of 20°C (68°F), at an atmospheric pressure of 1013 mbar.

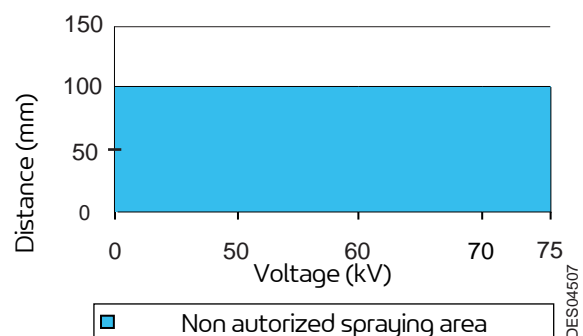
### 3.3. Safety characteristics

Inobell with high voltage unit UHT165:

**Authorized spraying distance**

Tension (kV)	Distance (mm)
0	100
50	
60	
70	
75	

Safety distance "X" as a function of voltage





### 3.4. Operating principle for powder projector

The **Inobell** projector is an electrostatic powder projector equipped with a rotating bell cup designed for automatic powder-coating installations. It is equipped with an air-driven turbine mounted on bearings.

There is an ionizing electrode on the front of the bell cup that is maintained at a high negative electrical potential. This electrode serves to electrically charge the powder while it flows from the end of the **Inobell** projector to the part to be painted.

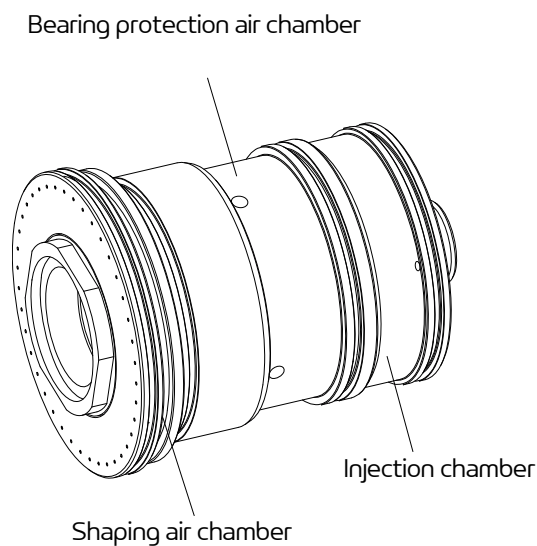
In addition, a counter-electrode efficiently charges the powder, regardless of the distance between the **Inobell** projector and the part to be painted and also serves to avoid certain undesirable effects caused by excessive accumulation of electrical charge on the part to be painted.

To ensure that the electrically charged powder paint adheres to the part to be painted, the part must be conductive (or semi-conducting) and correctly grounded (electrical resistance of the part to be painted must have a ground resistance that is less than 1 MΩ).

The TCR module controls all pneumatic and electrical functions necessary for operating the projector (HV, shaping air, turbine rotation, powder pump) ([see DRT7062](#)).

#### 3.4.1. Turbine

The turbine has 3 round supply chambers: rotation injection air, bearing protection air and shaping air.



DES04508

#### 3.4.2. Turbine Rotation Speed

The turbine rotation speed is measured using the speed detector housed in the body of the projector. It detects markers on the turbine's moving parts. This new technology provides extremely precise and reliable speed measurement, and needs no maintenance.

## 4. Installation

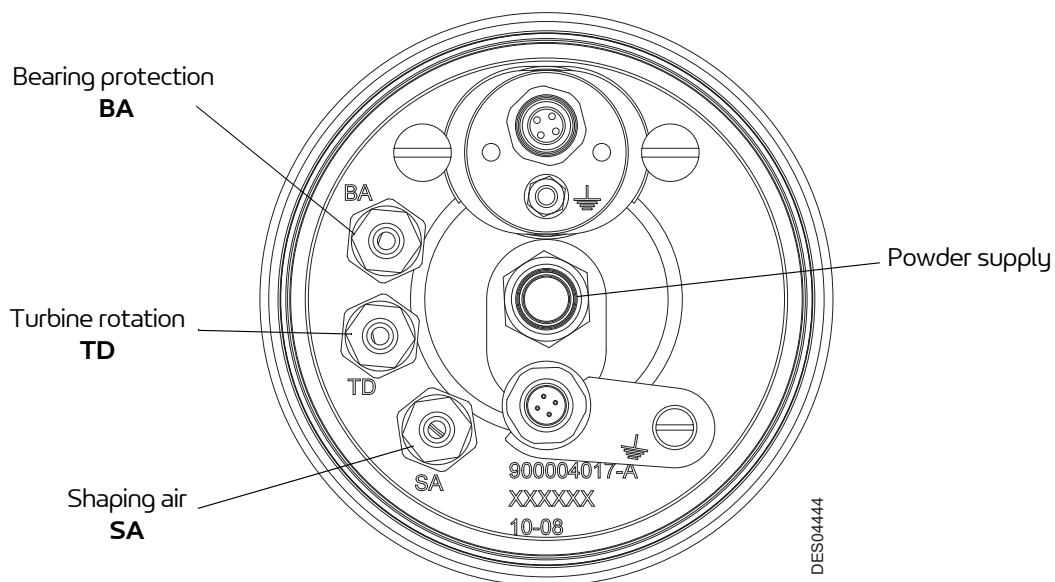


Before operation, ensure that installed equipment complies with safety regulations ([see § 1.5 page 8](#)).

### 4.1. Installation of Inobell projector

- Screw the nut onto the support stem, put the projector support arm in place and screw on the four nut bolts.
- Insert air hoses, wires and the powder supply hose into the support arm.
- Connect air and paint feed hoses to the projector.
- Connect the High Voltage Unit UHT165 and the speed detector. Fully tighten both bolts manually.
- Screw the projector nut onto the support arm then secure it using the tool (P/N: W6CERG036) by inserting the tool pin into a hole in the nut.

### 4.2. Connections

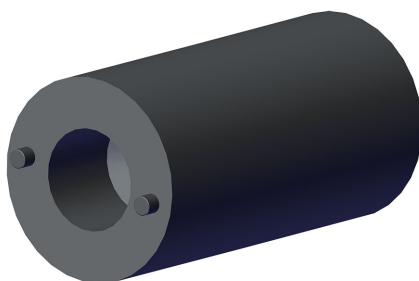


Marking	Function	Hose characteristics
SA	Shaping air	5.5/8 Flexible polyurethane
TD	Turbine rotation air	5.5/8 Flexible Polyurethane
BA	Bearing protection air	5.5/8 flexible polyurethane
	Powder supply	<a href="#">(see § 8.6 page 42)</a>

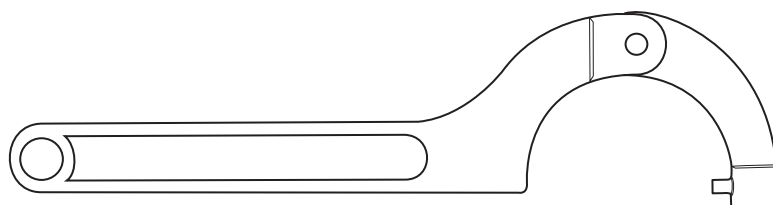
## 5. Tools



Part number	Description	Qty	Unit of Sale
900004377	Turbine shaft holding tool for bell cup removal	1	1



Part number	Description	Qty	Unit of Sale
900005634	Drive vane fitting/ removal tool and bearing nut and powder pipe	1	1



DES02179

Part number	Description	Qty	Unit of Sale
W6CERG036	Projector nut fitting/removal tool	1	1



Part number	Description	Qty	Unit of Sale
240000138	Powder pipe removal tool	1	1



Part number	Description	Qty	Unit of Sale
H1GMIN017	White vaseline (100 ml)	1	1
H1GSYN037	Dielectric grease for high voltage unit	1	1

**Additional tools and accessories required:**

The tools listed below should be available for product installation and maintenance operations..

- Hose cutter (P/N: W3SCTU002).
- Screwdriver (medium, large).
- 17mm ring wrench
- Torque wrench

## 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.



**Soiling and wear of the Inobell projector caused by the transfer of powder paint depends on the nature of the powder paint, the operating and application conditions and the production rate.**

### 6.1. Summary of maintenance operations

The maintenance intervals indicated in the procedures below are only indicative. The user will have to create his own maintenance schedule as he uses the **Sames** equipment.

Procedure	Description	Time required	Frequency
<b>Cleaning</b>			
<b>A</b>	Clean projector, air shroud and bell cup exterior	5 min	8 hours
<b>B</b>	<b>B1</b> Clean bell cup	5 min	40 hours
	<b>B2</b> Clean powder pipe	10 min	40 hours
<b>Replacement</b>			
<b>C</b>	<b>Turbine maintenance</b>		
	<b>C1</b> Replace bearings		6 months
<b>D</b>	<b>Body maintenance</b>		
	<b>D1</b> Replace speed detector sleeve (exceptional)	15 min	-
	<b>D2</b> Replace powder pipe	15 min	-
	<b>D3</b> Replace counter-electrode components	15 min	-
	<b>D4</b> Replace HV brush contact assembly	15 min	6 months
	<b>D5</b> Replace High Voltage Unit UHT 165	15 min	-

## 6.2. Preventive maintenance plan – PMP 7061

[see § 10.1 page 46](#)

The objective of the proposed preventive maintenance plan is to define in an exhaustive way, the verification, replacement and cleaning actions of the installed **Sames** equipment.

In order to anticipate breakdowns and malfunctions that may be due to technical deviations of the installation, the preventive maintenance plan attached to the user manual lists the routine maintenance operations necessary for better comfort in the use of the production tool.

Depending on the skills, area of responsibility and accreditation of each person involved, the preventive maintenance plan can be divided into two distinct levels: level 1 and level 2:

- **Level 1:** first level maintenance is essentially composed of visual control and cleaning operations of some elements of the equipment. To limit this level, only the specific tools supplied with the equipment will be used. This first level of maintenance is generally taken care of by paint operators or installation managers.
- **Level 2:** second level maintenance completes the first level by more complex dismantling operations requiring electrical engineering tools. This second level is generally handled by the factory maintenance department.

## 6.3. Cleaning

These preventive maintenance operations may be carried out in the paint booth. Always refer to the health and safety instructions before carrying out any work ([see § 1.5 page 8](#)).



Before disconnecting the projector, switch off the TCR module power supply (to prevent malfunctions).

### 6.3.1. Procedure A: Projector exterior

Water or solvents must never be used for cleaning the equipment. Cleaning operations must only be carried out using compressed air and clean, soft cloths.

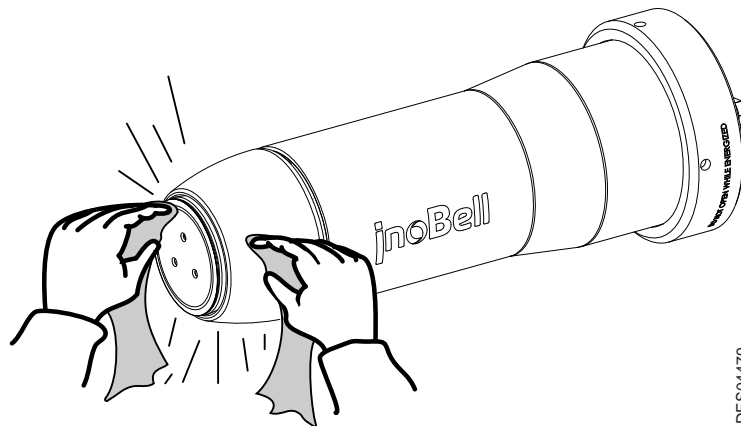


Ensure that bearing protection air supply is maintained to protect the bearings when cleaning the outside cover of the projector.

Never blow air in the direction of the bell cup if the bearing protection air is not on.

Powder must not be allowed to penetrate the turbine.

Ensure that the bearing protection air is not switched off when flushing the powder pump or powder hose.



DES04479

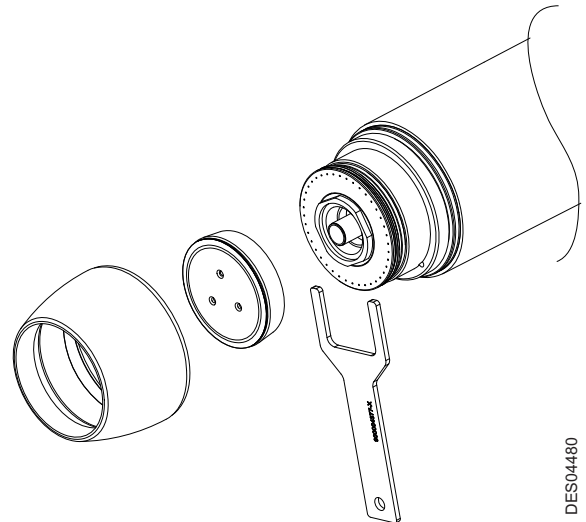
- Clean the cover, bell cup and projector with a clean cloth.
- Remove any powder residue using compressed air, being sure to follow the instructions set out above.

6.3.2. Procedure B1: Clean bell cup

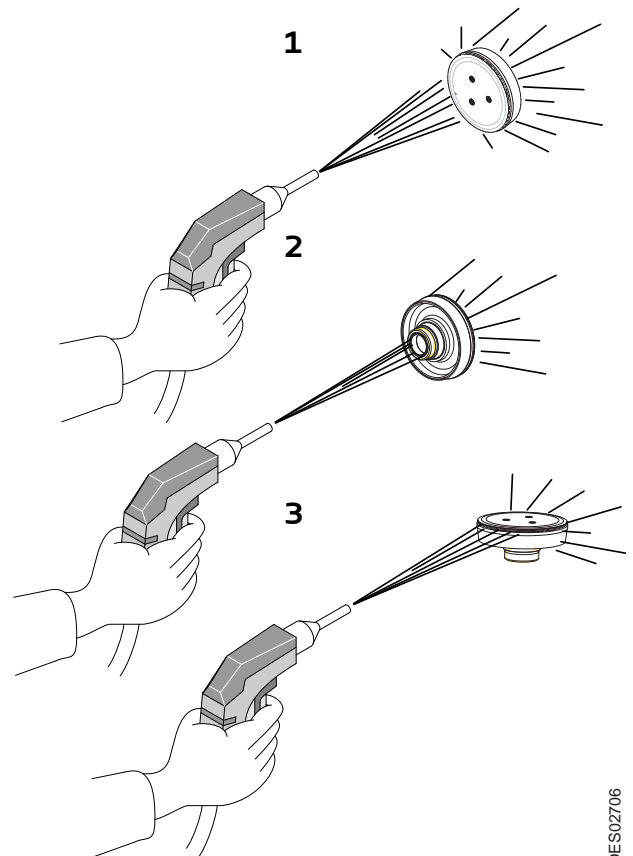


The bell cup must never be cleaned with compressed air while it is mounted on the projector. The bell cup must be removed for cleaning. Sharp or abrasive objects must never be used for cleaning the bell cup.

- Unscrew the air shroud
- Using tool (P/N: 900004377), hold the turbine shaft in place and unscrew the bell cup manually. Check the condition of the bell cup. Clean it and replace if necessary.



- Blow out the bell cup with compressed air using a high-pressure blower (with a tube nozzle, for example) to remove as much dirt as possible without disassembling the bell cups. Follow the three steps as indicated:
  - **Step 1:** Blow compressed air onto the outside of the bell cup.
  - **Step 2:** Blow into the powder tube and inside the bell cup.
  - **Step 3:** Blow into the bell cup lateral slot.

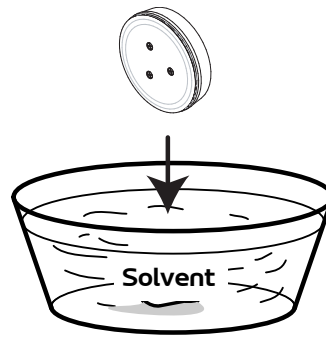


Pay particular attention to the conical part and the threads on the metal hub.

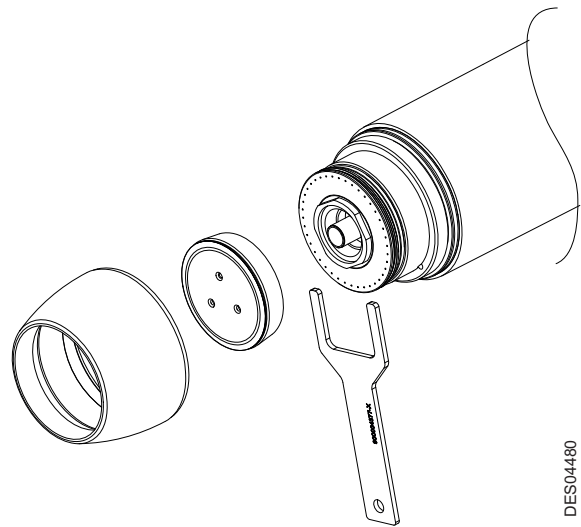


**If necessary:**

- Soak the bell cups for one hour in a solvent compatible with the bell cup material.
- Clean each bell cup with compressed air (in the three places described above) to expel dissolved powder and remaining solvent.
- Leave bell cup to dry for 30 minutes.
- **Re-assemble the bell cup assembly**
  - Carefully clean the conical bell cup housing on the turbine shaft with a soft cloth to eliminate any traces of powder
  - Hold the turbine shaft with the tool (P/N: 900004377), then fully tighten the bell cup until it locks.
  - Screw on the cover.



DES02707

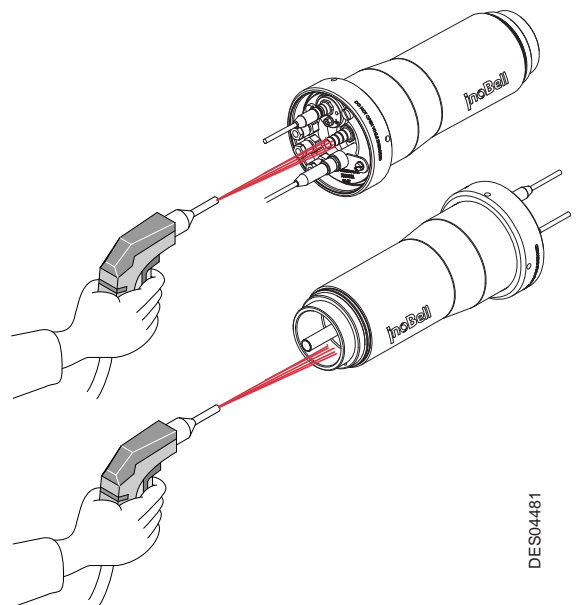


DES04480

- Switch on the empty bell cup before production in order to expel any solvent residue by inertia.

**6.3.3. Procedure B2: Clean powder tube**

- **Step 1:** Unscrew the cover.
- **Step 2:** Remove the turbine fitted with the bell cup
- **Step 3:** Disconnect the powder supply hose and clean the powder pipe with compressed air as indicated.  
NB: before refitting the turbine into the projector, clean the housing with compressed air.



DES04481

## 6.4. Replacement

### 6.4.1. Procedure C: Disassemble turbine

- **Step 1:** Switch off the projector
- **Step 2:** Unscrew the cover.
- **Step 3:** Remove the turbine cartridge assembly with bell cup.
- **Step 4:** Remove the bell cup from the turbine cartridge. Using tool (P/N: 900004377), hold the turbine shaft in place and unscrew the bell cup manually.



**When disassembling the turbine cartridge, check the condition of all four seals and replace them if necessary.**



### 6.4.2. Procedure C1: Replace turbine bearings

- **Step 1:** Using tool (P/N: 900004377), hold the turbine shaft in place and position tool (P/N: 900005634) onto the drive vane in order to unscrew it.
- **Step 2:** Place the tool (P/N: 900005634) onto the bearing nut and unscrew.



Tool  
(P/N: 900004377)

Tool  
(P/N: 900005634)



Drive vane



Bearing nut

- **Step 3:** Remove the shaft from the distributor.



- **Step 4:** Remove the rear bearing (P/N 180000142) from the distributor.



- **Step 5:** Hold the spacer against the front bearing (P/N 900005630) and remove them together.

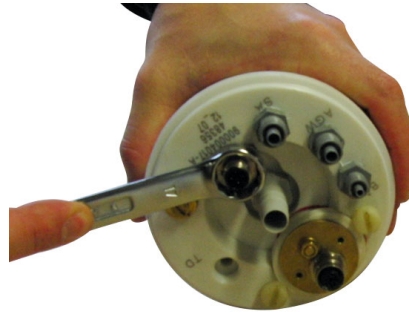


**For reassembly proceed in reverse order:**

- Position the rear bearing (P/N 180000142) in the distributor.
- Screw on the bearing nut and tighten with the tool.
- Fit the shaft with the front bearing (P/N 900005630) and spacer, push in the two components together so that the front bearing does not go skew.
- Slide the assembly into the distributor and tighten the drive vane.

### 6.4.3. Procedure D1: Replace speed detector sleeve

- **Step 1:** Unscrew the speed detector sleeve using a 17mm ring wrench.



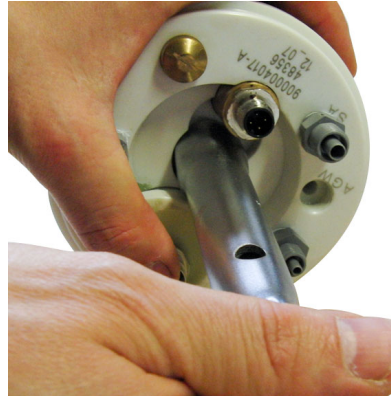
- **Step 2:** Remove the sleeve from the body.



- **Step 3:** Insert the new speed detector sleeve into its housing, push in completely and then tighten the sleeve with a ring wrench.

#### 6.4.4. Procedure D2: Replace powder tube

- **Step 1:** Unscrew the powder tube using the powder tube removal tool (P/N: 240000138).



- **Step 2:** Using the tool (P/N 900005634), push the powder tube towards the outside.



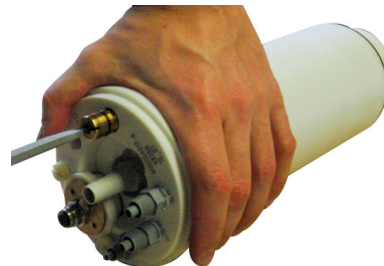
- **Step 3:** Remove the powder tube from the body and replace it.



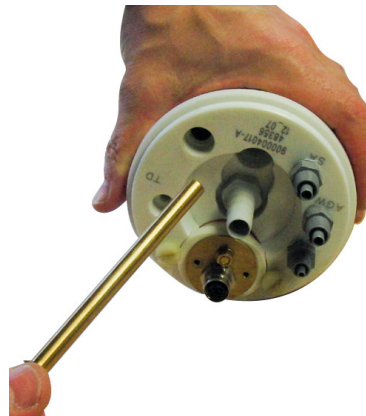
- **Step 4:** Insert the new powder tube into its housing, push it fully in using tool (P/N: 240000138) and tighten the powder tube.

### 6.4.5. Procedure D3: Replace counter-electrode components

- **Step 1:** Having removed the speed detector sleeve, unscrew the retaining screw from the grounding plate ([see § 8.1 page 37](#) items 13 and 15).



- **Step 2:** Using a large screwdriver, unscrew the counter-electrode contact ([see § 8.1 page 37](#), item 17), remove it from the body and take out the spring.



- **Step 3:** Remove the counter-electrode seal ([see § 8.1 page 37](#) item 7).

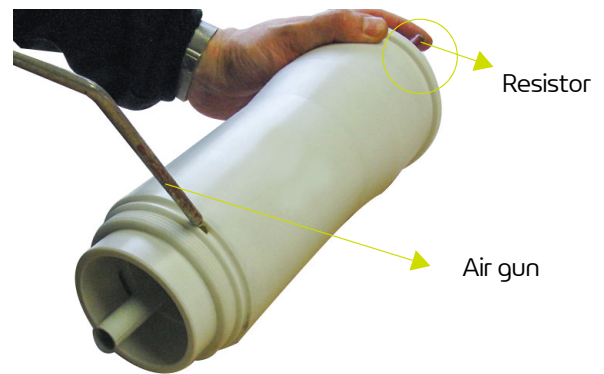


- **Step 4:** Using a small screwdriver push back the end contact ([see § 8.1 page 37](#) item 21).





- **Step 5:** Insert an air gun into the end contact slot in order to push out the resistor and the contact.



**For re-assembly**

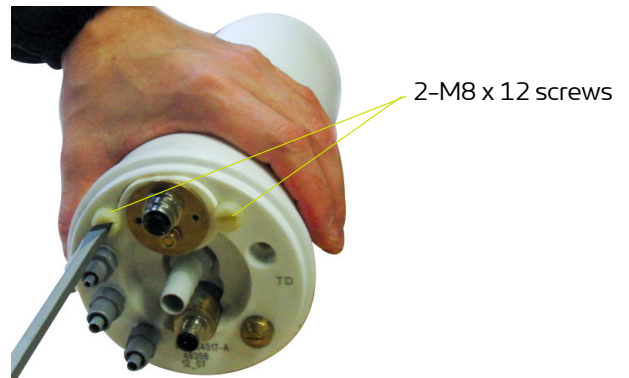
- Coat the resistor and the contact assembly (with seal) with a thin coat of dielectric grease.
- Fit the contact.
- Fit the resistor.
- Fit the spring.
- Screw the contact to the electrode.
- Fit the grounding plate and tighten.
- Fit the speed detector sleeve and tighten.
- Check the condition of the counter-electrode seal, replace it if necessary and reposition on the body.

**6.4.6. Procedure D4: Replace high voltage brush contact**

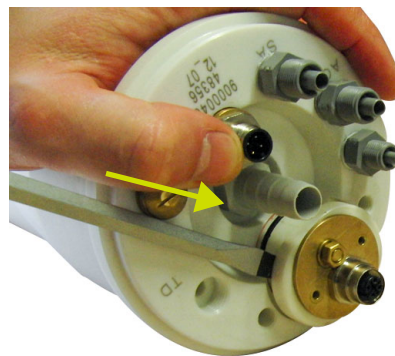
- Remove the cover.
- Remove the turbine cartridge assembly with bell cup.
- Unscrew the brush and replace it.

### 6.4.7. Procedure D5: Replace High Voltage Unit

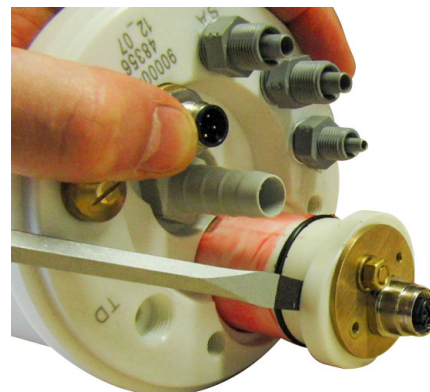
- **Step 1:** Unscrew the two UHT165 securing screws (M8 x 12).



- **Step 2:** Insert a large screwdriver under the shoulder.



- **Step 3:** Remove the UHT165 from its housing.



#### Replace the high voltage unit:

- **Step 4:** Coat the new UHT165 with a thin coat of dielectric grease.



- **Step 5:** Insert the UHT165 into the body, push it in fully and tighten the two securing screws.



## 7. Troubleshooting

Symptoms	Probable causes	Solutions
Turbine does not rotate	No turbine injection air	Check injection air supply Check TCR module air supply
	Bearings are worn or faulty	Change bearings
	Air leak in distributor injection chamber	Check turbine cartridge is properly inserted into the projector and check condition of distributor seals
	Bell cup rubs against air shroud	Change air shroud. Check condition of bell cup and change if necessary.
	Incorrect assembly of distributor	Check distributor assembly
	A TCR module fault prevents rotation command	Check TCR module fault information on the 'Faults' screen
Turbine does not reach required speed or does not stabilize	Air leak in the distributor injection chamber	Replace seals
	One of the bearings is faulty	Change both bearings. Check bearing protection air supply and distributor seals
	Bearings are new, turbine has not been properly run in.	Run in the bearings by running the turbine without powder for 15 minutes, at speed V+ if possible
Turbine over-speed	One of the bearings is reaching the end of its life and is seizing	Change both bearings
	The speed detector loses its speed signal	Check turbine cartridge is fully inserted into body and that air shroud is fully tightened.
		Check detector sleeve is fully tightened at back of projector.
		Check detector supply wiring
		Speed detector is out of order, replace sleeve assembly
		TCR module is malfunctioning
Check TCR module air supply		

Symptoms	Probable causes	Solutions
Powder is not projected from projector, or is projected in insufficient quantities	Powder hose is not connected to the powder tube	Reconnect hose correctly to rear of powder tube
	Blocked powder tube Blocked bell cup Pump hose between pump and projector is folded or blocked	Check full length of powder line from pump to bell cup. Clean with compressed air or replace blocked components.
	Pump is faulty	Check pump is working. Clean or replace pump. Check pump air supply (injection and dilution) from TCR module. Check TCR module air supply network
	Insufficient powder quantity	Check powder level at powder pump
	Insufficient powder fluidisation	Check powder fluidisation equipment and fluidisation airflow
	A TCR module fault prevents projection command	Check TCR module fault information on the 'Faults' screen
Powder does not adhere to part to be painted	Part is not correctly grounded	Ensure that electrical resistance of parts to be painted in relation to ground system is less than or equal to 1MΩ
	High Voltage is only partially transmitted because there is a contact missing in part of High Voltage circuit.	Check carbon brush in the projector for wear or fouling. Replace if necessary
	Voltage is not sufficiently high.	Measure voltage at bell cup and increase voltage
	High Voltage Unit is out of order	Replace High Voltage Unit
Abnormally high current consumption	Ground wire too close	Move ground wire further away
Abnormally low current consumption	Counter-electrode is not correctly connected.	Check counter-electrode seal for fouling and change if necessary
		Check counter-electrode resistance value (approx. 1GΩ). Check this value between rear grounding plate and counter-electrode contact (below seal)
		Check all counter-electrode components are in place
		Check speed detector connection to TCR module

Symptoms	Probable causes	Solutions
Fault in finish after application (insufficient coverage, “orange peel”) but thickness is sufficient	Counter-electrode not correctly connected.	(See above)
Powder shaping air shroud does not work	Incorrect location of turbine cartridge in the body	Check location of turbine cartridge and fully tighten air shroud
	Shaping air supply chamber in distributor leaks	Check condition of distributor seals and replace if necessary
	No shaping air supply	Check shaping air supply setpoint (0 to 100%) Check effective shaping air supply to rear of projector as well as at TCR module output

## 8. Spare Parts

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.



**In order to ensure optimum assembly, spare parts should be stored at a temperature close to their operating temperature. If not, a sufficient waiting time must be observed before installation, so that all parts are assembled at the same temperature.**



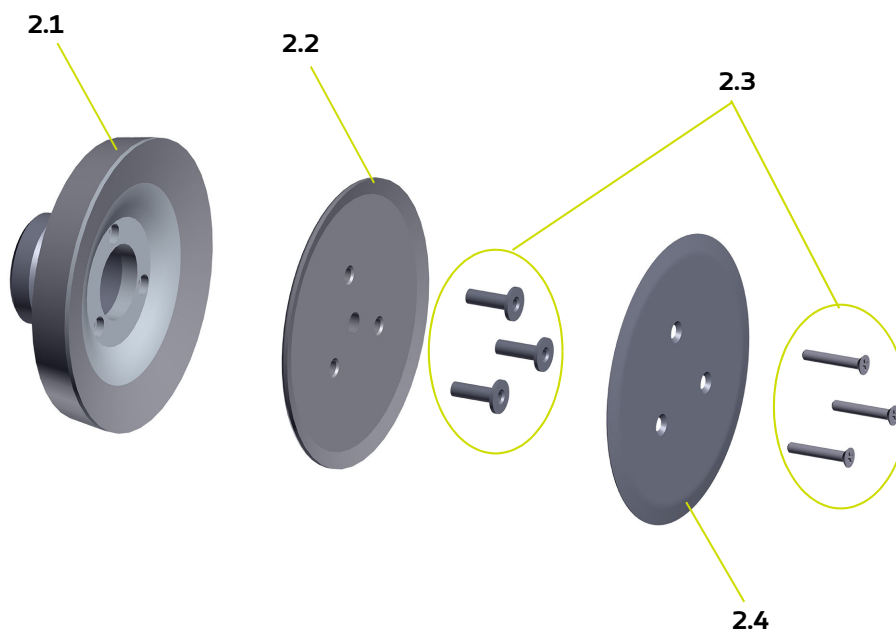
Item	Part number	Description	Qty	Unit of Sale	Spare Part Level (*)
	<b>910007600</b>	<b>Inobell Projector</b>	<b>1</b>	<b>1</b>	<b>-</b>
<b>1</b>	900004055	Cover	1	1	-
<b>2</b>	<b>910007602</b>	<b>Powder bell cup</b> ( <a href="#">see § 8.2 page 39</a> )	<b>1</b>	<b>1</b>	<b>1-2</b>
<b>3</b>	<b>910007593</b>	<b>Powder Turbine</b> ( <a href="#">see § 8.3 page 40</a> )	<b>1</b>	<b>1</b>	<b>1</b>
<b>4</b>	<b>910007750</b>	HV brush contact assembly	<b>1</b>	<b>1</b>	<b>2</b>
<b>5</b>	J3ETOR030	O-ring	1	1	2
<b>6</b>	160000078	O-ring	1	1	2
<b>7</b>	900004037	Inobell nut	1	1	-
<b>8</b>	<b>910007944</b>	<b>Inobell body</b>	<b>1</b>	<b>1</b>	<b>-</b>
<b>9</b>	F6RPUK320	Male union D: 8 1/4	3	1	-
<b>10</b>	<b>910007590</b>	<b>High Voltage Unit UHT 165</b> ( <a href="#">see DRT7060</a> )	<b>1</b>	<b>1</b>	<b>1</b>
<b>11</b>	<b>910007751</b>	<b>Powder tube assembly</b> ( <a href="#">see § 8.4 page 41</a> )	<b>1</b>	<b>1</b>	<b>1</b>
<b>12</b>	X9SVCB168	Screw, C M 8 x 12 - nylon + glass fibre	1	1	1
<b>13</b>	900002601	Counter-electrode end contact	1	1	-
<b>14</b>	J2CTPC054	O-ring	2	1	2
<b>15</b>	1404851	Resistor	1	1	-
<b>16</b>	<b>910007594</b>	<b>Speed detector sleeve assembly</b> ( <a href="#">see § 8.5 page 41</a> )	<b>1</b>	<b>1</b>	<b>-</b>
<b>17</b>	746107	Spring	1	1	-
<b>18</b>	900004075	Counter-electrode contact with rear plate	1	1	1-2
<b>19</b>	900004042	Grounding plate	1	1	-
<b>20</b>	X7DDZU005	Z5 U brass washer	1	1	-
<b>21</b>	X7CVCB181	Brass slotted screw, C M 5 x 10	1	1	-

(\*)

Level 1: 1st emergency parts

Level 2: Wearing parts

## 8.2. Powder Bell cup



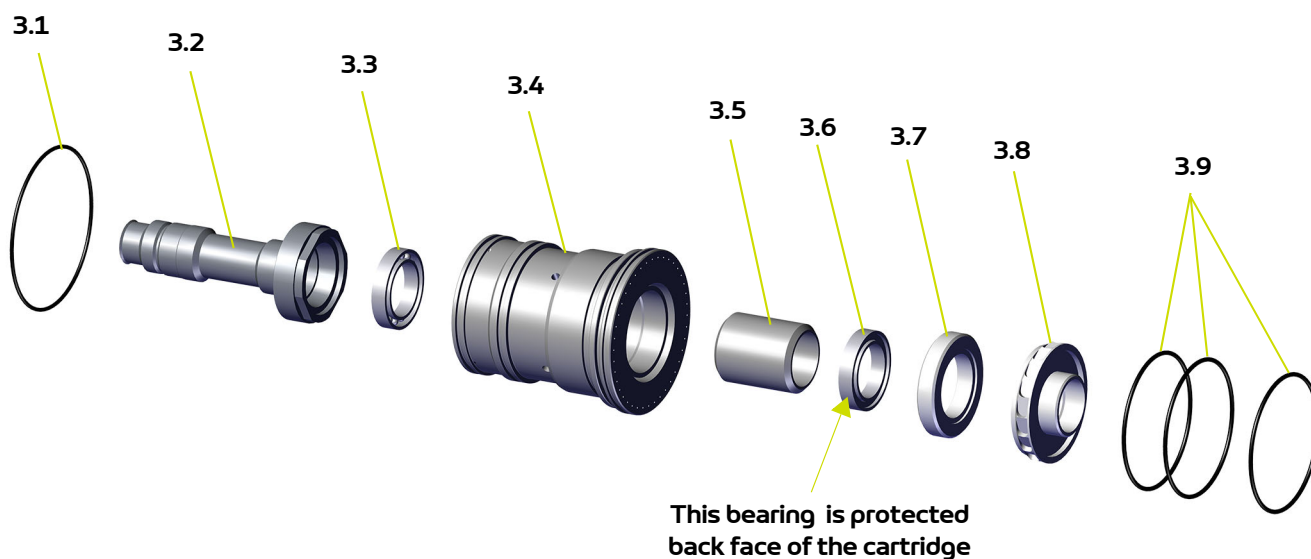
Item	Part number	Description	Qty	Unit of Sale	Spare Part Level (*)
<b>2</b>	<b>910007602</b>	<b>Powder Bell cup</b>	<b>1</b>	<b>1</b>	<b>1-2</b>
<b>2.1</b>	900005808	Rear deflector	1	1	1
<b>2.2</b>	<b>910011143</b>	<b>Front deflector assembly</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>2.3</b>	<b>910008118</b>	<b>Fastening set for powder bell cup</b>	<b>1</b>	<b>1</b>	-
<b>2.4</b>	-	HV disc	<b>1</b>	-	-

(\*)

Level 1: 1st emergency parts

Level 2: Wearing parts

### 8.3. Powder turbine



Item	Part number	Description	Qty	Unit of Sale	Spare Part Level (*)
<b>3</b>	<b>910007593</b>	<b>Powder turbine</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>3.1</b>	J2FTCF440	O-ring - Viton	1	1	1-2
<b>3.2</b>	900004056	Powder turbine shaft	1	1	-
<b>3.3</b>	900005630	Front bearing	1	1	1-2
<b>3.4</b>	-	Distributor	1	-	-
<b>3.5</b>	900004053	Bearing spacer	1	1	1
<b>3.6</b>	180000142	Back shielded rolling bearing	1	1	1-2
<b>3.7</b>	900004051	Bearing nut	1	1	-
<b>3.8</b>	<b>910007591</b>	<b>Drive vane</b>	<b>1</b>	<b>1</b>	<b>2</b>
<b>3.9</b>	J2CTPB510	O-ring	3	1	1-2

(\*)

**Level 1: 1st emergency parts**

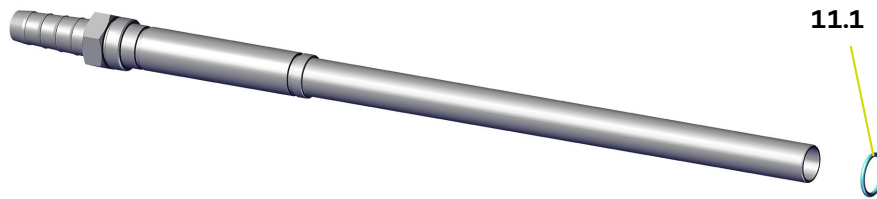
**Level 2: Wearing parts**



The two bearings (items 3 and 6) must be replaced at the same time.



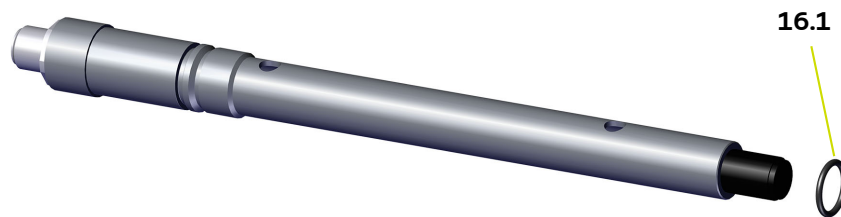
#### 8.4. Powder tube assembly



Item	Part number	Description	Qty	Unit of Sale	Spare Part Level (*)
<b>11</b>	<b>910007751</b>	<b>Powder tube assembly</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>11.1</b>	J2CTPB166	O-ring	1	1	1

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

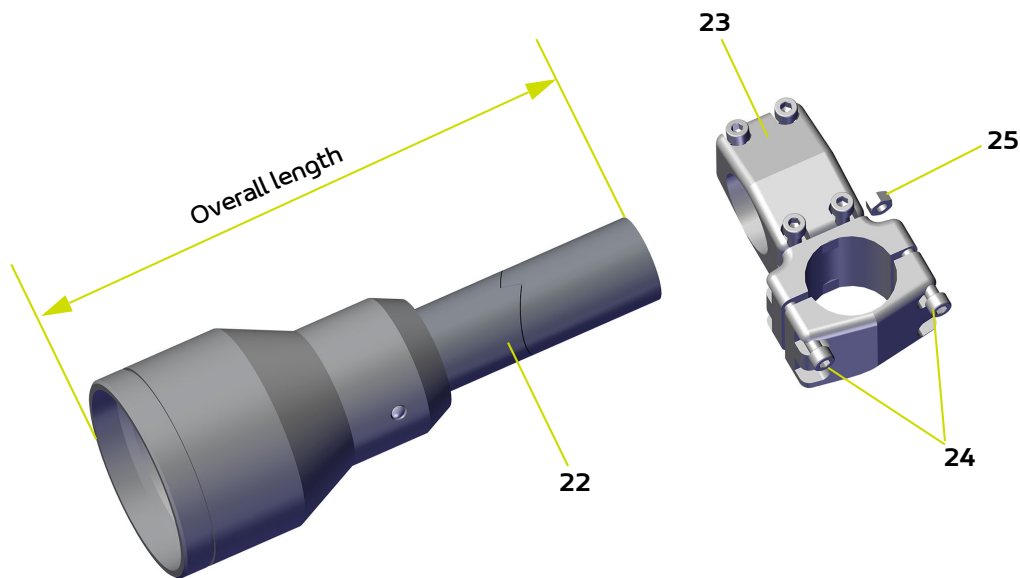
#### 8.5. Speed detector sleeve



Item	Part number	Description	Qty	Unit of Sale	Spare Part Level (*)
<b>16</b>	<b>910007594</b>	<b>Speed detector sleeve</b>	<b>1</b>	<b>1</b>	<b>-</b>
<b>16.1</b>	J2FTDF160	O-ring	1	1	1-2

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

## 8.6. Additional equipment



Item	Part number	Description	Qty	Unit of Sale	Spare Part Level (*)
22	910009357	Support arm, overall length: 515 mm	1	1	-
	910009358	Support arm, overall length: 1015 mm	1	1	-
	910009359	Support arm, overall length: 1615 mm	1	1	-
23	429104	Securing nut 50/50	1	1	-
24	X3AVSY285	Zinc coated steel Chc M8x30 screw	8	1	-
25	X2BEHU008	Zinc coated steel H M8 U nut	8	1	-

(\*)

Level 1: 1st emergency parts

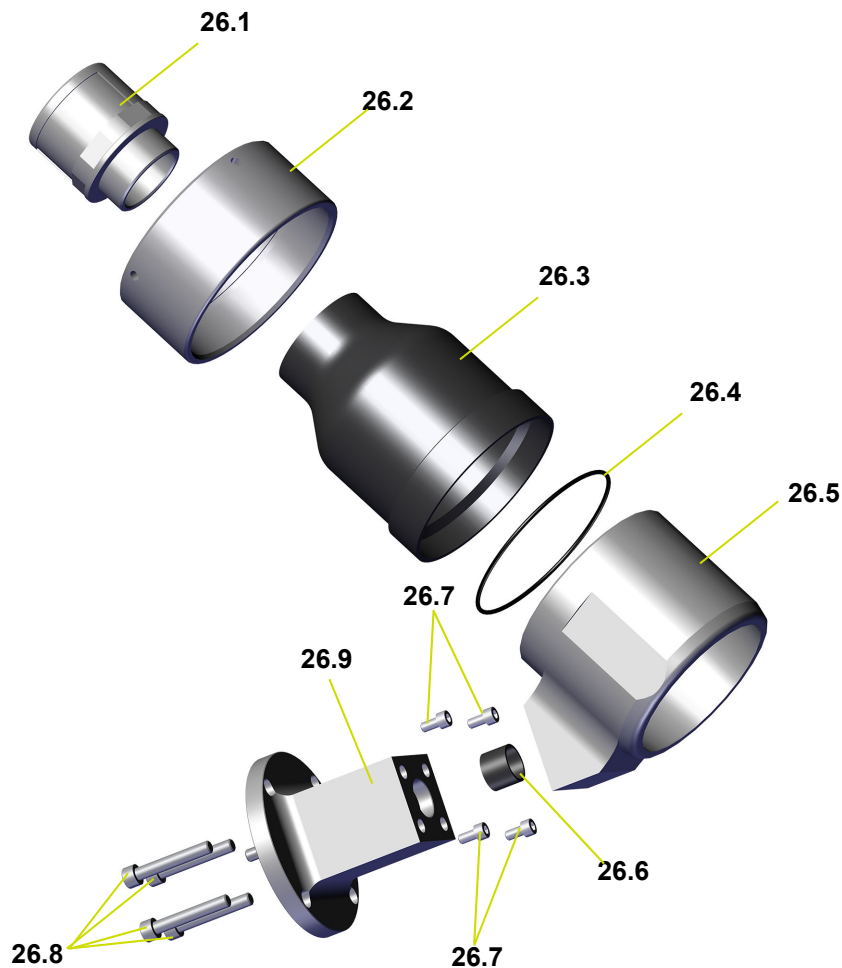
Level 2: Wearing parts

### Hoses

Item	Part number	Description	Qty	Unit of Sale	Spare Part Level (*)
	U1FGBA034	EAV 12 mm powder hose (grey)	15 m	50 m	2

## 8.7. Installing on robot

### 8.7.1. Robot support



Item	Part number	Description	Qty	Unit of Sale	Spare Part Level (*)
<b>26</b>	<b>910018895</b>	<b>Robot support</b>	<b>1</b>	<b>1</b>	-
<b>26.1</b>	110001042AT	Straight union	1	1	-
<b>26.2</b>	900008225	Inobell securing nut	1	1	-
<b>26.3</b>	900008226	Hose cover	1	1	-
<b>26.4</b>	J2FENV665	O-ring - FEP viton	1	1	-
<b>26.5</b>	900008224	Inobell support	1	1	-
<b>26.6</b>	449707	Insulating ring	1	1	-
<b>26.7</b>	X4FVSY222	Screw Chc M 6 / 12 stainless steel 316	4	1	-
<b>26.8</b>	X9SVSY289	Screw Chc M 8 / 50 glass fiber nylon	4	1	-
<b>26.9</b>	900008223	Robotic flange	1	1	-

(\*)

**Level 1: 1st emergency parts**

**Level 2: Wearing parts**

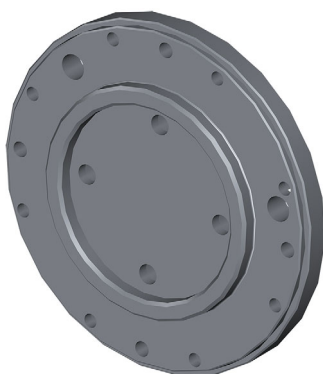
### 8.7.2. Robot extension lead

Part number	Description	Qty	Unit of Sale	Spare Part Level (*)
110001937	Robot extension lead, length: 7.5m	1	1	-

### 8.7.3. Robot adapters

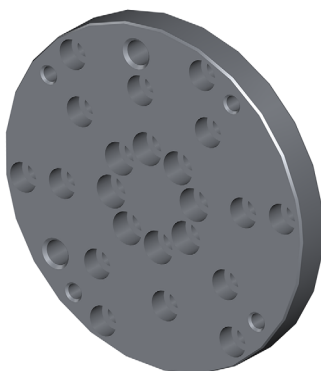
**For other robots, contact Sames.**

#### 8.7.3.1. For robots Staubli RX 160 and TX 250



Part number	Description	Qty	Unit of Sale	Spare Part Level (*)
910019977	Robot adapter	1	1	-

#### 8.7.3.2. For robots Fanuc P 200, Motoman PX 2050 and ABB IRB 580



Part number	Description	Qty	Unit of Sale	Spare Part Level (*)
910019978	Robot adapter	1	1	-

(\*)

**Level 1: 1st emergency parts**

**Level 2: Wearing parts**

## 9. Revision index History

Created by		Checked by: S. Tadem		Approuved by: S. Court	
Date	By:	Index	Purpose of the modification and location		
2008	S. Court	A	First issue		
2023/03	S. Court	F	Change of identity and logo	Update of the graphic chart	

## 10. Appendices

### 10.1. Preventive maintenance plan

**PLAN DE MAINTENANCE PREVENTIVE / PREVENTIVE MAINTENANCE PLAN**

Numéro d'ordre Serial	Ensemble - Assembly	Sous ensemble Sub assembly	Désignation de l'élément Designation of the assembly	Pour 1 ensemble - For 1 assembly			Acteurs Métiers Operators - skill (3)				Niveau Level (4)		Manuel d'utilisation Instruction manual	Outil Tool	Commentaires Notes	
				Action à effectuer Action to carry out	Temps prévu Estimated Time (1)		Périodicité Periodicity (H / hour) (2)	M	F	E	A	1				2
					100eme H	mn										
<b>Avant toute intervention, se référer au chapitre sécurité du manuel de l'équipement / Before any intervention, see chapter safety equipment manual</b>																
1	Projecteur de poudre InoBell InoBell powder projector	Équipement Equipment	Bol Bellcup	Vérification rotation bol et stabilisation à la valeur de consigne Cleaning rotation of the bellcup and stabilization	8,33	5	8	X				1			Avant chaque début de production Before every start production	
2		<b>L'air de joint pneumatique (BA) doit être maintenu en permanence lorsque l'installation n'est pas à l'arrêt complet et lors des opérations de nettoyage (Pompe, tuyau, etc.) Pneumatic seal air (BA) must be maintained continuously when the installation is not fully shut down and during cleaning operations (Pump, pipe...)</b>														
3		Équipement Equipment	Projecteur, jupe et bol Projector, air shroud and	Nettoyage extérieur Cleaning exterior	8,33	5	8	X				1			A chaque arrêt de production Every break time	
4		<b>Il ne faut JAMAIS nettoyer le bol au moyen d'air comprimé lorsque celui-ci est monté sur le projecteur InoBell The bellcup should NEVER be cleaned using compressed air when it is installed on the InoBell atomizer</b>														
5		Équipement Equipment	Bol Bell cup	Nettoyage bol hors applicateur Cleaning bell cup out projector	8,33	5	40	X				1		900004377		
6		Équipement Equipment	Tuyaux et raccords poudre Hoses and unions powder	Contrôle usure / fuite Wear / Leakage check	1,66	1	40	X				1				
7		Équipement Equipment	Câblage Wiring	Vérification hygiène connectique Checking wiring	1,66	1	40			X		2				
8		Projecteur Projector	Fixations Fixations	Vérification fixation appareil Check fixing projector	3,33	2	40	X				2				
9		Équipement Equipment	Bol Bell cup	Nettoyage bol Cleaning bell cup	8,33	5	40	X				1		900004377		
10		Équipement Equipment	Canal poudre Powder pipe	Nettoyage canal poudre Cleaning powder pipe	16,66	10	40	X				2		900004377		
11		Équipement Equipment	Outillage spécifique Specific tool	Contrôle visuel Visual control	3,33	2	40	X				1	2			

PLAN DE MAINTENANCE PREVENTIVE / PREVENTIVE MAINTENANCE PLAN

Numéro d'ordre Serial	Ensemble - Assembly	Sous ensemble Sub assembly	Désignation de l'élément Designation of the assembly	Pour 1 ensemble - For 1 assembly			Acteurs Métiers Operators - skill (3)				Niveau Level (4)		Manuel d'utilisation Instruction manual	Outil Tool	Commentaires Notes	
				Action à effectuer Action to carry out	Temps prévu Estimated Time (1)		Périodicité Periodicity (H / hour) (2)	M	F	E	A	1				2
					100eme H	mn										
12		Paramètre process <i>Process parameter</i>	Unité haute tension <i>High voltage unit</i>	Essais Haute tension <i>High voltage test</i>	3,33	2	1000 (2 fois/an / <i>twice a year</i> )			X			2			
13		Équipement <i>Equipment</i>	Balai contact HT <i>HV brush contact</i>	Remplacement balai <i>Replace brush contact</i>	8,33	5	1000 (2 fois/an / <i>twice a year</i> )	X					2	900004377		
14	<a href="#">(DRT 7061)</a>	Turbine <i>Turbine</i>	Roulements <i>Bearings</i>	Remplacement des roulements <i>Replace bearings</i>	16,66	10	1000 (2 fois/an / <i>twice a year</i> )	X					2	900004377, 900005634	<b>ATTENTION, une phase de rodage est nécessaire après le remplacement des roulements</b> <i>ATTENTION, a running-in phase is necessary after replacing the bearings</i>	
15	<b>Module de commande TCR TCR (Turbine Control Rack) control module</b>	Équipement <i>Equipment</i>	Tuyau air <i>Air pipe</i>	Contrôle fuite <i>Leakage check</i>	1,66	1	8	X				1			A chaque début de production <i>Every start production</i>	
16		Équipement <i>Equipment</i>	Face avant <i>Front</i>	Vérification aspect <i>Checking appearance</i>	1,66	1	8	X				1				
17		Équipement <i>Equipment</i>	Câblage <i>Wiring</i>	Vérification mise à la terre <i>Checking ground connection</i>	1,66	1	8			X			2		A chaque début de production <i>Every start production</i>	
18		Équipement <i>Equipment</i>	Module <i>Module</i>	Vérification fonctionnement module (di/dt) <i>Checking smooth functioning</i>	8,33	5	8			X			2			
19		Équipement <i>Equipment</i>	Câblage <i>Wiring</i>	Vérification intégration dans armoire <i>Checking integration into cabinet</i>	1,66	1	40			X			2			
20		Paramètre process <i>Process parameter</i>	Haute tension <i>High voltage</i>	Relevé valeur <i>Record value</i>	1,66	1	1000 (2 fois/an / <i>twice a year</i> )				X		2			
21	<a href="#">(notice 7062)</a>	Paramètre process <i>Process parameter</i>	Intensité <i>Intensity</i>	Relevé valeur <i>Record value</i>	1,66	1	1000 (2 fois/an / <i>twice a year</i> )				X		2			



**PLAN DE MAINTENANCE PREVENTIVE / PREVENTIVE MAINTENANCE PLAN**



Numéro d'ordre Serial	Ensemble - Assembly	Sous ensemble Sub assembly	Désignation de l'élément Designation of the assembly	Pour 1 ensemble - For 1 assembly			Acteurs Métiers Operators - skill (3)				Niveau Level (4)		Manuel d'utilisation Instruction manual	Outil Tool	Commentaires Notes	
				Action à effectuer Action to carry out	Temps prévu Estimated Time (1)		Périodicité Periodicity (H / hour) (2)	M	F	E	A	1				2
					100eme H	mn										
22	<b>Pièces de rechange</b> Spare parts	Stock Stock	Pièces Spare parts	Vérification disponibilité des pièces de première urgence Checking availability of spare parts	8,33	5	1000 (2 fois/an / twice a year)	X	X			1	2			

## 10.2. EU Declaration of conformity



## UE DECLARATION OF CONFORMITY

(1) The manufacturer herewith declares that the equipment is in conformity with the relevant Union harmonization legislation.

(2) <b>Equipment type</b>	PULVERISATEUR ELECTROSTATIQUE DE PEINTURE POWDRE ELECTROSTATIC POWDER PAINT SPRAY SYSTEM			
	<b>Inobell / UHT165 / TCR</b>			
(3) <b>Applicable Directives</b>	2014/34/UE ATEX Directive	(4) <b>Markings</b>	Sprayer <b>Inobell</b> :  II 2 D EEx < 350 mJ	
			Control module <b>TCR</b> :  II (2) D [EEx < 350 mJ] Matériel associé TRC doit être installé en zone sûre (zone non dangereuse) Associated equipment TRC must be installed in safe zone (non explosive area)	
		(5) <b>Harmonised standards</b>	EN 50177 : 2006 Le produit a fait l'objet d'un examen d'impact des modifications majeures introduites par la nouvelle norme harmonisée EN 50177:2009 et il est toujours conforme aux exigences essentielles de la directive ATEX. The product has been subject of an examination of the major modifications introduced by the new harmonized standard EN 5017 :2009 and it is always in conformity with the of ATEX Directive essential requirements.	
			(6) <b>Conformity assessment procedures</b>	CE type examination certificate : ISSeP 09 ATEX 027X Production Quality Assurance Notification : INERIS 07ATEXQ401
		Le signe X placé derrière le numéro d'attestation d'examen CE de type, indique que le respect d'une distance de sécurité (entre les parties à la HT du pulvérisateur et toutes pièces reliées à la terre) précisée dans le manuel d'emploi permet l'utilisation sûre de cet équipement. "X" placed behind the standard EC-type examination certificate number indicates that a safety distance (between the HV components of the air spray gun and all grounded parts) specified in the operating manual must be respected to ensure safe operation of this equipment.		
2014/30/UE Electromagnetic Compatibility Directive	(5) <b>Harmonised standards</b>	EN 61000-6-4 : 2007 EN 61000-6-2 : 2005		
2014/35/UE Low Voltage Directive	(5) <b>Harmonised standards</b>	EN 61010-1 : 2011		
(7) This declaration of conformity is issued under the sole responsibility of the manufacturer.				

**Director of the MEYLAN site - Executive Management (EM)**

Richard WLODARCZYK

DocuSigned by:

*Richard Wlodarczyk*

Established in Meylan, on 11-avr.-23 | 08:45 CEST

Sames

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# UE DECLARATION OF CONFORMITY

(1)	<p>Le Fabricant déclare que le matériel désigné ci-après est conforme à la législation d'harmonisation de l'Union applicable suivante/ Der Hersteller erklärt, dass das nachfolgend bezeichnete Material den folgenden anwendbaren Harmonisierungsrechtsvorschriften der Union entspricht / El fabricante declara que el equipo designado a continuación es conforme con la siguiente legislación de armonización de la UE aplicable / Il fabbricante dichiara che l'attrezzatura designata di seguito è conforme alla seguente legislazione di armonizzazione UE applicabile / O Fabricante declara que o equipamento designado abaixo está em conformidade com a seguinte legislação de harmonização aplicável da UE / Producent deklaruje, że urządzenie wskazane poniżej jest zgodne z następującymi obowiązującymi przepisami harmonizacyjnymi UE/ De fabrikant verklaart dat de hieronder beschreven apparatuur in overeenstemming is met de volgende toepasselijke EU-harmonisatiewetgeving/ Výrobce prohlašuje, že níže uvedené zařízení je ve shodě s těmito platnými harmonizačními právními předpisy EU/ Výrobce prohlašuje, že níže uvedené zařízení je ve shodě s těmito platnými harmonizačními právními předpisy EU/ Producenten erklærer, at det nedenfor angivne udstyr er i overensstemmelse med følgende gældende EU-harmoniseringslovgivning/ Valmistaja vakuuttaa, että jäljempänä mainitut laitteet ovat seuraavien sovellettävien EU:n yhdenmukaistamislainsäädännön mukaisia./ Tootja kinnitab, et allpool nimetatud seadmed vastavad järgmistele kohaldatavatele ELi ühtlustamise õigusaktidele./ Ražotājs apliecina, ka turpmāk norādītās iekārtas atbilst šādiem piemērojamiem ES saskaņošanas tiesību aktiem./ Gamintojas pareiškia, kad toliau nurodyta įranga atitinka šiuos taikytinus ES derinamuosius teisės aktus/ Производителят декларира, че посоченото по-долу оборудване е в съответствие със следното приложимо законодателство на ЕС за хармонизация/ A gyártó kijelenti, hogy az alább megjelölt berendezés megfelel a következő alkalmazandó uniós harmonizációs jogszabályoknak / Producătorul declară că echipamentul desemnat mai jos este în conformitate cu următoarea legislație de armonizare a UE aplicabilă/ Ο κατασκευαστής δηλώνει ότι ο εξοπλισμός που αναφέρεται κατωτέρω συμμορφώνεται με την ακόλουθη ισχύουσα νομοθεσία ενωρίμωσης της ΕΕ/ Προϊζνοδαč ovime izjavljuje da je oprema u skladu sa zakonskim zahtjevima Uje dinjene Kraljevine./ Výrobca vyhlasuje, že nižšie uvedené zariadenie je v súlade s týmito platnými harmonizačnými právnymi predpismi EÚ/ Произвојалец изјављује, да је сподат наведена опрема складна з насљедној вељавној усклајевалној законодајој ЕУ/ Производител заявяет, что указанное ниже оборудование соответствует следующим применимым законодательным актам ЕС по гармонизации/ 製造者は、以下に指定された装置が、適用される以下のEU調和法に適合していることを宣言する。/ 製造商声明, 下面指定的设备符合以下适用的欧盟协调立法。</p>
(2)	<p>Type d'équipement/ Art der Ausrüstung/ Tipo de equipo/ Tipo di attrezzatura/ Tipo de equipamento/ Rodzaj sprzętu/ Type uitrusting/ Typ zařízení/ Typ av anordning/ Type af anordning/ Laitteen tyyppi/ Seadme tüüp/ Iekārtas tips/ Įrangos tipas/ Вид оборудване/ A berendezés típusa/ Tipul de echipament/ Τύπος εξοπλισμού/ Vrsta opreme/ Typ zariadenia/ Vrsta naprave/ Тип оборудования/ 機器の種類/ 设备类型</p>
(3)	<p>Directives applicables/Anwendbare Richtlinien/Directivas aplicables/Direttive applicabili/Directivas aplicáveis/Obowiązujące dyrektywy/Toepasselijke richtlijnen/Platné smernice/Tillämpliga direktiv/Gældende direktiver/Sovellettavat direktiivit/Kohaldatavad direktiivid/Piemērojamās direktīvas/Taikomos direktyvos/Приложими директиви/Alkalmazandó irányelvek/Directive aplicabile/ισχύουσες οδηγίες/Primjenjive smjernice/Uplatnitelné smernice/Veljavne directive/Применимые директивы/適用される指令/适用的指令</p>
(4)	<p>Marquage/Markierung/Marcado/Marcatura/Marcação/Znakowanie/Markering/Označení/Märkning/Mærkning/Merkintä/Märgistus/Marķējums/Ženklinimas/Маркировка/Jelðis/Marcare/Ἱημανση/Obilježava/Označovanie /Označevanje/Маркировка/マーキング/标识</p>
(5)	<p>Normes harmonisées/Harmonisierte Normen / Normas armonizadas/ Norme armonizate/Normas harmonizadas /Normy zharmonizowane /Geharmoniseerde normen /Harmonizované normy /Harmoniserade standarder /Harmoniserede standarder /Yhdenmukaistetut standardit /Harmoniseeritud standardid /Saskaņotie standarti /Suderinti standartai /Хармонизирани стандарти /Harmonizált szabványok / Standarde armonizate/ Евармонизэвана прототпа /Harmonizirani standardi /Harmonizované normy /Usklajeni standardi /Гармонизированные стандарты /整合規格 /协调标准</p>
(6)	<p>Procédure d'évaluation de la conformité/Verfahren der Konformitätsbewertung/Procedimiento de evaluación de la conformidad/Procedura di valutazione della conformità/Procedimento de avaliação da conformidade/Procedura oceny zgodności/Conformiteitsbeoordelingsprocedure/Postup posuzování shody / Förfarande för bedömning av överensstämmelse/Procedure for overensstemmelsesvurdering /Vaatimustenmukaisuuden arviointimenettely / Vastavushindamismenetlus/Atbilstības novērtēšanas procedūra /Atitikties vertinimo procedūra /Процедура за оценка на съответствието /Megfelelőségértékelési eljárás / Procedura de evaluare a conformității/Διαδικασία αξιολόγησης της συμμόρφωσης /Postupak ocjene uskladenosti /Postup posuzovania shody /Postopek ugotavljanja skladnosti /Процедура оценки соответствия / 適合性評價手順 / 符合性評估程序</p>
(7)	<p>Cette déclaration de conformité est délivrée sous la seule responsabilité du fabricant. / Diese Konformitätserklärung wird unter der alleinigen Verantwortung des Herstellers ausgestellt./ Esta declaración de conformidad se emite bajo la única responsabilidad del fabricante./ Questa dichiarazione di conformità è rilasciata sotto la sola responsabilità del produttore./ Esta declaração de conformidade é emitida sob a exclusiva responsabilidade do fabricante./ Niniejsza deklaracja zgodności została wydana na wyłączną odpowiedzialność producenta./ Deze verklaring van overeenstemming wordt afgegeven onder de uitsluitende verantwoordelijkheid van de fabrikant./ Toto prohlášení o shodě je vydáno na výhradní odpovědnost výrobce./ Denna försäkran om överensstämmelse utfärdas på tillverkarens eget ansvar. / Denne overensstemmelseserklæring er udstedt på producentens eget ansvar./ Tämä vaatimustenmukaisuusvakuutus annetaan valmistajan yksinomaisella vastuulla./ Käesolev vastavusdeklaratsioon on välja antud tootja ainuvastutusel./ Šī atbilstības deklarācija ir izdota uz ražotāja atbildību./ Už šią atitikties deklaraciją atsako tik gamintojas./ Настоящата декларация за съответствие се издава на пълната отговорност на производителя./ Ezt a megfelelőségi nyilatkozatot a gyártó kizárólagos felelősége mellett adjuk ki./ Prezenta declarație de conformitate este emisă pe răspunderea exclusivă a producătorului./ Η παρούσα δήλωση συμμόρφωσης εκδίδεται με αποκλειστική ευθύνη του κατασκευαστή./ Ova izjava o skladnosti izdaje se isključivo pod odgovornošću proizvođača./ Toto vyhlásenie o zhode sa vydáva na výhradnú zodpovednosť výrobcu./ Za to izjavo o skladnosti je odgovoren izključno proizvajalec./ Din izdelkarazjoni ta' konformità għandha tinfhaqg taħt ir-responsabbiltà unika tal-manifattur./ Данная декларация соответствия выдана под исключительную ответственность производителя./ この適合宣言は、製造者の単独責任のもとで発行されています。/本符合性声明由制造商全权负责发布。</p>

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