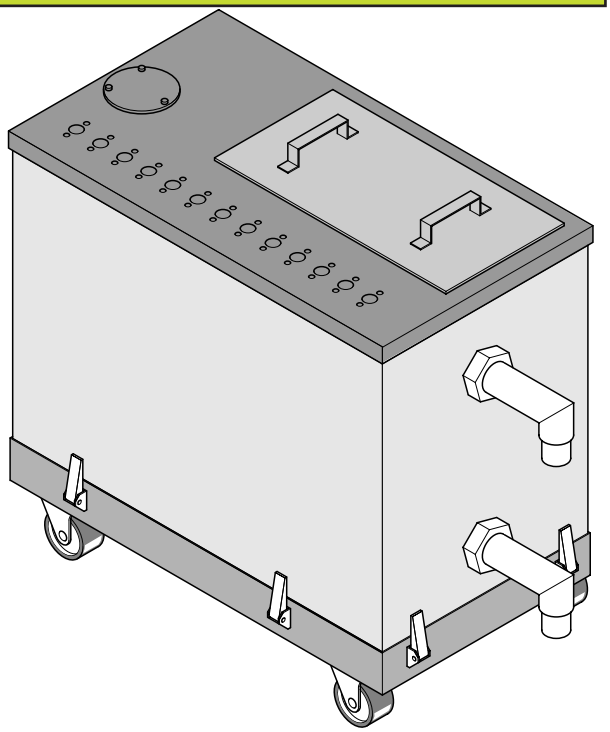
From February 1st, 2017 SAMES Technologies SAS becomes SAMES KREMLIN SAS
A partir du 1/02/17, SAMES Technologies SAS devient SAMES KREMLIN SAS

SAMES KREMLIN



DES00372

User manual

Powder Distributor Tank
CSV 600

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Trainings with the aim of getting the necessary know-how to use and for the maintenance of your equipment can be organised all along the year.
A catalog is available upon request. Among the different training programmes proposed, you will be able to find the training which corresponds the best to your needs and production purposes. These trainings can be organised in your premises or in our training center based in our headquarters in Meylan.

Training Department :
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E-mail : formation-client@sames.com

Powder Distributor Tank
CSV 600

1. Safety Rules - Installation

WARNING : Tank CSV 600 is designed only for storing powder paint.
This equipment may become a safety hazard if it is not operated in accordance with the instructions given in this manual (see Articles R233-140 to R233-150 of the French Labor Law concerning painting and powder spraying booths).
All conducting structures such as floors, spray booth walls, ceilings, gates, parts to be painted, powder distributor tanks, etc. placed close to the work station and also the ground terminal of the electropneumatic control module must have an electrical connection to the power supply grounding system.
Operating temperature range: 0 °C to 40 °C (32 °F to 104 °F).

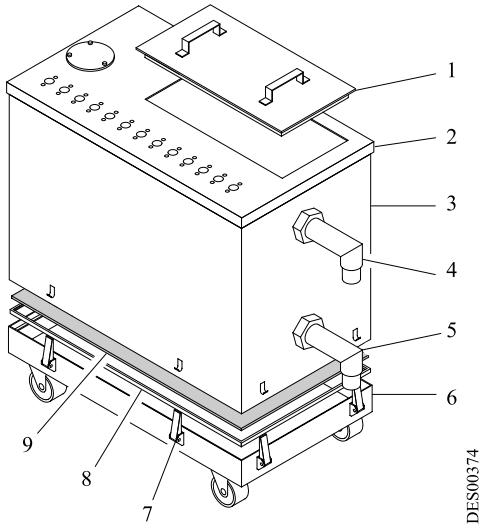
2. Description

The main components of tank CSV 600 are:

- A tank base [6] mounted on rollers, which supports a fluidization plate [9] fitted with a seal [8].
- A tank body [3] secured to the tank base by means of latch fasteners [7].
- A cover [2] supporting two suction plungers and a venturi tube for fume extraction.
- An access hatch [1] mounted on the cover for loading the powder.

As an option, the tank can be fitted with:

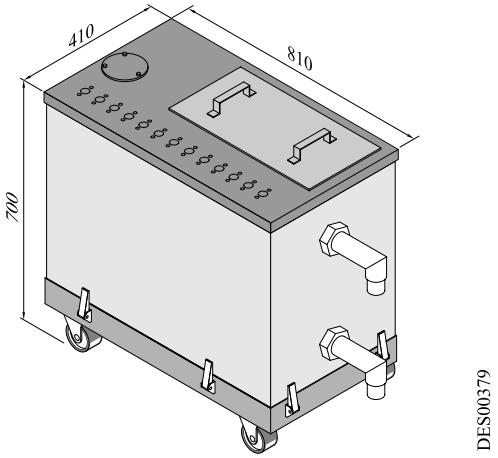
- A powder high level detector [4].
- A powder low level detector [5].



3. Characteristics

3.1. General Data

- Overall dimensions: 810 x 410 x 700 mm
- Weight without fittings: approx. 50 kg.
- Useful capacity: 120 liters (i.e. approx. 60 kg of fluidized powder).
- Maximum number of plungers: 12.



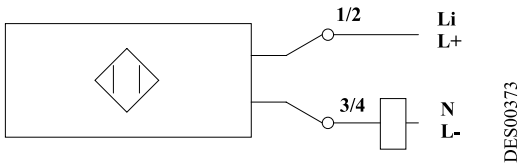
3.2. Pneumatic Data

- Fluidization air flow rate from the tank: 10 to 17 m_0^3/h.
- Air consumption of the fume extraction venturi tube: 5 to 7 m_0^3/h.
- Maximum air flow rate of the fume extraction venturi tube:
  - connected to 10 m of hose, dia. 20 mm: 20 m^3/ h.
  - connected to 5 m of hose, dia. 20 mm: 26 m^3/ h.

3.3. Level Detector Characteristics

Characteristic	Value
Power supply voltage	20 - 250 V AC/DC
Output current (holding)	350 mA AC (+ 50 °C (+ 122 °F)) 250 mA AC (+80 °C (+176 °F)) 100 mA DC
Output current (inrush)	2.2 A (20 ms/0.5 Hz)
Maximum output current	5 mA
Voltage drop / maximum load	< 6.5 V AC / < 6 V DC
Residual current	< 2.5 mA / 250 V AC < 1.3 mA / 110 V AC < 0.8 mA / 24 V DC
Switching frequency	25 Hz AC / 30 Hz DC
LED switching signal	yellow
Ambient temperature	-25... + 80 ° C - (+176° F)
Protection factor	IP 65
EMC	group 2
Case	PBTP, polycarbonate cover
Connection	terminals up to 2.5 mm^2

Connection diagram:



4. Diagrams

None.

5. Operation

The tank is supplied with compressed air through the porous base. The rising air current from the base fluidizes the powder contained in the tank.

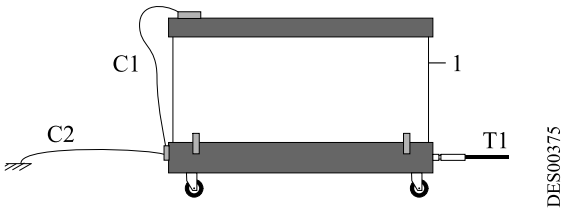
The tank cover can hold up to twelve suction plungers to feed the powder spray guns.

A fume extraction venturi, mounted on the cover, is used to expel the fluidization air to avoid powder leakage.

6. Tools
No specific tools.

7. Installation
It is essential to check that the tank is installed in compliance with the safety rules given in Chapter 1.
Connect the following items:

- The dia. 6/8 fluidization air hose [T1] from the powder tank [1].
- The ground cable [C1] between the tank base and the cover.
- The ground cable [C2] to the ground connection protecting the electrical supply unit.



8. Adjustments
None.

9. Maintenance

9.1. Maintenance and Periodic Checks

WARNING : Use compressed air, a cloth or possibly a brush for all cleaning operations. Water must never be used to clean the equipment.
The fouling and wear of the equipment caused by the powder paint passing through it vary according to the type of powder paint used.
The maintenance frequency shown in the table below is therefore only a guide. With a little experience of using SAMES equipment, the user will be able to draw up his own maintenance schedule.
As an initial guide, we recommend the following maintenance program:

WARNING : To prevent powder surges at the solenoid valve, the injection air and dilution air hoses must be disconnected before any cleaning operations on the suction plunger.

Maintenance frequency	Action
Before starting work	Check that the safety rules in Chapter 1 are applied.
Daily	Check the condition of the equipment.

9.2. Disassembly and Reassembly (General)
Quick-disconnect pneumatic unions are fitted on unions that are removed and refitted frequently:

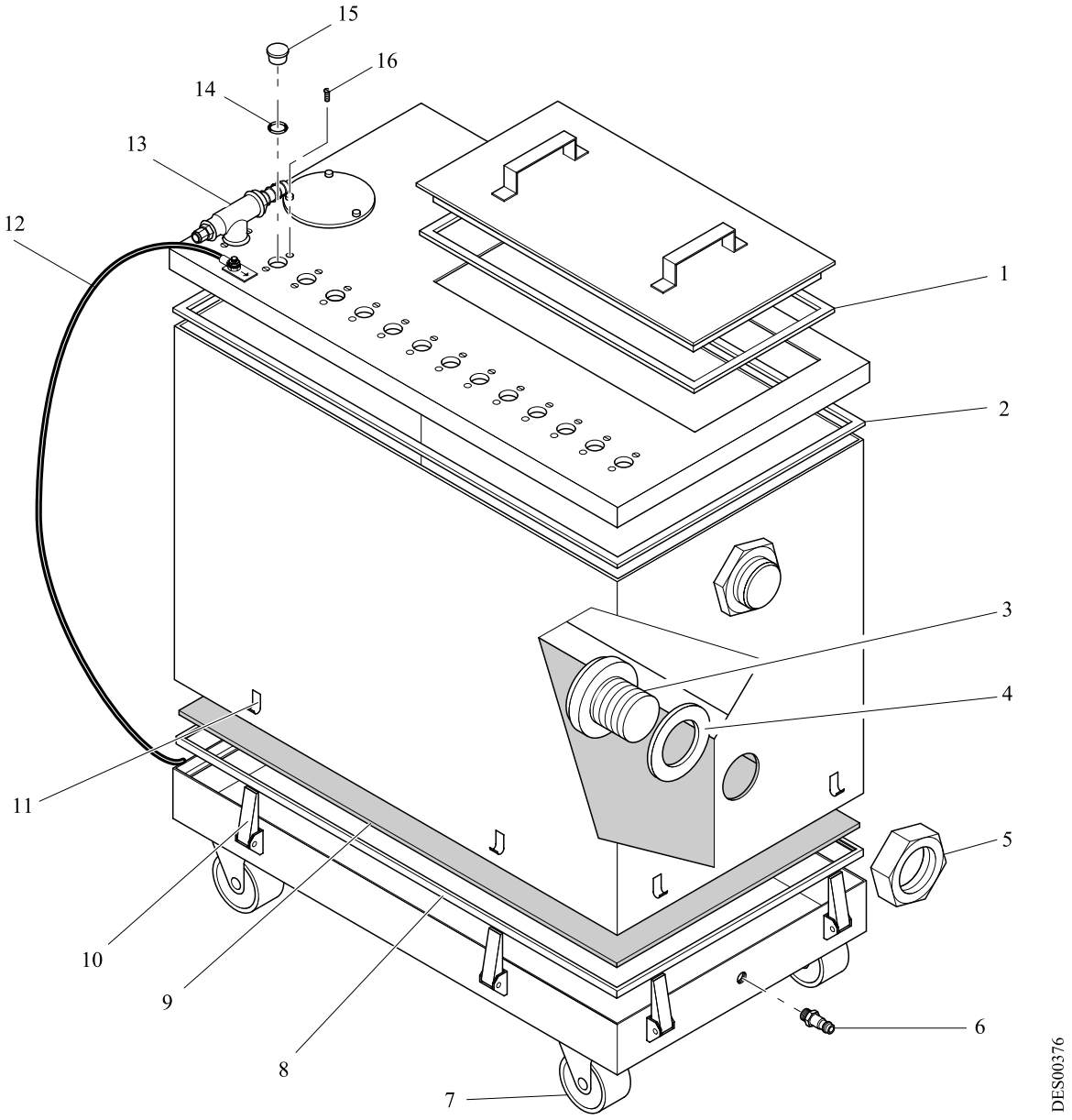
- to secure a hose, simply push it fully home in the union port,
- to disconnect the hose from the pneumatic union, using your fingers, push the ring fitted around the hose towards the union and remove the hose.

10. Troubleshooting

Symptoms	Probable causes	Remedies
The powder comes out in spurts.	Powder fluidization inadequate.	Set the pressure relief valve so that the fluidization air pressure is adequate.
	Diameter of powder supply hose unsuitable.	Change the powder supply hose.
The powder escapes from the tank.	Air flow of the fume extraction venturi is inadequate.	Adjust the fume extraction air flow.
Electrical discharge if tank is touched.	Poor grounding.	Check or change the ground braid between the tank cover and base.

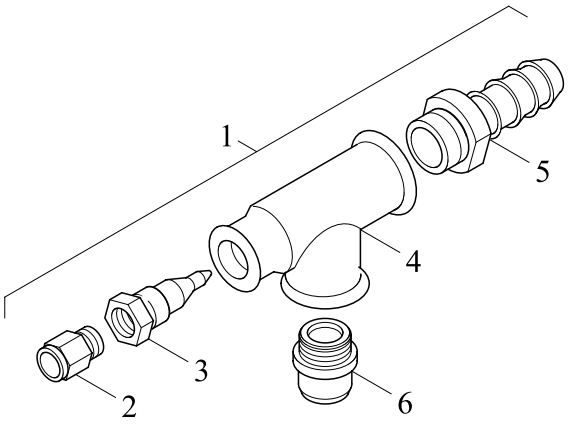
11. Spare Parts

11.1. Tank CSV 600



Item	Part number	Description	Qty	Unit of sale	First Emer-gency	Con-sumable
	752894	**Complete tank CSV 600**	**1**	**1**	**-**	**-**
1	749832	Seal of cover hatch	1	1		X
2	749833	Cover seal	1	1		X
3	E3RBBN036	Plug PG36	2	1	-	-
4	E3RPLJ036	Flat seal for cable gland PG36	2	1		X
5	E3RPCN036	Nut for cable gland PG36	2	1	-	-
6	F6RLJR195	Male socket	1	1	-	-
7	Q1VRGC001	Roller	4	1	-	-
8	749835	Fluidization plate seal	1	1		X
9	547720	Fluidization plate	1	1	X	
	749834	Reinforced Fluidization plate	Option	1	X	
10	Q1FFER053	Latch fastener	8	1	-	-
11	Q1FFER054	Hook for latch fastener	8	1	-	-
12	842635	Ground cable with lugs, length 5 m	1	1	-	-
	X7CEHM006	Nut, H M 6 brass	6	1	-	-
	X2BDVX006	Fan washer, AZ6	2	1	-	-
	X7DDZU006	Brass washer, Z6	2	1	-	-
13	see § 11.2 page 10	Fume extraction venturi	1	1		X
14	J2CTCN052	O-ring	13	10		X
15	F6NPBA097	Plug GPN300	12	1	-	-
16	X4EVSF117	Screw, F/90 Hc M 4 x 8 - stainless steel	26	1	-	-
	see § 11.3 page 10	Detection kit	Option	1	-	-

11.2. Fume Extraction Venturi



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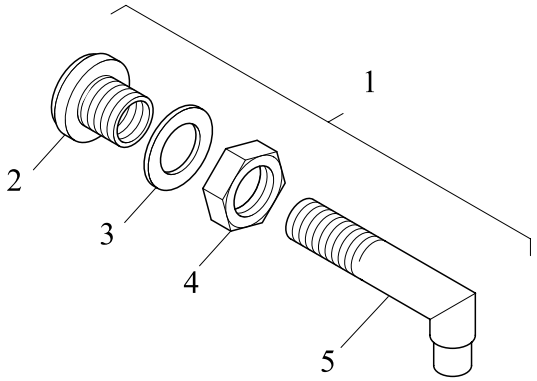
Item	Part number	Description	Qty	Unit of sale	First Emer-gency	Con-suma ble
1	**455455**	**Fume extraction venturi**		**1**		**X**
2	F6RLUS199	Single male union	1	1	-	-
3	449108	Injector	1	1	X	
4	742654	Venturi body	1	1	-	-
5	449109	Grooved end-piece	1	1		X
6	748489	Plunger tube support	1	1	-	-

11.3. Level Detector Option



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Item	Part number	Description	Qty	Unit of sale	First Emer-gency	Con-suma ble
1	**855392**	**Level detector kit**		**1**	**-**	-
2	548901	Level detector support	1	1	-	-
3	E3RPLJ036	Flat seal for cable gland PG36	1	1		X
4	E3RPCN036	Nut for cable gland PG36	1	1	-	-
5	E6KDDP066	Level detector	1	1	X	