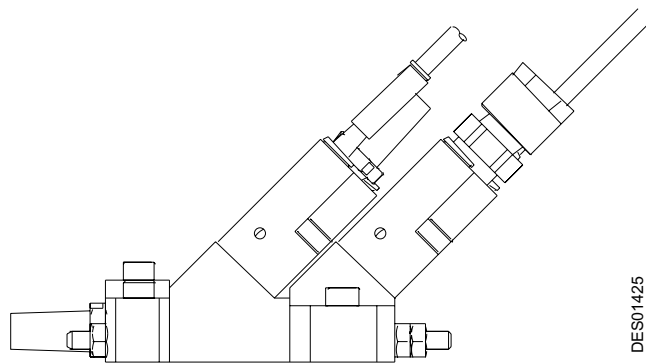




From February 1st, 2017 SAMES Technologies SAS becomes SAMES KREMLIN SAS
A partir du 1/02/17, SAMES Technologies SAS devient SAMES KREMLIN SAS



DES01425

User manual

Powder color changer «Modupoudre»

FRANCE

SAMES Technologies. 13 Chemin de Malacher 38243 Meylan Cedex
Tel. 33 (0)4 76 41 60 60 - Fax. 33 (0)4 76 41 60 90 - www.sames.com

USA

SAMES Technologies Inc. 11998 Merriman Road, Livonia, Michigan, 48 150
Tel. (734) 261.5970 - Fax. (734) 261.5971 - www.sames.com

Any communication or copying of this document, in any form whatsoever, and any use or divulging of its contents is forbidden without express written permission from SAMES Technologies.

The descriptions and characteristics contained in this document may be changed without prior warning and are in no way binding SAMES Technologies.

© **SAMES Technologies 2003**

**Note: Sames Technologies proposes various training programs.
A catalog is available on request.**

**Training Department:
Tel.: 33 (0)4 76 41 60 04
E-mail : formation-client@sames.com**

Powder color changer

«Modupoudre»

1. Characteristics - - - - -	4
2. Operation - - - - -	4
3. General description of a "Modupoudre" ass'y - - - - -	5
4. Replacement of a powder valve assembly - - - - -	6
4.1. <i>Disassembly</i>	6
4.2. <i>Reassembly</i>	6
5. Replacement of a powder valve upper section - - - - -	7
5.1. <i>Disassembly</i>	7
5.2. <i>Reassembly</i>	7
6. Maintenance / cleaning - - - - -	8
6.1. <i>Maintenance</i>	8
6.2. <i>Cleaning</i>	8
7. Spare parts list - - - - -	9
7.1. <i>Modupoudre</i>	9
7.2. <i>Powder valve manifold</i>	10
7.3. <i>Purge air manifold</i>	11
7.4. <i>Powder outlet manifold ass'y</i>	11

1. Characteristics

Pilot	Filtered, dehydrated, de-oiled air
Pinch-valve pilot pressure	1.5 to 2.5 bar maxi. (22.5 psi to 37.5 psi)
Powder supply pilot-air pressure	2 bar - 31.66 psi (or as needed by the applicator)

Polluting matter	Criteria	Level	Classification According to NF ISO 8573-1 (standard) norm
Solid	Maximum concentration	5 mg/m ₀ ³ *	3
Solid	Maximum concentration	5 µm	3
Water	Dew point (pressurized air)	+3°C	4
Oil	Maximum concentration	0,01mg/ m ₀ ³ *	1

* : The values are given for a temperature of 0 °C (32 °F), at atmospheric pressure.

2. Operation

The "MODUPOUDRE" is a fast color changer block for powder applicators.

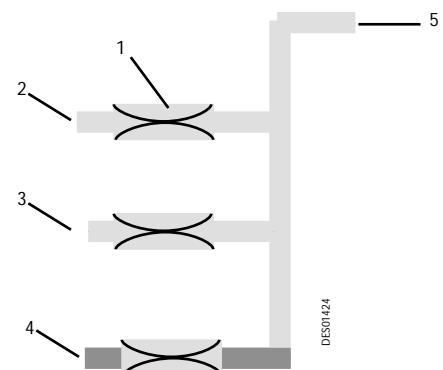
At every color change, a cleaning cycle (air) is applied.

Color changer must be located as close as possible to the sprayer in order to minimize powder losses and optimize color change times.

The operation of the block is as follows:

- Color # 1 spray application phase** : powder circuit # 1 opened, powder circuit # 2 and cleaning circuit shut off.
- End of spray application**: shut off powder circuits (# 1 and # 2), cleaning circuit remains shut.
- Circuit cleaning phase**: open cleaning circuit.
- Color # 2 spray application phase** : powder circuit # 1 and cleaning circuit shut off, powder circuit # 2 opened.

1	Pinch-valve
2	Powder circuit 1
3	Powder circuit 2
4	Cleaning air
5	Powder / air outlet



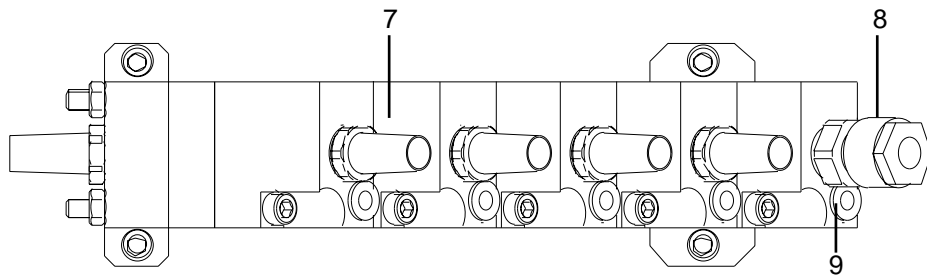
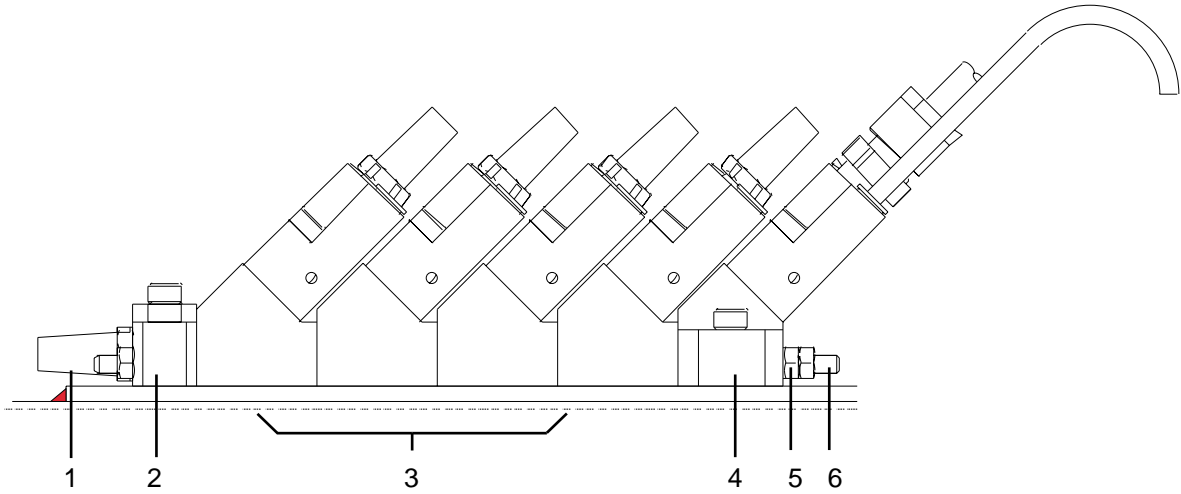
The "MODUPOUDRE" uses :

- An air distributor element for cleaning, made of a pinch-valve and an air pilot circuit.
- A powder and cleaning air outlet.

3. General description of a "Modupoudre" ass'y

It is possible to add or remove valves as needed, assuming that the length of the two threaded rods are changed.

"MODUPOUDRE" components are:



DES01413

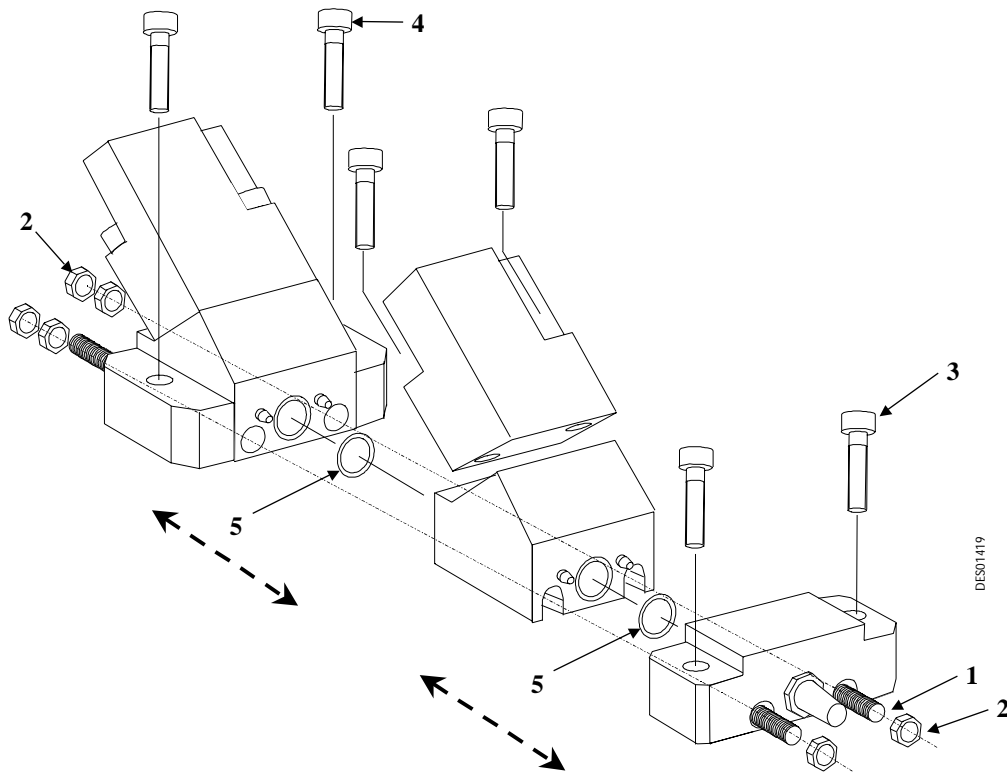
1	Powder, outlet end piece
2	Powder outlet manifold block
3	Powder valve manifold block
4	Purge air manifold
5	Air blow off inlet
6	Quick lock air fitting
7	Powder tube barbed fitting
8	Purge air fitting
9	Purge air-valve pilot

4. Replacement of a powder valve assembly

4.1. Disassembly

Tools: standard tool box.

- Before any operation, turn off all power (release pressure).
- Disconnect powder and air hoses from the concerned block.
- Remove the fixing screws (3) and (4) which hold the upper section on its base.
- Loosen the nuts and lock-nuts (2) of the two threaded rods (1) which support all elements.
- Separate the block, by pulling axially on each end, save seal (5).
- Repeat to remove the defective element.



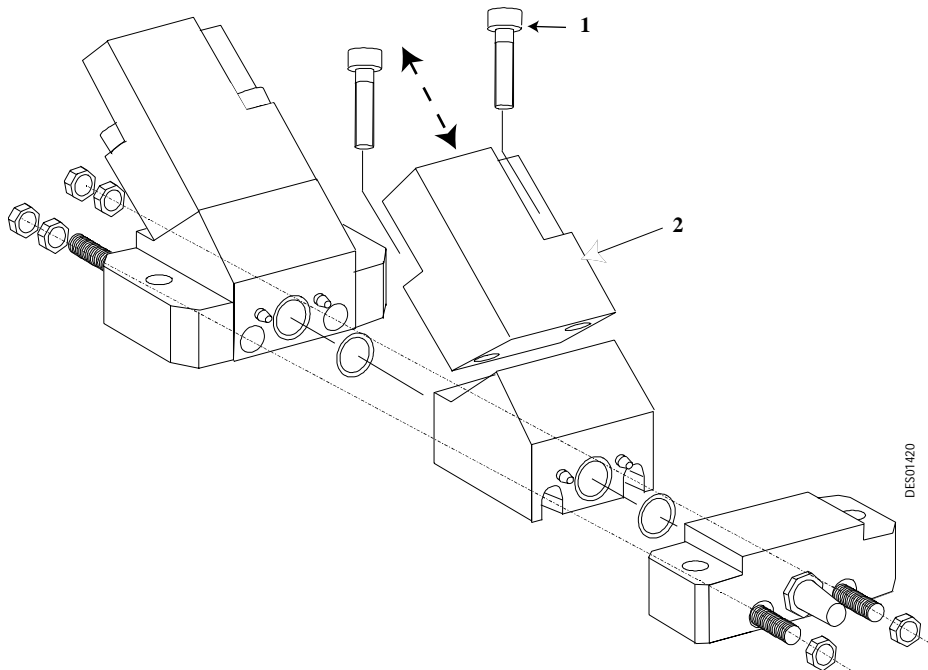
4.2. Reassembly

Proceed in reverse order, and mind the o-rings, replace if necessary.

5. Replacement of a powder valve upper section

5.1. Disassembly

- Before any operation, turn off all power (release pressure).
- Disconnect powder and air hoses from the concerned valve.
- Remove the fixing screws (1) which hold the block (2) on its base.
- To separate the (upper) valve from its base, make an axial effort.



5.2. Reassembly

Proceed in reverse order and mind the o-rings, replace if necessary.

6. Maintenance / cleaning

6.1. Maintenance

- It is limited to the replacement of the o-ring located between each section.
- Periodically check the block in order to detect potential leaks between the different parts.
If a leak is detected, it must be repaired quickly or operating issues will occur in a short time.

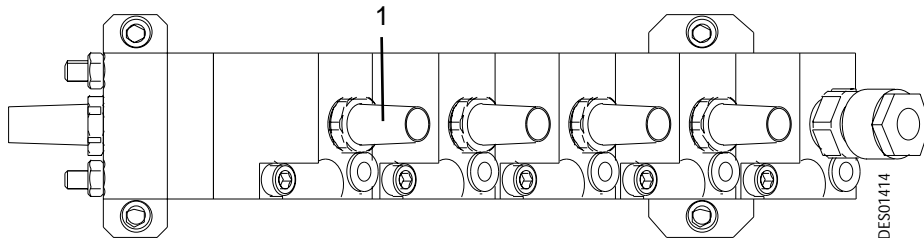


WARNING : Avoid long dipping of plastic parts in aggressive solvents. Do not use acids or phenol.

Do not dip o-rings in solvents. Every suspicious o-ring must be replaced.

Do not use sharp tools for cleaning.

- Periodically, remove the hose from the nipple (1) (cleaning of the dead spot) and blow with compressed air at the maximum pressure.



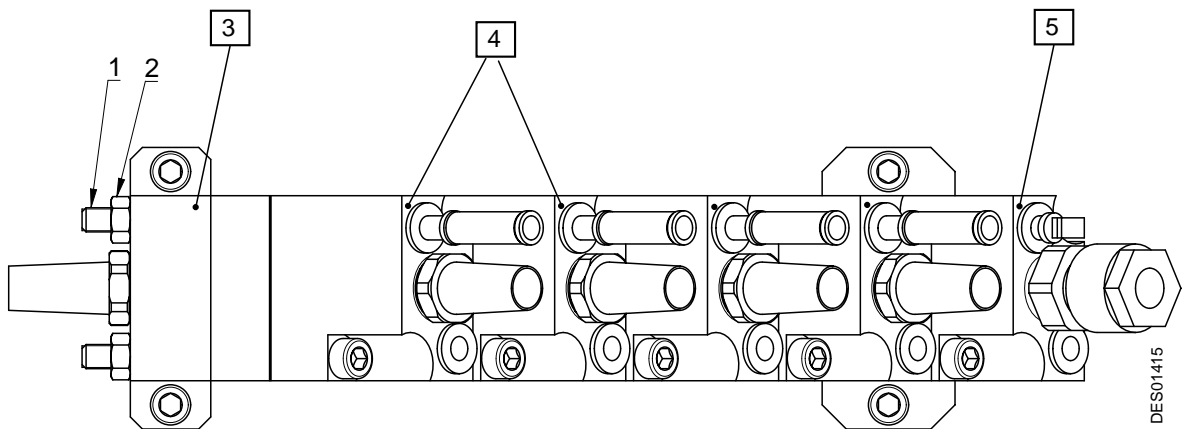
6.2. Cleaning

To prevent any restriction from powder build up:

- Preventive cleaning of the main circuit should be carried out once per shift.
 - Cleaning air pressure: 4 bar (60 psi) for powder supply hose length up to 4.57 m (15 ft).
 - Pinch-valve shut off pressure: 3 bar (45 psi).

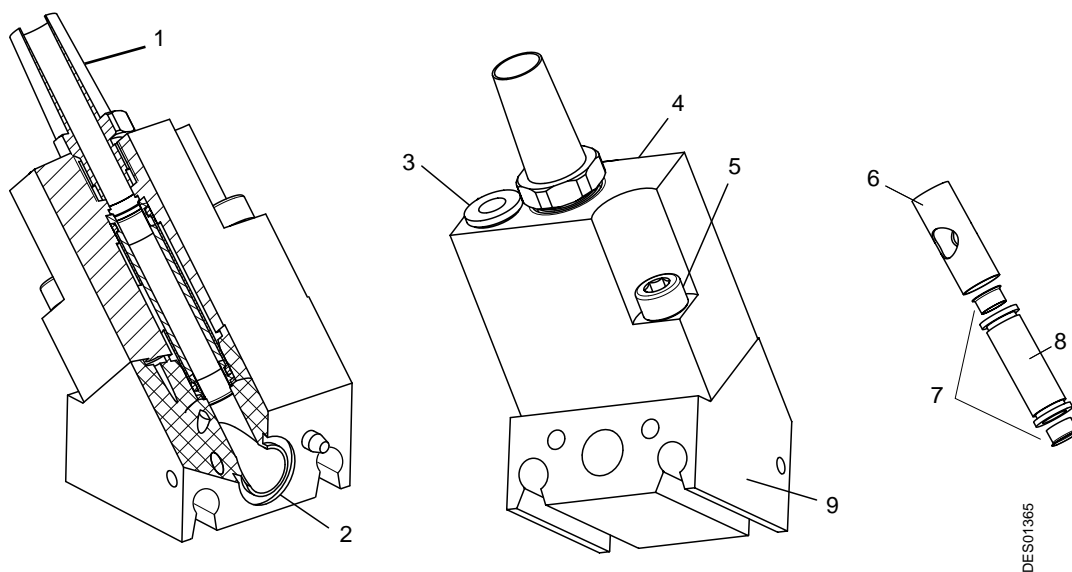
7. Spare parts list

7.1. Modupoudre



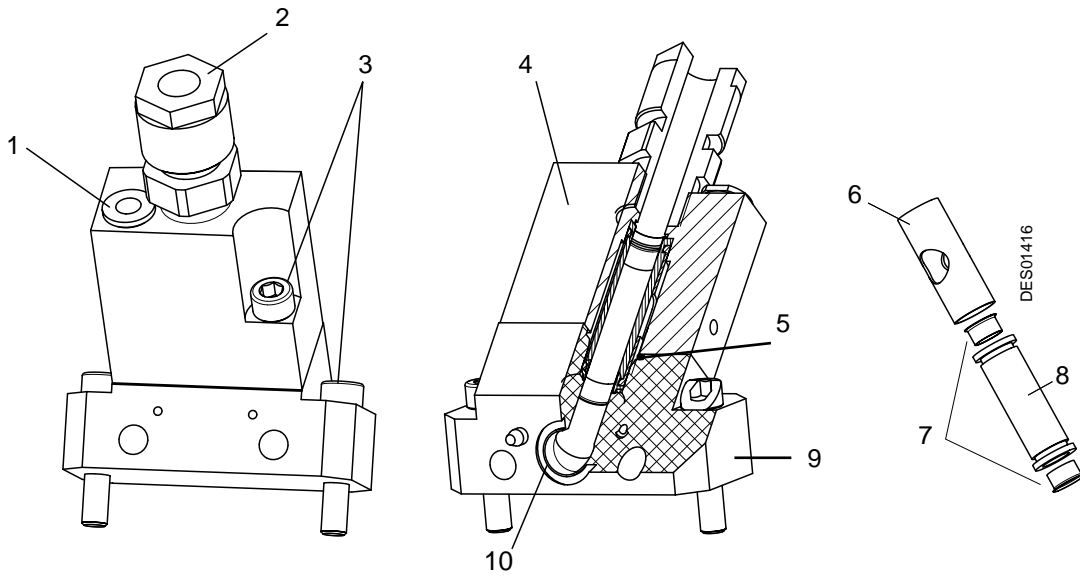
Item	Part number	Description	Qty	Unit of sale
1	1405852	Threaded rod M6 length: 235 mm	1	1
2	X2BEHU006	Nut H M6 U zinc plated steel	2	1
3	1511690	Powder outlet manifold ass'y see § 7.4 page 11	1	1
4	1511691	Powder valve manifold ass'y see § 7.2 page 10	1	1
5	1511685	Purge air manifold ass'y see § 7.3 page 11	1	1

7.2. Powder valve manifold



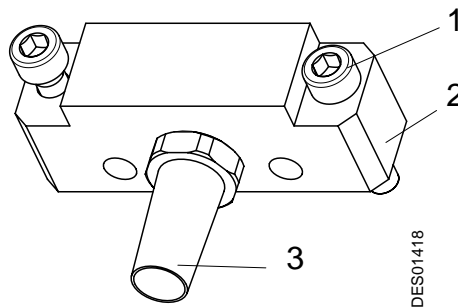
Item	Part number	Description	Qty	Unit of sale
	1511691	Powder valve manifold ass'y	1	1
1	642396	Powder fitting, barbed	1	1
2	J3ETOR040	O-ring	1	1
3	F6RLUC136	Guest cartridge Ø 6, pilot fitting	1	1
4	1306831	Upper section, valve	1	1
5	X9SVSY228	Screw - M 6 x 30 glass filled nylon	4	1
6	642193	Aluminum cylinder	1	1
7	642657	Ferrule	2	1
8	546898	Rubber sleeve	1	1
9	1306830	Base, valve	1	1

7.3. Purge air manifold



Item	Part number	Description	Qty	Unit of sale
	1511685	Purge air manifold	1	1
1	F6RLUC136	Guest cartridge Ø 6, pilot fitting	1	1
2	F6RLUS056	Air blow off fitting	1	1
3	X9SVSY228	Screw - M 6 x 30 glass filled nylon	4	1
4	1306831	Air manifold, upper section	1	1
5	J3ETOR040	O-ring	1	1
6	642193	Aluminum cylinder	1	1
7	642657	Ferrule	2	1
8	546898	Rubber sleeve	1	1
9	1306825	Air manifold, base	1	1
10	J3ETOR023	O-ring	1	1

7.4. Powder outlet manifold ass'y



Item	Part number	Description	Qty	Unit of sale
	1511690	Powder outlet manifold ass'y	1	1
1	X9SVSY228	Screw - M 6 x 30 glass filled nylon	2	1
2	1306662	Powder outlet, base	1	1
3	642396	Powder outlet, end piece	1	1