OptiFeed B FPS19
Fresh powder system

Translation of the original operating instructions
# Table of contents

General safety regulations .................................................. 3
  Safety symbols (pictograms) ........................................... 3
  Conformity of use ............................................................ 8
  Product-specific safety measures .................................... 8
  OptiFeed B FPS19 Fresh powder system ...................... 8

About this manual .......................................................... 9
  General information ........................................................ 9

Product description ......................................................... 11
  Field of application ....................................................... 11
  Utilization ........................................................................ 12
  Reasonably foreseeable misuse ..................................... 12
  Technical data .................................................................. 12
  Electrical data ................................................................. 12
  Pneumatic data ............................................................... 12
  Conveying performance/powder output ...................... 13
  Dimensions ....................................................................... 13
  Processible powders ..................................................... 13
  Design and function ........................................................ 14
  General view ..................................................................... 14
  Scope of delivery ............................................................ 15
  OptiFeed B FPS19 ........................................................... 15
  Accessories (Option) ....................................................... 15
  Typical properties - Characteristics of the functions ...... 15
  Processing the powder directly from the original powder manufacturer’s container .................. 15

Start-up .............................................................................. 17
  Preparation for start-up .................................................. 17
  Basic conditions ............................................................. 17
  Set-up ............................................................................... 17

Initial start-up ..................................................................... 19
  Operation ........................................................................... 20
  Powder hose rinsing ........................................................ 21
  Color change ..................................................................... 22
  General information ........................................................ 22
  Shutdown .......................................................................... 23

Cleaning and maintenance ............................................... 25
  Daily maintenance .......................................................... 25
  Weekly maintenance ....................................................... 25
  If in disuse for several days ............................................. 25
  Cleaning ............................................................................ 26
  Cleaning the fluidizing/suction unit .............................. 26
Maintenance and cleaning of the filter unit ........................................................... 26
Replacing the filter element ................................................................................. 26

Troubleshooting 27
General information ............................................................................................. 27

Spare parts list 29
Ordering spare parts ............................................................................................ 29
OptiFeed B FPS19 Fresh powder system – Spare parts .................................. 30
OptiFeed B FPS19 Fresh powder system – Spare parts .................................. 31
Fluidizing/suction unit ......................................................................................... 32
Fluidizing/suction unit - spare parts ................................................................. 33
OptiFeed B FPS19 – Pneumatic group ................................................................. 34
General safety regulations

This chapter sets out the fundamental safety regulations that must be followed by the user and third parties using OptiFeed B FPS19 Fresh powder system.

These safety regulations must be read and understood before the OptiFeed B FPS19 is put into operation.

Safety symbols (pictograms)

The following warnings with their meanings can be found in the Gema operating instructions. The general safety precautions must also be followed as well as the regulations in the operating instructions.

**DANGER!**
Danger due to live electricity or moving parts. Possible consequences: death or serious injury

**WARNING!**
Improper use of the equipment could damage the machine or cause it to malfunction. Possible consequences: minor injuries or damage to equipment

**INFORMATION!**
Useful tips and other information
The OptiFeed B FPS19 Fresh powder system is state of the art equipment that conforms to the recognized technical safety regulations and is designed for normal powder coating applications.

Any other use is considered non-compliant. The manufacturer shall not be liable for damage resulting from such use; the user bears sole responsibility for such actions. Gema Switzerland GmbH must be consulted before OptiFeed B FPS19 Fresh powder system is used for any other purposes or substances beyond those indicated here.

Observance of the operating, service and maintenance instructions specified by the manufacturer is also part of conformity of use.

The relevant accident prevention regulations, as well as other generally recognized safety regulations, occupational health and structural regulations are to be observed.

Furthermore, the country-specific safety regulations also must be observed.

Additional safety and operation notices can be found on the accompanying CD or on the homepage www.gemapowdercoating.com.

Start-up is forbidden until it has been established that the OptiFeed B FPS19 Fresh powder system has been set up and wired according to the EU guidelines for machinery.

Unauthorized modifications to the OptiFeed B FPS19 Fresh powder system exempt the manufacturer from any liability from resulting damages or accidents.

The operator must ensure that all users have received appropriate training for powder spraying equipment and are aware of the possible sources of danger.

Any operating method, which will negatively influence the technical safety of the powder spraying equipment, is to be avoided.
For your own safety, only use accessories and attachments listed in the operating instructions. The use of other parts can lead to risk of injury. Only original Gema spare parts should be used!

Repairs must only be carried out by specialists or by authorized Gema service centers. Unauthorized conversions and modifications can lead to injuries and damage to the equipment and invalidate the Gema Switzerland GmbH guarantee.

The connecting cables between the control unit and the spray gun must be installed so as to eliminate the possibility of damage during the operation. Please observe the local safety regulations!

The plug connections between the powder spraying equipment and the mains should only be removed when the power supply is switched off.

All maintenance activities must take place when the powder spraying equipment is switched off.

The powder coating equipment may not be switched on until the booth is in operation. If the booth stops, the powder coating device must switch off too.

The control units for the spray guns must be installed and used in zone 22. Spray guns are allowed in zone 21.

Only original Gema OEM parts are guaranteed to maintain the explosion protection rating. If damages occur related to the use of spare parts from other manufacturers, all relevant warranty or compensation claims are void!

Conditions leading to dangerous levels of dust concentration in the powder spraying booths or in the powder spraying areas must be avoided. There must be sufficient technical ventilation available, to prevent a dust concentration of greater than 50% of the lower explosion limit (UEG = max. permissible powder/air concentration). If the UEG is not known, then a value of 10 g/m³ should be considered (see EN 50177).

All unauthorized conversions and modifications to the electrostatic spraying equipment are forbidden for safety reasons.

The safety devices may not be dismantled or put out of operation.

Mandatory operational and workplace notices from the operating company must be written in a comprehensible manner in the language of equipment operators and posted in a suitable place.
Powder lying on the floor around the powder spraying equipment is a potentially dangerous source of slipping. Booths may be entered only in the places designed for this purpose.

**Static charges**

Static charges can have the following consequences: Charges to people, electric shocks, sparking. Proper grounding must be in place to prevent objects from becoming charged.

**Grounding**

All electrically conductive parts found within 5 meters around each booth opening, and in particularly the objects to be coated, must be grounded. The grounding resistance of each object must amount to maximally 1 MOhm. This resistance must be checked/tested regularly when starting work.

The condition of the work piece attachments, as well as the hangers, must guarantee that the work pieces remain grounded. The appropriate measuring devices must be kept ready in the workplace, in order to check the grounding.

The floor of the coating area must conduct electricity (normal concrete is generally conductive).

The supplied grounding cable (green/yellow) must be connected to the grounding screw of the Fresh powder system. The grounding cable must have a good metallic connection with the coating booth, the recovery unit and the conveyor chain, respectively with the suspension arrangement of the objects.

Smoking and igniting fire are forbidden in the entire vicinity of the system! No work that could potentially produce sparks is allowed!
As a general rule for all powder spraying installations, persons with pacemakers should never enter high voltage areas or areas with electromagnetic fields. Persons with pacemakers should not enter areas with powder spraying installations!

Photographing with flashlight can lead to unnecessary releases and/or disconnections by safety devices.

Disconnect the plugs before the machines are opened for maintenance or repair.
The plug connections between the powder spraying equipment and the mains should only be removed when the power supply is switched off.

As far as it is necessary, the operating firm must ensure that the operating personnel wear protective clothing (e.g. facemasks).
A dust mask corresponding to filter class FFP2 at minimum must be worn during any cleaning work.
The operating personnel must wear electrically conductive, steel-toe footwear (e.g. leather soles).
The operating personnel should hold the gun with bare hands. If gloves are worn, these must also conduct electricity.

These general safety regulations must be read and understood in all cases prior to start-up!
Conformity of use

1. The OptiFeed B FPS19 Fresh powder system is state of the art equipment that conforms to the recognized technical safety regulations and is designed for normal powder coating applications.

2. Any other use is considered non-compliant. The manufacturer shall not be liable for damage resulting from such use; the user bears sole responsibility for such actions. Gema Switzerland GmbH must be consulted before OptiFeed B FPS19 Fresh powder system is used for any other purposes or substances beyond those indicated here.

3. Observance of the operating, service and maintenance instructions specified by the manufacturer is also part of conformity of use. The OptiFeed B FPS19 Fresh powder system should only be used, maintained and started up by trained personnel informed and familiar with the possible hazards involved.

4. Start-up (i.e. operation of its intended use) is not allowed until it has been established that the OptiFeed B FPS19 Fresh powder system has been installed and wired according to the EU Machinery Directive (2006/42/EC). EN 60204-1 (machine safety) must also be observed.

5. Unauthorized modifications to the OptiFeed B FPS19 Fresh powder system exempt the manufacturer from any liability from resulting damage.

6. The relevant accident prevention regulations, as well as other generally recognized safety regulations, occupational health and structural regulations are to be observed.

7. Furthermore, the country-specific safety regulations also must be observed.

<table>
<thead>
<tr>
<th>Explosion protection</th>
<th>Protection type</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE Ex II 3D</td>
<td>IP54</td>
</tr>
</tbody>
</table>

Product-specific safety measures

- Installation work performed by the customer must be carried out according to local regulations.
- All components must be grounded according to the local regulations before start-up.

OptiFeed B FPS19 Fresh powder system

The OptiFeed B FPS19 is a constituent part of the system and is thus integrated into the safety system of the plant.

If it is to be used in a manner outside the scope of the safety concept, then corresponding measures must be taken.

Note:
For further security information, see the more detailed Gema safety regulations!
About this manual

General information

This operating manual contains all important information required to work with the OptiFeed B FPS19 Fresh powder system. It will safely guide you through the start-up process and give you references and tips for the optimal use of your new powder coating system.

Information about the functionality of the individual system components - booth, gun control unit, manual gun or powder injector - should be referenced to their enclosed corresponding documents.
Product description

Field of application

The OptiFeed B FPS19 Fresh powder system (with powder box) is exclusively intended for electrostatic coating using organic powders (For more on this please also review chapter "Technical Data").

Any other use is considered non-compliant. The manufacturer is not responsible for any incorrect use and the risks associated with such actions are assumed by the user alone!

For a better understanding of the interrelationships in powder coating, it is recommended that the operating instructions for all other components be read as well, so as to be familiar with their functions too!
Utilization

The OptiFeed B FPS19 Fresh powder system conveys fluidized coating powder dust free from a powder container to the place of destination.

Note:
The use of the OptiFeed B FPS19 Fresh powder system must take place in the area defined for it!

Reasonably foreseeable misuse

- Operation without the proper training
- Use with insufficient compressed air quality and grounding
- Use in connection with unauthorized coating devices or components

Technical data

Electrical data

<table>
<thead>
<tr>
<th>OptiFeed B FPS19</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal input voltage</td>
<td>100-240 VAC</td>
</tr>
<tr>
<td>Frequency</td>
<td>50 - 60 Hz</td>
</tr>
<tr>
<td>Connected load</td>
<td>120 VA</td>
</tr>
<tr>
<td>Vibrator connection and performance</td>
<td>110-230 VAC</td>
</tr>
<tr>
<td></td>
<td>max. 100 VA</td>
</tr>
<tr>
<td>Temperature range</td>
<td>0 °C - +40 °C</td>
</tr>
<tr>
<td></td>
<td>(+32 °F - +104 °F)</td>
</tr>
<tr>
<td>Max. surface temperature</td>
<td>120 °C (+248 °F)</td>
</tr>
<tr>
<td>Approvals</td>
<td>CE II 3 D IP54 120 °C</td>
</tr>
</tbody>
</table>

Pneumatic data

<table>
<thead>
<tr>
<th>OptiFeed B FPS19</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. input pressure</td>
<td>8 bar</td>
</tr>
<tr>
<td>Min. input pressure</td>
<td>6 bar</td>
</tr>
<tr>
<td>Max. water vapor content of the compressed air</td>
<td>1.3 g/m³</td>
</tr>
<tr>
<td>Max. oil vapor content of the compressed air</td>
<td>0.1 mg/m³</td>
</tr>
<tr>
<td>Air consumption (complete system)</td>
<td>8-11 Nm³/h</td>
</tr>
<tr>
<td>Air consumption (transport)</td>
<td>2-5 Nm³/h</td>
</tr>
</tbody>
</table>
Conveying performance/powder output

<table>
<thead>
<tr>
<th>OptiFeed B FPS19</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Powder hose length 0-8 m</td>
<td>5000 g/min</td>
</tr>
<tr>
<td>Powder hose length 8-16 m</td>
<td>4000 g/min</td>
</tr>
<tr>
<td>Powder hose length 16-25 m</td>
<td>3500 g/min</td>
</tr>
<tr>
<td>Powder pump</td>
<td>OptiFeed PP06 type</td>
</tr>
</tbody>
</table>

Dimensions

<table>
<thead>
<tr>
<th>OptiFeed B FPS19</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Width</td>
<td>460 mm</td>
</tr>
<tr>
<td>Depth</td>
<td>710 mm</td>
</tr>
<tr>
<td>Height</td>
<td>1700 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>54 kg</td>
</tr>
</tbody>
</table>

Processible powders

<table>
<thead>
<tr>
<th>OptiFeed B FPS19</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic powder</td>
<td>yes</td>
</tr>
<tr>
<td>Metallic powder</td>
<td>yes</td>
</tr>
<tr>
<td>Enamel powder</td>
<td>yes (with OptiFeed PP06-E only)</td>
</tr>
</tbody>
</table>

Note:
For further information, see the OptiFeed PP06 Powder pump operating manual!
Design and function

General view

OptiFeed B FPS19 Fresh powder system - Structure

<table>
<thead>
<tr>
<th>AS</th>
<th>Suction side</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS</td>
<td>Transport side</td>
</tr>
<tr>
<td>1</td>
<td>OptiFeed PP06 Powder pump</td>
</tr>
<tr>
<td>2</td>
<td>Power pack</td>
</tr>
<tr>
<td>3</td>
<td>Pressure regulator for fluidizing air</td>
</tr>
<tr>
<td>4</td>
<td>Fluidizing air connection</td>
</tr>
<tr>
<td>5</td>
<td>Fluidizing/suction unit</td>
</tr>
<tr>
<td>6</td>
<td>Filter unit</td>
</tr>
<tr>
<td>7</td>
<td>Vibrating table</td>
</tr>
<tr>
<td>8</td>
<td>Swivel wheel</td>
</tr>
<tr>
<td>9</td>
<td>Rubber wheel</td>
</tr>
<tr>
<td>10</td>
<td>Swivel arm with guide sleeve</td>
</tr>
</tbody>
</table>

OptiFeed PP06 Powder pump

All information about the OptiFeed PP06 Powder pump will be found in the corresponding enclosed documentation!
Power pack

Switch position

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Switch on the vibrator manually</td>
</tr>
<tr>
<td>0</td>
<td>Vibrator OFF</td>
</tr>
<tr>
<td>II</td>
<td>Vibrator is switched on via an external signal</td>
</tr>
<tr>
<td>0</td>
<td>PP06 Powder pump OFF</td>
</tr>
<tr>
<td>I</td>
<td>PP06 Powder pump ON</td>
</tr>
</tbody>
</table>

Scope of delivery

OptiFeed B FPS19
- mobile trolley
- vibrating table with a fluidizing/suction unit
- OptiFeed PP06 Powder pump
- Pneumatic hoses and connection cable
- Special cable jack for the connection of an external control signal
- Power pack with power supply cable
- Operating manual
- Short instructions

Accessories (Option)
- LM02 Level sensor

Typical properties - Characteristics of the functions

Processing the powder directly from the original powder manufacturer's container

The OptiFeed B FPS19 Fresh powder system allows for powder to be processed directly out of the original powder manufacturer's container. A titled vibrating floor has been included to ensure that the powder container empties itself completely.
Start-up

Preparation for start-up

Basic conditions
When starting up the OptiFeed B FPS19 Fresh powder system, the following general conditions impacting the coating results must be taken into consideration:

- Fresh powder system is set up properly
- Powder pump correctly connected
- Corresponding power and compressed air supply available
- Powder preparation and powder quality

Set-up
The OptiFeed B FPS19 Fresh powder system should always be set up vertically on a flat surface.

WARNING:
The Fresh powder system must not under any circumstances be set up near a heat source (such as an enameling furnace) or an electromagnetic source (such as a control cabinet).

Note:
Use clamp to connect grounding cable to the cabin or the suspension arrangement. Check ground connections with Ohm meter and ensure 1 MOhm or less!

Note:
The compressed air must be free of oil and water!
Initial start-up

Note:
If a malfunction occurs, see the troubleshooting guide, as well as the Powder pump operating manual!

1

2

3

Note:
The remainder of the start-up procedure for the OptiFeed PP06 Powder pump is explicitly described in the corresponding operating instructions (chapter "Initial start-up" and "Daily start-up")!
Operation

**WARNING**
If the Fresh powder system is not being used in conjunction with a sufficiently powerful suction unit, then the stirred-up dust from the coating powder can cause respiratory issues or cause a slippage/falling hazard.

- The manual equipment may only be operated in conjunction with a sufficiently powerful suction unit (such as Gema Classic Open booth).

1. Switch on the Fresh powder system  
   The switch lamp illuminates and the unit is ready for operation
2. Swivel aside the fluidizing/suction unit
3. Place the open powder container on the vibrating table

**WARNING**
If a container is placed on the vibrating plate, then fingers caught in the gap between the two plates can be crushed.

- The container may weight a max. of 30 kg.

4. Place the fluidizing/suction unit onto the powder
5. Switch on the vibrator manually (position I)
6. Adjust the fluidization with the pressure regulator on the Fresh powder system  
   Check the powder fluidization in the powder container.  
   The powder fluidization in the powder containers depends on the powder characteristic, the humidity and the ambient air temperature. Fluidizing starts by switching on the Fresh powder system.

**WARNING**
If the ventilation has been incorrectly adjusted, then the coating powder can create a dust cloud capable of causing respiratory problems.

- Adjust the fluidization correctly

7. The fluidizing/suction unit digs itself into the powder
8. Switch on the OptiFeed PP06 Powder pump
9. The powder pump conveys powder to the powder hose

**Note:**
For further information, see the OptiFeed PP06 Powder pump operating manual!
Powder hose rinsing

In order to prevent hose cloggings, the powder hose must be cleaned by powder residues, if a longer standstill takes place.

The powder hose rinsing function of the OptiFeed PP06 Powder pump allows the cleaning of the powder hoses and the filter elements.

Note:
For further information, see the OptiFeed PP06 Powder pump operating manual!
Color change

General information

When a color change takes place, the individual components of the Fresh powder system must be cleaned carefully. All powder particles of the former color must be removed during this process!

The following describes an ‘extreme’ color change (light to dark).

1. Clean the OptiFeed PP06 Powder pump (see the corresponding operating manual)
Shutdown

1. Switch off the vibration
2. Switch off the Fresh powder system

*If in disuse for several days*

1. Separate from power mains
2. Clean the Fresh powder system
3. Turn off the compressed air main supply
Cleaning and maintenance

Note:
Regular and conscientious maintenance increases the service life of the OptiFeed B FPS19 Fresh powder system and provides for a longer continuous coating quality!
The parts, which are to be replaced during maintenance work, are available as spare parts. These parts will be found in the corresponding spare parts list!

Daily maintenance

1. Empty the powder hose by removing the fluidizing/suction unit from the powder container when the conveying is activated
2. Clean the powder hose; Please also review the section "Color change"

Weekly maintenance

1. Visual check of the pinch valves in the OptiFeed PP06 Powder pump for possible damages

Note:
For further information, see the OptiFeed PP06 Powder pump operating manual!

2. Clean the fluidizing/suction unit The fluidizing/suction unit is placed back into the powder shortly before restarting operation
3. Check the Fresh powder system grounding connections to the coating booth, the suspension devices of the work pieces, or the conveyor chain

If in disuse for several days

1. Interrupt the power supply/remove the mains plug
2. Clean the Fresh powder system thoroughly
3. Turn off the compressed air main supply
Cleaning

**WARNING**
If no dust mask or one of an insufficient filter class is worn when cleaning the Fresh powder system, then the dust that is stirred up from the coating powder can cause respiratory problems.

- The ventilation system must be turned on for all cleaning work.
- A dust mask corresponding to filter class FFP2 at minimum must be worn during any cleaning work.

**Cleaning the fluidizing/suction unit**
- Remove the powder pump from the fluidizing/suction unit
- Remove the fluidizing/suction unit
- Clean the fluidizing/suction unit with compressed air. Blow off the suction tube also with compressed air
- Visual check of the fluidizing/suction unit for possible damages
- Reassemble the individual parts and reinsert the fresh powder pump

**Maintenance and cleaning of the filter unit**

The filter unit on the OptiFeed 2 S Fresh powder system measures and cleans the compressed air. This is where the equipment's main compressed air connection is located.

**Replacing the filter element**

Procedure:

1. Unscrew the filter glass on the filter unit
2. Remove the complete filter element
3. Replace the filter element
4. Clean the filter glass on the inside and install it again
## Troubleshooting

### General information

<table>
<thead>
<tr>
<th>Fault</th>
<th>Causes</th>
<th>Troubleshooting</th>
</tr>
</thead>
<tbody>
<tr>
<td>The powder is not fluidized</td>
<td>Compressed air not present</td>
<td>Connect the equipment to the compressed air</td>
</tr>
<tr>
<td></td>
<td>Fluidizing air adjustment is set too low</td>
<td>Set the fluidizing air correctly</td>
</tr>
<tr>
<td>Vibrator not functioning</td>
<td>Vibrator not plugged in</td>
<td>plug in</td>
</tr>
<tr>
<td></td>
<td>Vibrator switch in position 0</td>
<td>switch on (position 1)</td>
</tr>
<tr>
<td></td>
<td>Vibrator/condenser broken</td>
<td>Contact local Gema representative</td>
</tr>
<tr>
<td>Pump does not convey or conveys insufficient</td>
<td></td>
<td>See therefore the OptiFeed PP06 Powder pump operating manual</td>
</tr>
<tr>
<td>Level control with level sensor (option) not running</td>
<td>Level control defective</td>
<td>Send in the level control unit for repair</td>
</tr>
<tr>
<td></td>
<td>Level sensor defective</td>
<td>Send in the level sensor for repair</td>
</tr>
</tbody>
</table>

**Note:**
For further information, see the OptiFeed PP06 Powder pump operating manual!
Spare parts list

Ordering spare parts

When ordering spare parts for powder coating equipment, please indicate the following specifications:

- Type and serial number of your powder coating equipment
- Order number, quantity and description of each spare part

Example:

- Type OptiFeed B FPS19
- Serial number 1234 5678
- Order no. 203 386, 1 piece, Clamp - Ø 18/15 mm

When ordering cable or hose material, the required length must also be given. The spare part numbers of this bulk stock is always marked with an *.

Wearing parts are always marked with a #.

All dimensions of plastic hoses are specified with the external and internal diameter:

Example:

Ø 8/6 mm, 8 mm outside diameter (o/d) / 6 mm inside diameter (i/d)

WARNING!
Only original Gema spare parts should be used, because the explosion protection will also be preserved that way. The use of spare parts from other manufacturers will invalidate the Gema guarantee conditions!
### OptiFeed B FPS19 Fresh powder system – Spare parts

<table>
<thead>
<tr>
<th>Part</th>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>OptiFeed PP06 Powder pump (see the corresponding operating manual)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Hose connection - complete, incl. pos. 3</td>
<td>1007 658</td>
</tr>
<tr>
<td>3</td>
<td>O-ring - Ø 16x2 mm</td>
<td>1007 794</td>
</tr>
<tr>
<td>4</td>
<td>Fluidizing/suction unit - complete (incl. pos. 5)</td>
<td>1007 509</td>
</tr>
<tr>
<td>5</td>
<td>O-ring – Ø 20x3 mm</td>
<td>1007 121</td>
</tr>
<tr>
<td>6</td>
<td>Guide sleeve</td>
<td>1007 094</td>
</tr>
<tr>
<td>7</td>
<td>Lock nut M36x1.5 mm</td>
<td>1007 095</td>
</tr>
<tr>
<td>8</td>
<td>Retaining bracket</td>
<td>1008 083</td>
</tr>
<tr>
<td>9</td>
<td>Bearing bush</td>
<td>1002 046</td>
</tr>
<tr>
<td>10</td>
<td>Quick release connection - NW5, Ø 6 mm</td>
<td>200 840</td>
</tr>
<tr>
<td>11</td>
<td>Plastic tube - Ø 6/4 mm, black</td>
<td>1001 973</td>
</tr>
<tr>
<td>12</td>
<td>Vibrator - 220-240 V, 50 Hz</td>
<td>1001 227</td>
</tr>
<tr>
<td>13</td>
<td>Rubber damper - Ø 20x25-M6/2a</td>
<td>246 000</td>
</tr>
<tr>
<td>14</td>
<td>Spacing ring</td>
<td>375 624</td>
</tr>
<tr>
<td>15</td>
<td>Swivel wheel - Ø 50 mm</td>
<td>260 606</td>
</tr>
<tr>
<td>16</td>
<td>Rubber wheel - Ø 200 mm</td>
<td>201 316</td>
</tr>
<tr>
<td>17</td>
<td>Pneumatic group - complete (see corresponding spare parts list)</td>
<td></td>
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<tr>
<td>18</td>
<td>Pressure regulator - 0-4 bar</td>
<td>242 225</td>
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<tr>
<td>19</td>
<td>Nut - M30x1.5 mm</td>
<td>1003 772</td>
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<tr>
<td>20</td>
<td>Elbow joint - 1/4a-Ø 6 mm</td>
<td>265 691</td>
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<tr>
<td>21</td>
<td>Pressure gauge - 0-4 bar, Ø 25-1/8a</td>
<td>1003 775</td>
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<td>22</td>
<td>Screw-in nipple - 1/4&quot;a, Ø 8 mm</td>
<td>265 136</td>
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<tr>
<td>23</td>
<td>Plastic tube - Ø 8/6 mm, black</td>
<td>103 152*</td>
</tr>
<tr>
<td>24</td>
<td>Powder hose - Ø 16/23 mm</td>
<td>1003 307*</td>
</tr>
<tr>
<td>25</td>
<td>Quick release connection - NW7.8 - Ø 10 mm</td>
<td>239 267</td>
</tr>
<tr>
<td>26</td>
<td>Operating manual</td>
<td>1008 762</td>
</tr>
</tbody>
</table>

* Please indicate length
OptiFeed B FPS19 Fresh powder system – Spare parts
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Code</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Connector / Flow restrictor 0,3 mm</td>
<td>1006 556</td>
</tr>
<tr>
<td>2</td>
<td>Internal tube</td>
<td>1007 516</td>
</tr>
<tr>
<td>3</td>
<td>O-ring</td>
<td>1007 121</td>
</tr>
<tr>
<td>4</td>
<td>Fluidizing ring</td>
<td>1007 514</td>
</tr>
<tr>
<td>5</td>
<td>Foot piece</td>
<td>1007 511</td>
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<tr>
<td>6</td>
<td>O-ring - Ø 24x2 mm</td>
<td>230 480</td>
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<tr>
<td>7</td>
<td>O-ring - Ø 26x2 mm</td>
<td>246 549</td>
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<tr>
<td>8</td>
<td>O-ring - Ø 15x1.5 mm</td>
<td>261 564</td>
</tr>
<tr>
<td>9</td>
<td>Pneumatic connection for Fluidizing air - complete (incl. pos. 9.1 and 9.2)</td>
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</tr>
<tr>
<td>9.1</td>
<td>Quick release connection - NW5, Ø 6 mm</td>
<td>200 840</td>
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<tr>
<td>9.2</td>
<td>Plastic tube - Ø 6/4 mm, black</td>
<td>1001 973</td>
</tr>
</tbody>
</table>
Fluidizing/suction unit - spare parts

Fluidizing/suction unit - spare parts
## OptiFeed B FPS19 – Pneumatic group

<table>
<thead>
<tr>
<th>Pneumatic group - complete</th>
<th>1008 235</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Filter cartridge - 20 μm</td>
<td>1008 239</td>
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</tbody>
</table>

*OptiFeed B FPS19 – Pneumatic group*