Operating instructions and spare parts list

MagicCenter MC02
Powder management system

Translation of the original operating instructions
Documentation - MagicCenter MC02

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General safety regulations

This chapter sets out the fundamental safety regulations that must be followed by the user and third parties using the MagicCenter MC02. These safety regulations must be read and understood before the MagicCenter MC02 is put into operation.

Safety symbols (pictograms)

The following warnings with their meanings can be found in the ITW 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

Conformity of use

1. The MagicCenter MC02 is built to the latest specification and conforms to the recognized technical safety regulations and is designed for the normal application of powder coating.

2. Any other use is considered as non-conform. The manufacturer is not responsible for any incorrect use, the risk for this is assumed by the user alone! If the MagicCenter MC02 is to be used for other purposes or other substances outside of our guidelines then ITW Gema GmbH should be consulted.

3. Observance of the operating, service and maintenance instructions specified by the manufacturer is also part of conformity of use. The MagicCenter MC02 should only be used, maintained and started up by trained personnel, who are
informed about and are familiar with the possible hazards involved.

4. Start-up (i.e. the execution of a particular operation) is forbidden until it has been established that the MagicCenter MC02 has been set up and wired according to the guidelines for machinery (2006/42 EG). EN 60204-1 (machine safety) must also be observed.

5. Unauthorized modifications to the MagicCenter MC02 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>
<th>Temperature class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex</td>
<td>IP54</td>
<td>T4 (Zone 22)</td>
</tr>
</tbody>
</table>

**Product specific security measures**

The MagicCenter MC02 is part of the plant and therefore integrated in the safety concept of the plant.

For the use outside of the safety concept, corresponding measures must be taken.

**Note:**
For further information, see the more detailed ITW Gema safety regulations!

**Installation**

Installation work to be done by the customer must be carried out according to local safety regulations.

**Grounding**

Check the grounding of the booth and the powder management system before every start-up. The grounding connection is customer specific and is fitted on the booth basement, on the cyclone and on the powder management system. The grounding of the workpieces and other plant units must also be checked.

**Operating the equipment**

In order to be able to operate the equipment safely, it is necessary to be familiar with the safety regulations, the operational characteristics and functioning of the various plant units.
For this purpose, read the safety notes, this operating manual and the operating instructions of the control unit with touch panel, before starting up the plant.

In addition, all further equipment-specific operating instructions, e.g. the OptiFlex or OptiMatic and all additional components should also be read.

To obtain practice in operating the plant, it is absolutely essential to start the operation according to the operating instructions. Also, later on, they serve as a useful aid on possible malfunctions or uncertainty and will make many enquiries unnecessary. For this reason, the operating manual must always be available at the equipment.

Should difficulties arise, however, your ITW Gema service center is always ready to assist.

**Inspection check**

The following points are to be checked at every booth start-up:

- No foreign material in the central suction unit in the booth and in the powder suction
- Sieve machine is connected to the cyclone separator, the clamp is tightly locked
- Pneumatic conduction and powder hose are connected to the dense phase conveyor
- The filter elements door is closed, the waste container is fitted and pressed on

**Repairs**

Attention:
Repairs must be carried out by trained personnel only. Unauthorized conversions and modifications can lead to injuries and damage to the equipment. The ITW Gema GmbH guarantee would no longer be valid. By carrying out repairs, the powder center must be disconnected from the mains, according to the local safety regulations!

Note:
We point out that the customer himself is responsible for the safe operation of the equipment! ITW Gema GmbH is in no way responsible for any resulting damage! Only original ITW Gema spare parts should be used! The use of spare parts from other manufacturers will invalidate the ITW Gema guarantee conditions!
About this manual

General information

These operating manual contains all important information which you require for the working with the MagicCenter MC02. 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 function mode of the individual system components - booth, axis, gun control unit, powder gun or powder injector - should be referenced to their enclosed corresponding documents.

Software version

This document describes the operation of the Touch Panels to control the MagicCenter MC02 powder management system with software version 0.90.
Structure and function

MagicCenter MC02 - Field of application

The MagicCenter MC02 Powder management system is conceived for simple and clean handling of the coating powder. It enables an automated cleaning procedure and consequently a quick color change. The conception contains all gun and axis control units, as well as the complete fresh powder metering.

As a part of the process controlled coating plant, the powder management system is laid out for fully automatic operation.

Characteristics

The most important characteristics of the MagicCenter MC02 powder management system are:

- Processing the powder directly from the (original) powder bags
- Integrated electrical and pneumatic control units
- Powder level monitoring by level sensor
- Automatic internal cleaning of the suction tubes, injectors, powder hoses and guns
- Refeed of the recovered powder
- Closed powder circuit - no powder escaping during coating or cleaning procedure. This prevents powder loss, and the workplace and the environment remain clean.
- No own exhaust system - the powder management system has no own exhaust system and will be therefore connected directly to the After Filter
MagicCenter MC02 - general overview

MagicCenter MC02 - structure

1 Control unit/operating panel
2 Key switch (control voltage)
3 Emergency stop push button
4 Injectors
5 OptiSpeeder
6 Fluidizing/suction unit
7 Powder bag cone with vibrator
8 Powder bag fixation
9 Gun and axes control units
10 "Waste" connection
11 OptiSpeeder connection
12 Powder pump
MagicCenter MC02 - OptiSpeeder

The OptiSpeeder is suited for the automated preparation and fluidization of the coating powder.

The OptiSpeeder can contain 3.5 kg powder, and can be equipped with up to 20 OptiFlow injectors.

MagicCenter MC02 - Powder bag cone

MagicCenter MC02 - Touch Panel

All necessary operating procedures are activated by the Touch Panel.
General operating sequence

Powder circuit

During the typical MagicCenter MC02 (7) operation, the powder bag is put in the powder bag cone. The powder is fluidized in the bag with the fluidizing/suction lance and then fed to the OptiSpeeder in the MagicCenter MC02. The fluidized powder is aspirated by the injectors and fed through the powder hoses to the guns/spray nozzles (8). The powder, which does not adhere to the workpieces, will be absorbed by the exhaust air of the booth (1) and separated from the air in the cyclone separator (2).

The separated powder will be cleaned by passing through the integrated sieve (3) and fed back into the OptiSpeeder by the dense phase conveyor (4), where it will be prepared again for coating operation.

Powder flow in the plant

1 Booth
2 Cyclone separator
3 Sieve
4 OptiFeed PP06 Powder pump
5 After Filter
6 Refuse container
7 MagicCenter
8 Automatic guns
9 OptiSpeeder
## Technical data

### MagicCenter MC02

#### Electrical data

<table>
<thead>
<tr>
<th>MagicCenter MC02</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Input power</td>
<td>230 V / 10 A</td>
</tr>
<tr>
<td>Frequency</td>
<td>50/60 Hz</td>
</tr>
<tr>
<td>Protection type</td>
<td>IP54</td>
</tr>
</tbody>
</table>

#### Pneumatic data

<table>
<thead>
<tr>
<th>MagicCenter MC02</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Input pressure</td>
<td>min. 6.5 bar</td>
</tr>
<tr>
<td>Compressed air consumption during coating operation</td>
<td>15 Nm³/h</td>
</tr>
<tr>
<td>Compressed air consumption during cleaning (incl. OptiSpeeder and guns)</td>
<td>350 Nm³/h</td>
</tr>
<tr>
<td>Compressed air consumption during cleaning of the PP06 hose to the cyclone</td>
<td>120 Nm³/h</td>
</tr>
<tr>
<td>Water vapor content of compressed air</td>
<td>max. 1.3 g/m³</td>
</tr>
<tr>
<td>Oil content of compressed air</td>
<td>max. 0.1 mg/kg</td>
</tr>
</tbody>
</table>

#### Dimensions

<table>
<thead>
<tr>
<th>MagicCenter MC02</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Base area (width x depth)</td>
<td>1500 x 2100 mm</td>
</tr>
<tr>
<td>Overall height</td>
<td>2100 mm</td>
</tr>
<tr>
<td>Weight</td>
<td></td>
</tr>
</tbody>
</table>

#### Powder transport

<table>
<thead>
<tr>
<th>MagicCenter MC02</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Conveying performance</td>
<td>230 g/Min.</td>
</tr>
<tr>
<td>Recovery</td>
<td>max. 3.5 kg/Min.</td>
</tr>
</tbody>
</table>
Rating plate

Note:
Fields with a gray background contain contract-specific data!
Set-up and assembly

**Note:**
Installation work to be done by the customer must be carried out according to local safety regulations!

Preparation for start-up

**Compressed air supply**

**Note:**
The compressed air must be free of oil and water!

The MagicCenter requires a connection to a sufficient dimensioned compressed air circuit.

In order to ensure a perfect operation, a pressure of 6.5 bar must be adjusted with the main pressure regulator.
Grounding of the powder management system

The MagicCenter must be grounded according to the general, local safety regulations. The grounding of the powder management system must be checked regularly.

A corresponding connection point at the MagicCenter is reserved for the potential equalization.

Potential equalization - connection point
Operation with Touch-Panel

Touch-Panel/operating panel

The operation and monitoring of the powder management system takes place by the touch-sensitive operating panel of the control unit.

The operation panel serves to initiate the function commands, which are necessary for the satisfactory operation of the powder management system. The function parameters are also entered by the control panel. These are set at the factory and, therefore, may only be changed after consultation with an ITW Gema service center.
Touch keypads

The key functions are activated by touching the screen within this area. An illumination means that the touch keypad was directly touched.

The screen layout

The exit key enables switching back to the previous program level. The remaining operating keys switch to the next corresponding program menu.

Note:
The designation (labeling) of pictograms is made in English only and is used by ITW Gema worldwide for identification of technical support issues. The symbols are designed for the user, who will be guided through the plant by means of pictures. All operation and error messages are not displayed as pictograms, and are adapted to the local language according to the Sales contract!
Information

- Operating mode display
- No release - booth not ready
- Release OK - booth is ready
- The signal comes from the booth control unit through the CAN bus, or through the digital input, if it's a foreign manufacturer booth.
- Control voltage is switched off
- Control voltage is switched on

Key functions

Attention: The keys of the input field should only be pressed with fingertips and under no circumstances with fingernails or hard objects!

Function keys

- Start the powder management system for coating
- Key is not activated, until boot is ready
- For this function, no log-in is necessary
- Cleaning for color change
- Key is not activated, until boot is ready
- For this function, no log-in is necessary

- Log-in to modify parameters, configuration or change the language

- Configuration
- Parameters
- Language change

- By pressing the Help key, the phone number of the ITW Gema Helpline will be shown.

**Attention:**
The function parameters are set at the factory and may not be changed by the customer!
Parameters may only be modified after consultation with an ITW Gema service center!

**State of the keys**
All keys are normal displayed during operation. However, some keys start to blink, when their key function is to be confirmed. These blinking keys are shown in this user manual as follows:
MagicCenter MC02 - operating modes

General information

The following operating modes are available:

- different coating modes
- Cleaning / color change
- Service/parameterization

The operating modes are explicitly described in the following chapters. The operation level of the control unit is designed with pictograms, so that only the really essential parameters are displayed, and the operator can therefore reach his solution quickly.

Basically, the control unit is not in one of these operating modes after switching on, or after a restart. The operating modes are selected on the panel.

Coating with powder recovery (spray)

This coating mode allows the coating with recovery of the powder, which does not adhere to the object.

Utilization of this operating mode:

- Long time coating operation with the same powder and high coating quality with minimal powder loss
- Immediate coating following a powder change with minimum demands on quality and the smallest possible of powder loss
- Additional operating mode - Coating with small powder quantities/using up residual powder (see below)
Coating without powder recovery (spray waste)

There is no powder recovery in this coating mode - the powder, which does not adhere to the object, is fed directly to the waste.

**Utilization of this operating mode:**
- When restarting the plant or after the color change (a few minutes)
- If highest coating quality claim is required
- If the volume of order is very small
- Additional operating mode - Coating with small powder quantities/using up residual powder

Coating with small powder quantities / Using up residual powder (small lot)

This coating mode is selectable in both already mentioned operating modes.

**Utilization of this (special) operating mode:**
- If the fresh powder, at the end, is used up (measured to be running low)
- If a color change is pending (operator has to estimate the powder consumption)
- If a small powder quantity is used (e.g. tests)

Cleaning / color change (clean)

This operating mode enables the user to chose, on the first cleaning screen, between **Fast cleaning** and **Quality cleaning**. In the procedure of both of these cleaning modes, there is no difference, only the preset parameters are different (cleaning times). The higher the requirement for cleanliness, the higher is the time expenditure.

Each of these cleaning modes consists of two parts, the coarse cleaning and the fine cleaning. The coarse cleaning mode does recover the powder, the fine cleaning mode does not (powder loss).

The cleaning of the components is partially automated, however, some of them must be cleaned manually.

The **Cleaning** operating mode can be selected from every coating operating mode, or from the **Standby** operating mode.

**Utilization of this operating mode:**
- After switching on the equipment, if very high quality is required on initial coating application
- Before every color change

Service / parameterization (maintenance)

This operating mode enables the user to change the operating language.
Coating operation

Before switching on the MagicCenter MC02

Before switching on the MagicCenter, the following points must be observed:

- Observe the safety regulations
- Check the grounding of the MagicCenter, the booth and the other plant units and ensure it, if necessary
- Check the compressed air supply

Starting up the MagicCenter MC02

Start-up

Attention:
The keys of the input field should only be pressed with fingertips and under no circumstances with fingernails or hard objects!

The start-up takes place according the following steps:

1. Switch on the booth (see also the booth operating instructions) - the Booth ready signal may be present
2. Switch on the control voltage in the powder management system with the key switch:
   - the key switch returns to its starting position
   - the interior lighting switches on
3. Wait for booth release
   - the display shows the basic menu
11. Select desired operating mode (AUTOMATIC or MANUAL) on the booth control unit (see therefore the corresponding operating manual)
Coating with powder recovery (spray)

1. Login
2. Spray
3. Spray waste
4. Small lot
5. Fresh powder
6. Clean
7. Maintenance
8. Error

Recovery hose
5.  - the fluidization switches on
    - now the coating operation can begin

6.  If necessary, replace the powder bag,
    see also "Replacing the powder bag (change bag)"

7.  If necessary, switch on the exhaust air manually
    The exhaust air stops automatically after a certain period

8.  The key closes the Coating menu and returns to the main menu
Coating without powder recovery (spray waste)

1. Login
2. Spray waste
3. Spray
4. Small lot
5. Clean
6. Maintenance

Recovery hose
5. - the Fluidization switches on  
   - now the coating operation can begin

6. If necessary, replace the powder bag, see also "Replacing the powder bag (change bag)"

7. If necessary, switch on the exhaust air manually  
The exhaust air stops automatically after a certain period

8. The operating mode **Coating with powder recovery (spray)** can be selected, if desired

9. The key **closes the Coating menu and returns to the main menu**
Coating with small powder quantities / Using up residual powder (small lot)

Note:
This operating mode can be selected from the "Coating with powder recovery" or "Coating without powder recovery" operating mode!

Coating with small powder volumes with powder recovery

1. The key closes this menu and returns to the last menu
Coating with small powder volumes without powder recovery

1. The key closes this menu and returns to the last menu.

2. The key closes this menu and returns to the last menu.

3. The key closes this menu and returns to the last menu.
Replacing the powder bag (change bag)

1. Check visually the powder level in the bag cone
2. Hold the full powder bag ready
3. Empty the used powder bag with the residual powder into another container or dispose it
4. 
5. Empty the used powder bag with the residual powder into another container or dispose it
6. 
7. 
8. Press the key to confirm the change. The display returns to the last menu.

9. The key closes this menu and switches back to the last menu without powder bag change.

### Starting up the MagicCenter MC02 after an emergency stop

1. Switch on the booth (see the booth operating instructions) - the **Booth ready** signal may be present.
2. Switch on the control voltage in the powder management system with the key switch:
   - The key switch returns to its starting position.
   - The interior lighting switches on.
   - The display shows the basic menu.
3. Select the desired operating mode.
Switching off the MagicCenter MC02 (after each work day)

The following steps must be taken to switch off the powder center:

1. Check if all the workpieces have been coated
2. Clean the MagicCenter thoroughly, in order to avoid powder accumulation (see therefore in chapter "Cleaning / Color change")

3. Press the exit key
   The following menu appears on the display:

   - the level control is switched off
   - the vibrating table switches off

4. Switch off the powder management system by key switch
   - the interior lighting expires
Cleaning / color change

Note:
Very much air will be required for the cleaning procedure! A pressure sensor detects the current pressure in the supply line after the input pressure regulator (6 bar), and compares it to the threshold value which was set in the parameters. If the threshold value is not reached for 3 seconds, the cleaning procedure will be interrupted. The cleaning interruption takes at least 30 seconds. Afterwards the cleaning procedure continues, if the pressure amounts to > 5.5 bar.

Cleaning operating mode (clean)

General information
The Cleaning operating mode offers two cleaning possibilities:
- Fast cleaning
- Quality cleaning

Cleaning procedure

![Diagram of the cleaning process]
2. Connect the recovery hose

3. Press the \textit{fast} or \textit{quality} key

The display switches to the following menu.
8. - The automated cleaning procedure is started
   - The powder from the OptiSpeeder and from the booth will be fed back in the powder bag

9. The booth cleaning can now be started.

10. The cleaning steps (shown as symbols in the lower line) are processed now
13. When the cleaning process is completed, the control switches automatically to the next menu:

14. Open the monocyclone

15. Slowly swing out the sieve and clean it with the compressed air gun

16. Open the monocyclone

17. Slowly swing out the sieve and clean it with the compressed air gun

Attention:
In order to avoid damage to the sieve when blowing through the transport hose, make sure that the sieve is swung out completely during the cleaning process!
19. Press the key \textit{cyclone clean}
   The cleaning of the recovery hose will be started.

20. Press the button on the monocyclone
   The cleaning process is started.

21. The hose is blown off in pulses

\textbf{The procedure can be stopped or resumed manually by the user.}

22. Swing the funnel on the cyclone slowly away and, at the same time,
    clean it off with the compressed air gun

23. Clean the inside of the cyclone with the cleaning lance

24. Close the sieve and funnel on the cyclone again

25. Put the powder management system into operation (see chapter
    "Start-up")
Attention:
All MagicCenter settings are set at the factory and may not be changed by the customer!
Parameters may only be modified after consultation with an ITW Gema service center!

Changing operating language

In order to input the settings on the operating panel, the plant must be in operation. To do this, proceed as follows:

1. Switch on the booth (see the booth operating instructions) - the Booth ready signal may be present
2. Switch on the control voltage in the powder management system with the key switch:
   - the key switch returns to its starting position
   - the interior lighting switches on
   - the display shows the basic menu

3. [Diagram of operating panel with labels such as 'ITW Gema', 'stand by', 'interlocking', 'switch on', 'login', 'spray waste', 'spray', 'clean', 'maintenance']

V0.90
2008-09-15
12:11:08 17:13:59
Please login
4. Press the **exit** key, the previous menu appears.
Messages

Error messages

If faults occur in the powder management system, an error message shown in red font appears on the display. The causes of these errors must be eliminated, before further procedures can be carried out (see therefore the troubleshooting guide).

If the error has been eliminated, the display returns to the previous menu again.

<table>
<thead>
<tr>
<th>No.</th>
<th>Display text</th>
<th>Description</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 01  | Clean the **Level base** sensor | OptiSpeeder empty, level sensor indicates the status, no coating operation possible: Powder accumulation on level sensor | Open OptiSpeeder service cover and front panel:  
- Clean the sensor  
- Readjust the sensor sensitivity  
- Check the fluidizing of the sensor if necessary, increase the fluidizing air pressure  
- Remove the fluidizing air hose and check it |
|     | Sensor defective | replace |
|     | Cable defective | replace |
| 02  | Clean the **Level top** sensor | OptiSpeeder empty, level sensor indicates the status, no coating operation possible: Powder accumulation on level sensor | Open OptiSpeeder service cover and front panel:  
- Clean the sensor  
- Readjust the sensor sensitivity  
- Check the fluidizing of the sensor if necessary, increase the fluidizing air pressure  
- Remove the fluidizing air hose and check it |
<p>|     | Sensor defective | replace |
|     | Cable defective | replace |</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Display text</th>
<th>Description</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 03  | Clean the **Cyclone level base** sensor | Cyclone funnel empty, level sensor indicates the status, no coating operation possible:  
  - Powder accumulation on level sensor  
    - Clean the sensor  
    - Readjust the sensor sensitivity  
    - Check the fluidizing of the sensor if necessary, increase the fluidizing air pressure  
    - Remove the fluidizing air hose and check it  
  - Sensor defective  
  - Cable defective replace | replace |
| 04  | Clean the **Cyclone level top** sensor | This function not active at the moment | - - - |
| 05  | Open service cover | OptiSpeeder service cover is open | Close the cover |
|     | Proximity switch defect | Check the function, if necessary, replace it | |
|     | Cable defective | replace | |
| 06  | Air supply low pressure | Air pressure dropped below the threshold value of 4.5 bar  
  - Sudden pressure decrease | Increase the pressure at the main pressure regulator  
  - Check the compressed air supply  
  - Sudden pressure decrease | Check the compressed air supply, if necessary, wait until the system has reached the operating pressure |
| 07  | Cylinder does not open | OptiSpeeder cylinder does not move to the preset position, control unit switches to Standby mode  
  - Check lateral panel:  
    - Check the cylinder for contamination and clean, if necessary  
    - Check the compressed air  
    - Restart, select the corresponding function  
    - Contact an ITW Gema service center | |
| 08  | Cylinder does not close | OptiSpeeder cylinder does not move to the preset position, control unit switches to Standby mode  
  - Check lateral maintenance panel:  
    - Check the cylinder for contamination and clean, if necessary  
    - Check the compressed air  
    - Restart, select the corresponding function  
    - Contact an ITW Gema service center | |
| 09  | Cylinder limit switch defective | Both limit switches illuminate, control unit switches to Standby mode  
  - Contact an ITW Gema service center | |
| 10  | Vibrator defective | Motor protection switch Q6 has reacted  
  - Vibrator defective | Remove the small maintenance panel and switch on the motor protection switch again. With repeated Alarms, contact an ITW Gema service center  
  - Vibrator defective replace | |
| 13  | Powder recovery pump conveying problem | Powder pump does not function properly  
  - Pump defective  
  - Hose clogged | - see corresponding operating manual OptiFeed PP06  
  - Hose clogged | Check the recovery system |
<table>
<thead>
<tr>
<th>No.</th>
<th>Display text</th>
<th>Description</th>
<th>Activity</th>
</tr>
</thead>
</table>
| 14  | Powder recovery pump overpressure | Powder pump is switched off | - Hose clogged or connected incorrectly  
- Pressure sensor at the OptiFeed PP06 Powder pump defective | Check the recovery system and/or connect correctly  
replace (see also corresponding OptiFeed PP06 operating manual) |
| 15  | 24 V valve block failure | Safety equipment (F7) has reacted, control unit switches to Standby mode | Check the 24 VDC Power pack (G4)  
Check the safety equipment whether all 4 LEDs illuminate green  
- If one or more LEDs illuminate, reset the corresponding channel and if necessary, restart |
| 16  | Fuse Fxx defective | Fuse (1 AT) in the WAGO-Modul A1 defective, control unit switches to Standby mode | Replace the fuse, otherwise contact an ITW Gema service center |
| 19  | Powder alert in OptiSpeeder | Powder warning, flashlight activated | Check the powder bag, otherwise powder shortage |
| 20  | Powder shortage in OptiSpeeder | Powder bag empty, chain conveyor is stopped, flashlight activated | Replacing the powder bag |
| 21  | CAN bus malfunction | No communication with CM10/CM20  
CAN-Bus participant defective | Switch on the CM10/CM20 superordinated control unit  
Contact an ITW Gema service center |

Warnings

Warnings shown with a green font are notes for the operating personnel. If a warning is present, it appears on the display. The warning must be acknowledged. Afterwards, the last illustration shown appears on the display.

<table>
<thead>
<tr>
<th>No.</th>
<th>Display text</th>
<th>Description</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>51</td>
<td>Cleaning not completed</td>
<td>Cleaning not completely terminated because of abort or power failure.</td>
<td>Press the &quot;cleaning broken&quot; key, in order to acknowledge it</td>
</tr>
<tr>
<td>52</td>
<td>Key switch off or Emergency stop</td>
<td>Key switch off or Emergency stop</td>
<td>Rotate the key switch clockwise</td>
</tr>
</tbody>
</table>
Maintenance

Daily after longer working interruptions and at the end of shift

- Before switching off the plant, the OptiSpeeder must be emptied and cleaned

Check weekly

- Check the injector nozzles and replace them, if necessary

Check every 6 months

- Check the cylinder guideways and gaskets and replace them, if necessary
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** MagicCenter MC02
  - **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 yard/meter ware is always marked with an *.

The 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 ITW 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 ITW Gema guarantee conditions!
# Touch panel control unit

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Touch panel - 5.7&quot;</td>
<td>269 450</td>
</tr>
<tr>
<td>Compact Flash card - 32 MB (not shown)</td>
<td>269 018</td>
</tr>
</tbody>
</table>

![Touch panel control unit](image)

*Touch panel control unit*