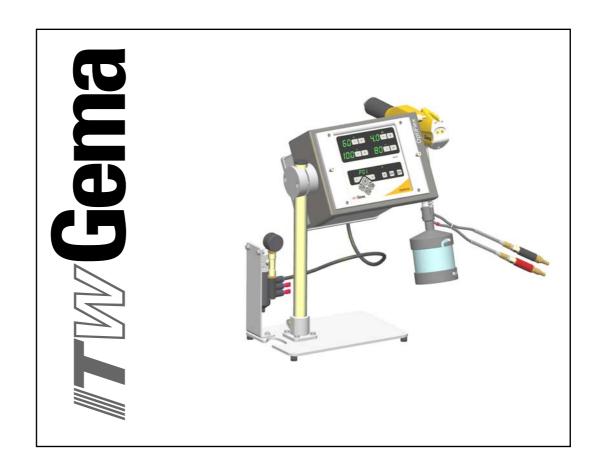
Operating instructions and spare parts list

Manual coating equipment OptiFlex





Documentation OptiFlex C manual coating equipment

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ITW Gema AG Mövenstrasse 17 9015 St. Gallen Switzerland

Phone: +41-71-313 83 00 Fax.: +41-71-313 83 83 E-Mail: info@itwgema.ch

E-Mail: Info@itwgema.cn
Homepage: www.itwgema.ch



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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 OptiFlex C manual coating equipment.

These safety regulations must be read and understood before the OptiFlex C manual coating equipment is used.

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

- The OptiFlex C manual coating equipment is built to the latest specification and conforms to the recognized technical safety regulations and is designed for the normal application of powder coating.
- Any other use is considered as non-conform. The manufacturer is not responsible for any damage resulting from this, the risk for this is assumed by the user alone! If the OptiFlex C manual coating equipment is to be used for other purposes or other substances outside of our guidelines then ITW Gema AG should be consulted.



- Observance of the operating, service and maintenance instructions specified by the manufacturer is also part of the conformity of use. The OptiFlex C manual coating equipment 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 OptiFlex C manual coating equipment has been set up and wired according to the guidelines for machinery (98/37 EG). EN 60204-1 (machine safety) must also be observed.
- 5. Unauthorized modifications to powder spraying equipment exempts 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.
- Furthermore the country-specific safety regulations must be observed.

Explosion protection	Protection type	Temperature class
C € ₀₁₀₂ ⟨Ex⟩ _{II (2) D}	IP54	T6 (zone 21) T4 (zone 22)

Technical safety regulations for stationary electrostatic powder spraying equipment

General information

The powder spraying equipment of ITW Gema is designed with safety in mind and is built according to the latest technological specifications. This equipment can be dangerous if it is not used for its specified purpose. Consequently it should be noted, that there exists a danger to life and limb of the user or third party, a danger of damage to the equipment and other machinery belonging to the user and a hazard to the efficient operation of the equipment.

- The powder spraying equipment should only be started up and used once the operating instructions have been carefully studied. Improper use of the controlling device can lead to accidents, malfunction or damage to the control itself.
- 2. Before every start-up check the equipment for operational safety (regular servicing is essential)!
- 3. Safety regulations BGI 764 and VDE regulations DIN VDE 0147, Part 1, must be observed for safe operation.
- Safety precautions specified by local legislation must be observed!
- 5. The plug must be disconnected before the machine is opened for repair.
- 6. The plug and socket connection between the powder spraying equipment and the mains network should only be taken out when the power is switched off.



- 7. The connecting cable between the controlling device and the spray gun must be set up so that it cannot be damaged during operation. Safety precautions specified by local legislation must be observed!
- 8. Only original ITW-Gema spare parts should be used, because the explosion protection will also be preserved that way. Damage caused by other parts is not covered by guarantee.
- 9. If ITW-Gema powder spraying equipment is used in conjunction with machinery from other manufacturers then their safety regulations must also be taken into account.
- 10. Before starting work familiarize yourself with all installations and operating elements, as well as with their functions! Familiarization during operation is too late!
- 11. Caution must be exercised when working with a powder/air mixture! A powder/air mixture in the right concentration is flammable! Smoking is forbidden in the entire plant area!
- 12. 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!



WARNING!

We emphasize that the customer himself is responsible for the safe operation of equipment. ITW Gema AG is in no way responsible for any resulting damages!

Safety conscious working

Each person responsible for the assembly, start-up, operation, service and repair of powder spraying equipment must have read and understood the operating instructions and the "Safety regulations"-chapter. The operator must ensure that the user has had the appropriate training for powder spraying equipment and is aware of the possible sources of danger.

The control devices for the spray guns must only be set up and used in zone 22. Spray guns are admitted in zone 21.

The powder spraying equipment should only be used by trained and authorized personnel. This applies to modifications to the electrical equipment, which should only be carried out by a specialist.

The operating instructions and the necessary closing down procedures must be followed before any work is carried out concerning the set-up, start-up, operation, modification, operating conditions, mode of operation, servicing, inspection or repairs.

The powder spray equipment can be turned off by using the main switch or failing that, the emergency shutdown. Individual components can be turned off during operation by using the appropriate switches.

Individual safety regulations for the operating firm and/or operating personnel

1. Any operating method which will negatively influence the technical safety of the powder spraying equipment is to be avoided.



- 2. The operator has to ensure that no non-authorized persons work on the powder spraying equipment (e.g. this also includes using the equipment for non-conform work).
- 3. For dangerous materials, the employer has to provide an operating instructions manual for specifying the dangers arising for humans and environment by handling dangerous materials, as well as the necessary preventive measures and behavior rules. The operating instructions manual has to be written in an understandable form and in the language of the persons employed, and has to be announced in a suitable place in the working area.
- 4. The operator is under obligation to check the powder spraying equipment at least once every shift for signs of external damage, defects or changes (including the operating characteristics) which could influence safety and to report them immediately.
- 5. The operating enterprise has to ensure that GEMA electrostatic spraying equipment is only operated in perfect condition.
- 6. As far as it is necessary, the operating firm must ensure that the operating personnel wear protective clothing (e.g. facemasks).
- The operating firm must guarantee cleanliness and an overview of the workplace with suitable instructions and checks in and around the powder spraying equipment.
- 8. No safety devices should be dismantled or put out of operation. If the dismantling of a safety device for set-up, repair or servicing is necessary, reassembly of the safety devices must take place immediately after the maintenance or repair work is finished. All maintenance activities must be executed when the powder spraying mechanism is switched off. The operator must train and commit the responsible personnel to this.
- 9. Activities, such as checking powder fluidization or checking the high voltage spray gun etc., must be carried out with the powder spraying equipment switched on.

Notes on special types of hazard

Power/tension

It is necessary to refer once more to the danger of life from high voltage current if the shutdown procedures are not observed. High voltage equipment must not be opened - the plug must first be taken out - otherwise there is danger of electric shock.

Powder

Powder/air mixtures can be ignited by sparks. There must be sufficient ventilation in the powder coating booth. Powder lying on the floor around the powder spraying device is a potentially dangerous source of slipping.

Static charges

Static charges can have the following consequences: Charges to people, electric shocks, sparking. Charging of objects must be avoided - see "Earthing".

Grounding/Earthing

All electricity conducting parts and machinery found in the workplace (according to DIN VDE 0745, part 102) 1,5 meters either side and 2,5 me-



ters around each booth opening, have to be grounded. The earthing resistance must amount to maximally 1 MOhm. The resistance must be tested regularly. The condition of the work piece attachments as well as the hangers must guarantee that the work pieces remain grounded. If the grounding of the work pieces takes place by their attachments, these must constantly be kept clean in order to guarantee the necessary conductivity. The appropriate measuring devices must be kept ready in the workplace in order to check the earthing.

Compressed air

When there are longer pauses or standstill times between working, the powder spraying equipment should be drained of compressed air. There is a danger of injury when pneumatic hoses are damaged and from the uncontrolled release and improper use of compressed air.

Crushing and cutting

During operation, moving parts may automatically start to move in the operating area. It must be ensured that only instructed and trained personnel go near these parts. The operator should ensure that barriers comply with the local security regulations.

Access under exceptional circumstances

The user enterprise has to ensure due to the local conditions, that when repairs at the electrical part or restarting operation activities are done, additional measures such as providing with gates against the admission of unauthorized persons are absolutely executed.

Prohibition of unauthorized conversions and modifications to machines

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

The powder spraying equipment should not be used if damaged, and the faulty part must be immediately replaced or repaired. Only original ITW Gema spare parts may be used! Damage caused by other parts is not covered by guarantee.

Repairs must only be carried out by specialists or in ITW-Gema workshops. Unauthorized conversions and modifications may lead to injury or damage to machinery. The ITW Gema AG guarantee would no longer be valid.

Safety requirements for electrostatic powder coating

- 1. This equipment can be dangerous, if the instructions in this operating manual are not followed.
- 2. All electrostatic conductive parts, in particular the machinery within 5 meters of the coating equipment, must be earthed.
- 3. The floor of the coating area must conduct electricity (normal concrete is generally conductive).
- 4. The operating personnel must wear electricity conducting footwear (e.g. leather soles).
- 5. The operating personnel should hold the gun with bare hands. If gloves are worn, these must also conduct electricity.



- 6. The supplied grounding cable (green/yellow) must be connected to the grounding screw of the manual electrostatic powder spraying equipment. The grounding cable must have a good metal to metal connection with the coating booth, the recovery unit and the work piece conveyor system, especially with the work piece suspension.
- 7. The electricity and powder supply to the hand guns must be set up in such a way that they are fully protected against heat and chemical damage.
- 8. The powder coating equipment may be able to be switched on only if the booth is in operation. If the booth cuts out then the powder coating device must be switched off.
- 9. The earthing of all electricity conducting devices (e.g. hooks, conveyor chains) must be checked on a weekly basis. The earthing resistance must amount to maximally 1 MOhm.
- 10. The control unit must be switched off, if the hand gun is cleaned or the nozzle is changed.
- 11. When working with cleaning agents there may be a risk of hazardous fumes. The manufacturers instructions must be observed when using such cleaning agents.
- 12. The manufacturers instructions and the applicable environmental requirements must be observed when disposing of powder lacquer and cleaning agents.
- 13. If any part of the spray gun is damaged (broken parts, tears) or missing then it should not be used.
- 14. 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 ITW-Gema replacement parts should be used.
- 15. Repairs must only be carried out by specialists and under no circumstances should they be carried out in the operating area. The former protection must not be reduced.
- 16. 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 more than 50% of the lower explosion limit (UEG) (UEG = max. permissible powder/air concentration). If the UEG is not known then a value of 10 g/m³ should be used.

A summary of the rules and regulations

The following is a list of relevant rules and regulations which are to be observed:

Guidelines and regulations, German professional association

BGV A1	General regulations
BGV A2	Electrical equipment and material
BGI 764	Electrostatic coating
BGR 132	Guidelines for the avoidance of the dangers of ignition due to electrostatic charging (Guideline "Static Electricity")



VDMA 24371	Guidelines for electrostatic coating with synthetic powder ¹⁾
	- Part 1 General requirements - Part 2 Examples of use

Leaflets

 Leaflet for the use of tools in locations where there is
danger of explosion 1)

EN European standards

RL94/9/EC	The approximation of the laws of the Member States relating to apparatus and safety systems for their intended use in potentially explosive atmospheres		
EN 292-1 EN 292-2	Machine safety 2)		
EN 50 014 to EN 50 020, identical: DIN VDE 0170/0171	Electrical equipment for locations where there is danger of explosion ³⁾		
EN 50 050	Electrical apparatus for potentially explosive atmospheres - Electrostatic hand-held spraying equipment ²⁾		
EN 50 053, part 2	Requirements for the selection, installation and use of electrostatic spraying equipment for flammable materials - Hand-held electrostatic powder spray guns ²⁾		
EN 50 177	Stationary electrostatic spraying equipment for flammable coating powder 2)		
EN 12981	Coating plants - Spray booths for application of organic powder coating material - Safety requirements		
EN 60 529, identi- cal: DIN 40050	IP-Type protection; contact, foreign bodies and water protection for electrical equipment ²⁾		
EN 60 204 identical: DIN VDE 0113	VDE regulations for setting-up high voltage electrical machine tools and processing machines with mains voltages up to 1000 V 3)		

VDE (Association of German Engineers) Regulations

	<u> </u>
DIN VDE 0100	Regulations for setting-up high voltage equipment with mains voltages up to 1000 V $^{4)}$
DIN VDE 0105	VDE regulations for the operation of high voltage equipment ⁴⁾
part 1	General regulations
part 4	Supplementary definitions for stationary electrical spraying equipment
DIN VDE 0147 part 1	Setting up stationary electrostatic spraying equipment 4)
DIN VDE 0165	Setting up electrical equipment in locations in areas with danger of explosion ⁴⁾

^{*}Sources:

 $^{^{\}rm 1)}$ Carl Heymanns Verlag KG, Luxemburger Strasse 449, 5000 Köln 41, or from the appropriate employers association

²⁾ Beuth Verlag GmbH, Burgrafenstrasse 4, 1000 Berlin 30

³⁾ General secretariat, Rue Bréderode 2, B-1000 Bruxelles, or the appropriate national committee

⁴⁾ VDE Verlag GmbH, Bismarckstrasse 33, 1000 Berlin 12



Product specific security measures

- The installation work, to be done by the customer, must be carried out according to local regulations
- Before starting up the plant a check must be made that no foreign objects are in the booth or in the ducting (input and exhaust air)
- It must be observed, that all components are grounded according to the local regulations, before start-up



About this manual

General information

This operating manual contains all the important information which you require for the working with the OptiFlex C manual coating equipment. 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, gun control unit, manual gun or powder injector - should be referenced to their enclosed corresponding documents.



Function description

Field of application

The OptiFlex C manual coating equipment (with application cup) is built exclusively for electrostatic coating with organic powders. Any other use is considered as non-conform. The manufacturer is not responsible for any damage resulting from this, the risk for this is assumed by the user alone!

The OptiFlex C electrostatic powder manual coating equipment with the OptiSelect manual powder gun and the application cup is ideally suited for manual coating of objects in vary small series, for test coatings at powder manufacturers, and in test laboratories.

The powder types used must can be fluidized without vibration.

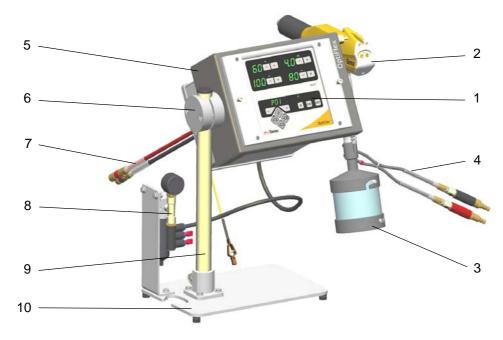
Typical characteristics

- OptiFlex C is suitable for working with minimum quantity of powder
- Precise application parameters lead to repeatable application performances
- Quick and simple color change
- Supplied ready for use



OptiFlex C manual coating equipment

Structure



OptiFlex C manual coating equipment - structure

Clamping element 1 OptiStar control unit 2 Pneumatic connection OptiSelect manual powder gun 7 3 Application cup Filter unit 4 Pneumatic connection Tube Rack 10 Base

OptiStar control unit

All information about the OptiStar control unit will be found in the corresponding enclosed documentation!

OptiSelect manual powder gun

All information about the OptiSelect manual powder gun will be found in the corresponding enclosed documentation!

Application cup

All information about the application cup will be found in the corresponding enclosed documentation!



Scope of delivery

OptiFlex 1-C

- A OptiStar control unit in a metal case with power supply cable
- A base with column and filter unit
- An application cup, complete with pneumatic connection to the control unit
- An OptiSelect manual powder gun with gun cable, rinsing air hose and standard nozzle set (see therefore the OptiSelect manual powder gun user manual)



Technical data

OptiFlex C manual coating equipment

Electrical data

OptiFlex C	
Mains input voltage	100-240 VAC
Operating frequency	50/60 Hz
Input power	40 VA
Nominal output voltage (to the gun)	max. 12 V
Nominal output current (to the gun)	max. 1 A
Protection type	IP54
Temperature range	0-40°C (+32°F - +104°F)
Approval	(pendent)

Pneumatical data

OptiFlex C	
Compressed air main connection	G1/4" - female thread
Max. input pressure	10 bar
Min. input pressure (while unit in operation)	6 bar
Max. water vapor content of the compressed air	1,3 g/m³
Max. oil vapor content of the compressed air	0,1 mg/m³
Max. compressed air consumption 6 m³/h	



Connectable guns

OptiFlex C	connectable
OptiSelect GM02	yes
OptiGun GA02	yes
PG1/PG2-A	yes (no remote control)
TriboJet	yes, with adapter*

^{*} The gun type must be set on the control unit (see therefore the corresponding user manual)!



Attention:

The OptiFlex C manual coating equipment can only be used with the specified gun types!

Dimensions

OptiFlex C	
Width	444 mm
Depth	310 mm
Height	490 mm
Weight	12 kg



Start-up and operation

Connection guide

 Check the compressed air connection from the filter unit to the control unit. Connect the compressed air supply hose from the compressed air circuit directly to the filter unit main connection on the base (1/4" female BSP)

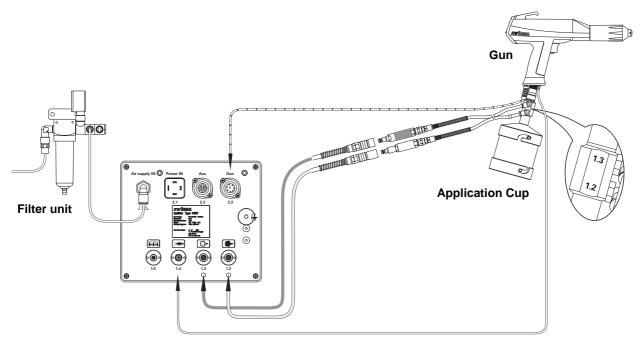


Note:

The compressed air must be free from oil and water!

- Connect the grounding cable to the control unit with the grounding screw, and the 5 m long grounding cable with the clamping clip to the booth or the conveyor. Check ground connections with Ohm meter and ensure 1 MOhm or less
- 3. Connect the gun cable plug to the socket **2.3** on the rear side of the control unit
- 4. Connect the rinsing air hose to the electrode rinsing air output **1.4** and to the powder gun
- 5. Connect the red hose for the conveying air to the corresponding output **1.2** on the rear of the control unit
- 6. Connect the black hose for the supplementary air to the corresponding output **1.3** on the rear of the control unit
- 7. Insert the application cup into the corresponding connection on the OptiSelect gun
- 8. Connect pneumatic hoses according to color coding on the cup connection
- Connect the red quick release connection (with integrated powder stop) with the Quick release coupling of the conveying air hose. The conveying air hose must already be connected to the output 1.2 on the rear side of the control unit.
- 10. Connect the black quick release connection (with integrated powder stop) with the Quick release coupling of the supplementary air hose. The supplementary air hose must already be connected to the output 1.3 on the rear side of the control unit
- 11. Connect the mains cable to the **2.1 Power IN** plug and screw it on





Connecting guide - overview

Preparation for start-up

Fill in powder

- 1. Fill the application cup with powder
- 2. Place the dip tube in the powder carefully, in order to prevent the plug building in the inside of the dip tube
- 3. Lock the bayonet closure

Switch on the booth

The coating booth is switched on according to the corresponding user manual.

Start-up

Switch on the control unit

Press the **ON** power switch.
 The displays illuminate and the control unit is ready for operation



Note:

The further start-up procedure for the OptiFlex C manual coating equipment is explicitly described in the OptiStar CG07 control unit operating instructions (chapter "Initial start-up" and "Daily start up")!





Color change

General information

When a color change takes place, the individual components of the manual coating equipment must be cleaned carefully. Thereby, all powder particles of the former color must be removed!

Procedure:

- 1. Clean the application cup (see therefore the application cup user manual)
- 2. Dismantle and clean the powder gun (see therefore the user manual of the OptiSelect manual powder gun)
- 3. Prepare the manual coating equipment with new powder for start-up



Maintenance and cleaning



Note:

Regular and conscientious maintenance increases the life span of the manual coating equipment and provides for a longer continuous coating quality!

Daily maintenance

1. Clean the application cup (see therefore the application cup user manual)

Weekly maintenance

- 1. Clean the application cup (see therefore the application cup user manual)
- 2. Check the O-rings
- Check the control unit grounding connections to the coating booth, the suspension devices of the work pieces, or the conveyor chain

If in disuse for several days

- 1. Remove the mains plug
- 2. Clean the coating equipment
- 3. Turn off the compressed air main supply

Cleaning

Cleaning the OptiSelect manual powder gun

Frequent cleaning of the gun helps to guarantee the coating quality.



Note:

Before cleaning the powder gun, switch off its control unit. The compressed air used for cleaning must be free from oil and water!



Daily:

1. Blow off the outside of the gun and wipe, clean etc.

Weekly:

- 2. Remove the application cup from the connection
- 3. Remove the spray nozzle from the gun and clean it
- 4. Blow out the gun from the connection in flow direction with compressed air
- 5. Clean the integrated gun tube with the provided gun brush
- 6. Blow through the gun with compressed air again
- 7. Clean the powder hose
- 8. Reassemble the gun and connect it



Note:

See therefore the user manual of the OptiSelect manual powder gun!

Cleaning the application cup

Frequent cleaning of the application cup helps to guarantee the coating quality.



Note:

Before cleaning the application cup, switch off the control unit. The compressed air used for cleaning must be free from oil and water!



Attention:

It is not permitted to clean the application cup with solvents!

- 1. Empty any powder out of the application cup
- 2. Blow off the outside of the application cup and wipe, clean etc.
- 3. Release the bayonet closure between cup cover and cup
- 4. Clean the cup
- 5. Pull the dip tube out and clean
- 6. Press and hold (approx. 3 seconds) the program key **T12** on the OptiStar control unit, until a circulating luminous segment is shown in display **A5**
- 7. Press the powder gun trigger to begin the cleaning
- 8. The cleaning mode is terminated by pressing the program key **T12** again
- 9. Clean the cup with compressed air
- 10. Clean the fluidizing plate with compressed air (free of oil and water)



Attention:

Do not clean the fluidizing plate with solvents or other fluidities!



Maintenance and cleaning of the filter unit

The filter unit on the OptiFlex C manual coating equipment measures and cleans the compressed air. Here, the main compressed air connection of the equipment is located.

Replacing the filter element

Procedure:

- 1. Unscrew the filter glass on the filter unit
- 2. Loose the cap screw
- 3. Remove the complete filter element
- 4. Replace the filter element
- 5. Clean the filter glass on the inside and install it again



Troubleshooting

General information

Fault	Causes	Troubleshooting
	Power pack defective	Replace the power pack, if error is permanent
	Main valve defective	Replace main valve coil
	Gun not connected	Connect the gun
	Gun plug, gun cable or gun cable connection defective	Replace corresponding part or send in for repair
	Remote control on pow- der gun defective	Replace remote control (gun back cover)
	Rinsing air solenoid valve of flat jet nozzle defective	Replace valve coil
	Rinsing air solenoid valve of round jet nozzle defective	Replace valve coil
	Gun plug, gun cable or gun cable connection defective	Replace corresponding part or send in for repair
Gun LED remains dark, although the gun is triggered	Gun plug, gun cable or gun cable connection defective	Replace corresponding part or send in for repair
	Remote control on pow- der gun defective	Replace remote control (gun back cover)
Powder does not adhere to object, al-	High-voltage and current deactivated	Press the selection key (application key)
though the gun is trig- gered and sprays powder	High voltage cascade defective	Send in the gun for repair
powdoi	Objects are not properly grounded	Check the grounding



Fault	Causes	Troubleshooting
Control unit displays remain dark, although	Control unit is not con- nected to the mains	Connect the equipment with the mains cable
the control unit is switched on	Power pack fuse defective	Replace the fuse
	Power pack defective	Replace the power pack, if error is permanent
The gun does not spray powder, al-	Compressed air not present	Connect the equipment to the compressed air
though the control unit is switched on and the gun is triggered	Throttle motor or powder gun are clogged	Clean corresponding part
guir is triggered	Front plate defective	Send in for repair
	The application cup is incorrectly connected or not connected at all to the control unit	Check the pneumatic connections, and if nec- essary, connect (see Connection guide)
	Injector nozzle clogged	Dismantle the application cup completely and clean it
	Dip tube clogged	Blow through the dip tube with compressed air, and place it in the powder carefully
Irregular powder output	Poor closure	Dismantle the applica- tion cup completely, check the O-rings and replace, if necessary
	Pneumatic hoses not correctly connected	Check the elbow joints and connect correctly, if necessary
	Powder fluidization insufficient or not available	Dismantle the fluidizing plate, and clean, 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** OptiFlex C manual coating equipment **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 wear 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!



OptiFlex C manual coating equipment - spare parts list

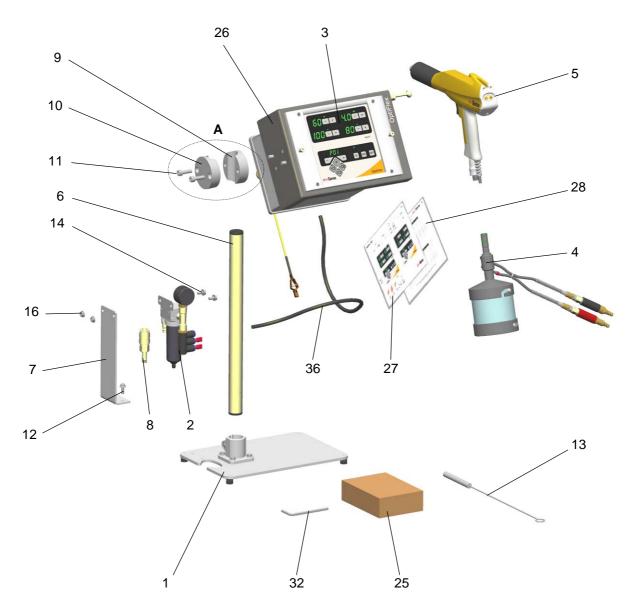
1	Base complete	385 190
2	Filter unit - complete (see corresponding spare parts list)	
3	CG07 gun control unit - complete (see corresponding operating manual)	
4	Application cup - complete (see corresponding operating manual)	
5	OptiSelect manual powder gun - complete (see corresponding operating manual)	
6	Column - complete	1002 532
7	Mounting bracket	1002 579
8	Rectus quick release connection - NW7,4-Ø 10 mm	239 267
Α	Clamping element - 30-1-1 - complete (incl. pos. 9, 10, 11)	376 183
9	Cover, fix	364 720
10	Cover	364 010
11	Cylinder Allen screw - M8x25 mm	216 500
12	Shakeproof Allen screw - M6x16 mm	261 823
13	Cleaning brush - Ø 12 mm	389 765
14	Hexagon shakeproof screw - M6x12 mm	244 406
16	Hexagon locknut - M6	244 430
25	Parts set, consisting of:	1002 789
	Fuse - F4.00AF	262 897
	Cable tie - L=100x2.5 mm	200 719
26	Rack - complete	1002 680
27	Short instruction OptiStar CG07	1002 060
28	Program table OptiStar CG07	1002 063
32	Hex. Allen key - wrench size 6	262 030
36	Plastic tube - Ø 8/6 mm black	103 152*

[#] Wearing part

^{*} Please indicate length



OptiFlex C manual coating equipment - spare parts



OptiFlex C manual coating equipment - spare parts



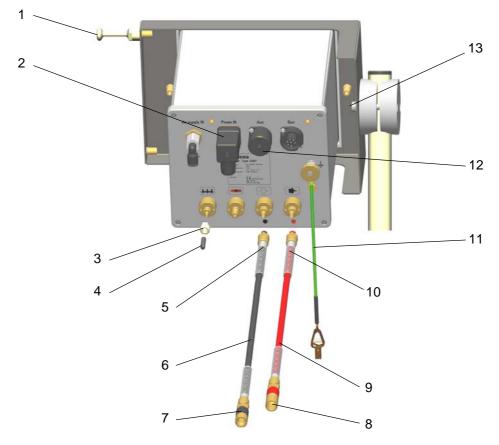
OptiFlex C Manual coating equipment - spare parts list

1	Gun retainer	1001 140
2	Mains cable - L=5m, 12 G (Switzerland)	382 493
-	Mains cable - L=5m, VII G Schuko (Europe, Russia etc.)	382 485
	Mains cable - L=5m, 498 G (USA, Japan etc.)	382 507
	Mains cable - L=5m, BS89/5 (GB, Africa etc.)	382 515
-	Mains cable - L=5m, SAA/3 (Australia, China etc.)	382 523
3	Nut - M10x1 mm, Ø 6 mm	263 052
4	Screw cap - Ø 6 mm	263 044
	Pneumatic connection - supplementary air (complete, incl. pos. 5, 6, 7)	382 221
5	Nut with kink protection - M12x1 mm, Ø 8 mm	201 316
6	Plastic tube - Ø 8/6 mm, black	103 756*
7	Quick release coupling - NW5, Ø 8 mm, black	261 637
	Pneumatic connection - conveying air (complete, incl. pos. 8, 9, 10)	382 213
8	Quick release coupling - NW5, Ø 8 mm, red	261 645
9	Plastic tube - Ø 8/6 mm, antistatic	103 500*
10	Nut with kink protection - M12x1 mm, Ø 8 mm	201 316
11	Grounding cable complete	301 140
12	Protection cap	206 474
13	Shakeproof Allen screw - M8x12 mm	263 214

^{*} Please indicate length



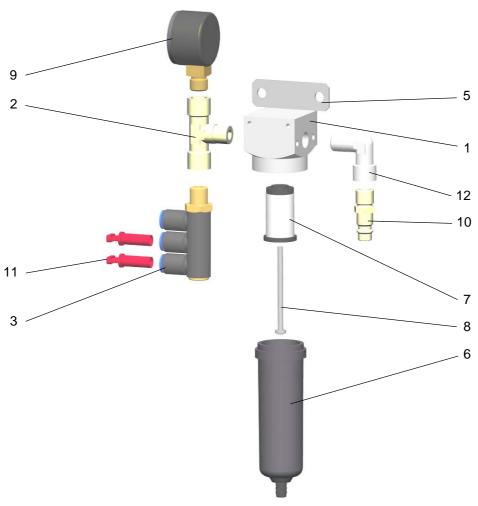
OptiFlex C Manual coating equipment - spare parts



OptiFlex C manual coating equipment - spare parts



OptiFlex C - filter unit Filter unit - complete, without pos. 13 1001 147 Filter separator body - F14MD 1001 759 2 T-piece - 1/4"i-1/4"a-1/4"i 262 064 3 Elbow joint - 1/4"-Ø 8/3x1 mm 1002 614 5 Fixture plate - complete 1001 758 6 Condensate container with drain valve 1001 761 7 Filter cartridge - 20 µm 1001 762 8 Cap screw - M4x60 mm 258 946 1001 764 9 Pressure gauge - 1/4"ext. Ø, 0-10 bar 10 Rectus connector - NW 7,4-1/4"a 256 730 11 Plug - Ø 8 mm 238 023 12 Elbow connection - 1/4"a-1/4"i 222 674 13 Rectus quick-release coupling (for pos. 10, not shown) 239 267



OptiFlex C - filter unit

