Operating Instructions and Spare Parts List

PG 1-Cup Gun
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Directions for use

Electrostatic Manual Spraying equipment for Powder Coating

The electrostatic manual coating system consists of:

- PG 1-Cup Gun with a 0.7 l Powder funnel
- PGC 1 Powder Gun Control unit with CB 1 electronics control board - (Option)

This equipment is matched and should only be operated in this configuration.

This equipment combination was tested by PTB: PTB No 91.C.9102, PTB 1991

Safety rules for the electrostatic powder coating

1. This equipment can be dangerous when it is not operated according to the following standards:
   - EN 50 050 (or VDE 0745 Part 100), EN 50 053 Part 2 (or VDE 0745 Part 102) as well as the Specification sheet ZH 1/444 for concerning electrostatic powder coating.

2. All electrostatic conductive parts which are within 5 metres of the coating area and especially the workpieces must be grounded.

3. The floor in the coating area must be electrostatic conductive.
   - Normal concrete is generally conductive.

4. The operating personnel must wear electrostatic conductive footwear, i.e. leather soles.

5. The operating personnel should hold the gun in the bare hand. If gloves are worn they must be electrostatically conductive.

6. Connect the grounding cable (green/yellow) supplied to the grounding terminal on the control module. The grounding cable must have a good metal to metal contact with the coating booth, recovery unit, and the workpiece conveyor system, especially with the workpiece suspension.

7. The electrical cables and powder feed hoses to the gun must be laid out so that they are protected from possible mechanical damage.

8. The powder coating equipment should only be switched on after the coating booth is in operation. If the booth breaks down then the powder coating equipment must also be switched off.

9. Check the grounding of all electrostatic conductive parts at least once a week.

10. When cleaning the gun or changing nozzles the control module must be switched off.
## Technical data for the PG 1-Cup Gun

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powder capacity</td>
<td>0.7 l (~350 g/~12 oz.)</td>
</tr>
<tr>
<td>- option</td>
<td>0.35 l (~180 g/~6 oz.)</td>
</tr>
<tr>
<td>Rated input voltage</td>
<td>10 V eff.</td>
</tr>
<tr>
<td>Frequency</td>
<td>17 kHz</td>
</tr>
<tr>
<td>Rated output voltage</td>
<td>98 kV</td>
</tr>
<tr>
<td>Maximum output current</td>
<td>130 μA</td>
</tr>
<tr>
<td>Polarity</td>
<td>negative</td>
</tr>
<tr>
<td>Flash protection</td>
<td>EEx 5 mj</td>
</tr>
<tr>
<td>Approval</td>
<td>EN 50 050 and PTB No. Ex-91.C.9102. PTB Date tested 10/991</td>
</tr>
</tbody>
</table>

*Connection: The PG 1-Cup Gun must only be connected to the PGC 1 Powder Gun Control (also the PGC 2, PGC 3 or RGC-HV only after consulting ITW Gema)*
PG 1-Cup Gun for electrostatic coating

1. Fields of application

The PGC 1 Powder Gun Control with the PG 1-Cup Gun is especially suited for very small series, test coatings at powder manufacturers and in test laboratories.

2. Scope of delivery for PG 1-Cup Gun :

- A PG 1-Cup Gun (1) with electric cable, and a standard PG 1 nozzle set (see Fig. 3), and an air hose adaptor (4 - for use with MPS units). The PG 1-Cup Gun is already modified to operate with the SuperCorona® attachment.
- *(The SuperCorona® attachment (6) is not part of the Standard equipment, but is available as an option. When using the SuperCorona® a corona ring with the corresponding extension arm length must be used).*
- A Conveying air hose (5) with quick-release coupling, and screw connector for the conveying air (red) from the control module.
- A Rinsing air hose (3) with quick-release connector.
- *A PGC 1 control module (2), installed in a metal housing, complete with carrying handle and power cables is not part of the Standard equipment, but is available as an option. See the separate PGC 1 Operating Instructions.*

![Diagram of PG 1-Cup Gun components]

Figure 1.
3. PG 1-Cup Gun

1. Funnel cover.
2. Powder funnel.
3. Injector housing.
4. Powder feed adjustment.
5. Grounding plate.
7. Gun cable connection.
8. Rinsing air connection.
10. Conveying air hose connection.
11. Conveying air tube.
15. Intermediate block.
16. Atomizing system.
17. Threaded sleeve.
18. SuperCorona® attachment (Option).
19. Shaft (with H-V cascade).
20. End plate with hook.

Figure 2.
The PG 1-Cup Gun can be equipped with the following nozzles:

40 mm nozzles*

Flat jet nozzle with vented centre electrode.

Round nozzle with vented deflector and vented centre electrode.

150 mm nozzles*

Flat jet nozzle with vented centre electrode.

Round nozzle with vented deflector and vented centre electrode.

300 or 500 mm nozzles* (not part of the standard nozzle set - see spare parts list)

Extended flat jet nozzle with vented centre electrode - 300 or 500 mm long.

Extended round nozzle with vented deflector and vented centre electrode.

*When used with the SuperCorona® a corona ring with the corresponding extension arm length must be used. See the Spare Parts List.

Figure 3.
Functional description

The powder in the powder funnel is sucked down into the chamber between the injector nozzle and the injector sleeve by the vacuum caused by the conveying air venting from the injector into the injector sleeve.

The powder is electrostatically charged shortly before it leaves the gun nozzle. The electrostatically charged powder sprayed onto the grounded workpiece adheres to the latter’s surfaces.

The conveying air is set on the PGC 1 Powder Gun Control unit. To reduce the powder feed the powder feed adjusting knob must be turned counter-clockwise.
1. High-Voltage generation

The voltage generator module (control module) supplies high-frequency low-voltage. This voltage is fed through the gun cable (14) and the gun connector (12) in the grip to the High-Voltage cascade (25).

In the cascade (25) this low voltage is stepped up (c). This primary High-voltage is subsequently rectified and multiplied in several stages in the cascade (d) until the required High-Voltage is attained.

The High-voltage is then fed from the spray nozzle to the electrode (e). See also Figures 7 and 8, page 7.

2. Circuitry

In addition to the low-voltage a switching voltage is fed to the gun. When the gun trigger (21) is actuated, a reed switch closes the circuit. The control module switches the low-voltage and the rinsing air on. This reed switch satisfies safety regulations of most major standards.
3. Powder flow and rinsing air

An exposed electrode in operation will be covered with powder very quickly, which will lead to a reduction in the coating quality of the gun. A small stream of air (rinsing air) flowing around the electrode prevents powder from settling on the electrode. Rinsing air is connected to the connection point 1.4 (7 - Fig. 9, page 8) at the rear of the control module.

The function of the nozzles are described in the applicable sections (see page 7).
4. Flat jet nozzle with vented centre electrode

Figure 7.

The air-cleaned flat jet nozzle atomizes and electrically charges the powder. The slotted opening shapes the powder cloud to form an oval spray pattern. The powder is charged by the central electrode. The High-Voltage, generated inside the gun, is fed via the black contact ring of the nozzle holder to the centre electrode. In order to prevent powder from sintering (building up) on the electrode, the latter is cleaned by compressed air during the spraying process. For this purpose the rinsing air is fed, via the small hole in the black contact ring in the nozzle holder, into the hole in the electrode holder. The rinsing air control on the control module is described in the applicable section (see page PGC 1 Operating Instructions).

5. Round nozzle with vented deflector and vented centre electrode

Figure 8.

The deflector plate is used for shaping the powder jet emerging from the gun to form a powder cloud. The powder is charged by the centre electrode. The High-Voltage generated inside the gun is conducted via the black contact ring of the nozzle holder to the centre electrode.

Powder can build up on the deflector plate, which has to be rinsed with air. For this purpose the rinsing air is fed via the small hole in the black contact ring in the nozzle holder, then into the hole in the electrode holder and deflected in such a way that it blows across the inside cone of the deflector plate. The intensity of the rinsing air is dependent on the powder and its sintering ability.

The rinsing air control on the control module is described in the applicable section (see PGC 1 Operating Instructions).
Installation of powder coating equipment.

The powder coating equipment is pre-assembled in the factory to a point where only the gun connections and air hoses must be connected. Refer to the assembly drawing (Fig. 17, page 19).

- Connect the hose for the external compressed air input to the inlet 1.1 IN (10) at the rear of the control module.
- Fit the red hose to the conveying air outlet 1.2 (9) at the rear of the control module and the other end to the fitting of the vacuum nozzle valve body.
- Connect the rinsing air hose (small diameter transparent hose) to the connection on the gun and the other end to the outlet 1.4 (7) at the rear of the control module.

2. Fluidizing air solenoid valve socket (B)*.
3. Fuse holder - F1.
4. Module ground connection.
5. Fuse holder - F2* (for N. America only)

6. Mains connection (C).
7. Rinsing air connection (1.4).
8. Supplementary air connection (1.3)*
9. Conveying air connection (1.2).
10. External compressed air input (1.1 IN).

* Not used with PG 1-Cup Gun
Starting up

a) Start-up of the PG 1-Cup Gun

1. Connect the gun plug (1) to the 'A Gun' socket on the rear of the PGC 1 control unit.
2. Connect the transparent rinsing hose (6) to the socket 1.4 on the rear of the PGC 1 control unit.
3. Connect the control unit to the Mains through the Mains connection - C (2) and to the compressed air network (1.1 IN).
4. Function checks, see PGC 1 Operating Instructions.
   - Set the conveying air pressure at 1 to 1.5 bar (never more than 3 bar) with the knob on the PGC 1 control unit (see PGC 1 Operating Instructions). The conveying air volume should be 2-3 Nm³/h.
   - Turn the adjusting knob (4 - Fig. 12, page 11) on the gun to the stop in the clockwise direction - that is the maximum output. To decrease the powder output turn the adjusting knob in the counter-clockwise direction (to approximately 90°).
5. Pour powder into the funnel (1 - Fig. 12, page 11).

Figure 10.
b) Shut-down

1. Release the gun switch.
2. Switch off the control module.
   *The adjustment for High-Voltage, rinsing air, and powder output should not be changed.*
3. For work interruptions such as lunchbreaks, over-night, etc. it is necessary to disconnect the compressed air supply.

c) Assembling the metallic powder tube

1. Remove the Standard powder tube.
   - Unscrew the nozzle.
   - Place the extractor tool approximately 2-3 cm into the powder tube.
   - Tighten the milled screw only so much that the extractor does not move.
   - Pull out the Standard powder tube completely.
2. Push the metallic powder tube in to the stop.
   - the metallic powder tube must protrude about 150 mm (see below).
3. Screw on the metallic powder nozzle.
   - the PG 1-Cup Gun is now ready to spray metallic powder.

d) Dismantling the metallic powder nozzle.

1. Blow off the gun and injector thoroughly with compressed air.
2. Pull the metallic powder tube out at the front of the powder gun.
3. Push the Standard powder tube in and push it to the stop with the "Pusher tool" (Item 28, page 3 - PG 1 Powder Gun Spare Parts List) - the powder tube must be set back 5 mm from the mouth of the gun.
4. Fit the Standard nozzle (or if necessary with the SuperCorona®).

![Diagram of the powder gun components](image_url)
Cleaning and repairs.

PG 1-Cup Gun

Regular and frequent cleaning of the gun is recommended to assure a long working life of the equipment and a constantly high coating quality.

a) Daily cleaning
   1a Clean the gun, see below

b) Weekly cleaning:
   1b Check the grounding connection of the PGC 1 control unit with the booth, Workpiece suspension or the chain conveyor

c) When the powder coating equipment has not been used for a few days:
   1c Disconnect the Mains plug.
   2c Clean the coating equipment, see point 1a.
   3c Disconnect the main air line.

d) Cleaning:
   1. Empty the powder from the funnel (1).
   2. Clean the outside of the gun with compressed air or wiping with a soft clean cloth etc.
   3. Remove the threaded sleeve and nozzle and clean, see Fig. 16, page 16.
   4. Remove the funnel (1) by unscrewing it and clean.

Weekly:
   5. Pull the adjusting knob (4) on the gun lightly to the rear and turn to the left in the counter-clockwise direction (approximately 30° over the minimum) until it can be pulled out.
   6. Blow compressed air through the conveying air connection of the gun.

Figure 12.
d) Cleaning (Cont.)

7. Clean the powder tube with the spiral brush supplied.
8. Clean all parts with compressed air.
9. The white injector sleeve (3 - Fig. 12, page 11) can be removed from the adjusting knob to check if the injector is clean.
10. Reassemble in the reverse order.
11. *Normally the gun does not have to be dismantled.*

If dismantling is necessary, then the procedure is as follows:

1. Unplug the gun cable (12 - Fig. 14, page 13).
   - Unscrew the lock screw (9 - Fig. 14, page 13).
   - Turn the gun cable connection (12 - Fig. 14, page 13) 1/4 of a turn to the left (Mark aligned with mark) and pull straight out of the grip (20 - Fig. 14, page 13).
   - Screw in the lock screw (9 - Fig. 14, page 13) provisionally, as this can be easily lost.
2. Unscrew the conveying air tube connection (16 - Fig. 14, page 13).
3. Remove the adjusting knob (5 - Fig. 15 below) from the gun.
4. Unscrew both M4 Allen screws (3 - Fig. 13 below) from the injector block (7 - Fig. 13 below) on the gun and remove by pulling to the rear.
5. Unscrew the white plastic M8 Allen screw (32 - Fig. 13 below) from the black cover plate with hook (30 - Fig. 13 below).
6. Dismantle the grip (20 - Fig. 14, page 13), intermediate block (23 - Fig. 14, page 13), and shaft (26 - Fig. 14, page 13).
7. Assemble in the reverse order.
   - Check all the O-rings first, especially Item 22 (2x) below.

*Gun parts must not be cleaned with solvents. The fluidizing pad (34) will be damaged.*
e) Dismantling the gun

**IMPORTANT**

The gun should only be disassembled if this becomes necessary due to a defect or contamination.
Disassemble only to the point where access to the corresponding part is achieved.
Before cleaning the gun, switch off the control module and detach the gun plug (17).
The cascade (25) must not be removed because it has been installed according to a special process. If the cascade is defective, send the entire shaft (26) to an authorized ITW Gema service centre.

*For description of parts, see PG 1 Cup Gun - Spare Parts List, page 3.*
f) Gun assembly

- The gun is reassembled by performing the previously described disassembling steps in the reverse order.
- Careful handling is recommended.
- If the gun cable connector (12 - Fig. 14, page 13) cannot be inserted properly without applying force, disassemble the gun again and reassemble it.

After the gun has been reassembled check that:
- the gun cable connector (12 - Fig. 14, page 13) is properly seated. It should be possible to turn the lock screw (9 - Fig. 14, page 13) all the way into the countersink.
- there are no gaps between the joints.
- the gun trigger can be smoothly actuated and that it returns to the neutral position on its own

g) Gun repair

Except for the replacement of possibly defective parts, virtually no repairs should be required. The replacement of the cascade (25 - Fig. 14, page 13) and the repair of the gun cable connector (12 - Fig. 14, page 13) should only be performed by an authorized ITW Gema service centre – please consult a ITW Gema dealer.

Replacing the trigger (21 - Fig. 14, page 13) or the spring (21.1 - Fig. 14, page 13):

1. Disassemble the gun.
2. Remove the spring (21.1 - Fig. 14, page 13) - Pulling the yoke with the forefinger.
3. Fit the (new) spring on the guide ribs of the trigger and push to the stop.
4. Insert the (new) trigger (21.1 - Fig. 14, page 13) into the grip (20 - Fig. 14, page 13).
5. Reassemble the gun.

Replacing the gun connector (17 - Fig. 14, page 13):

A soldering iron is required.

![View of soldering pins](image)

1. Opening the connector:
   - Unfasten the sealing gland (1)
   - Unscrew the sleeve (2)

In case the sleeve cannot be unscrewed, put the gun plug into the gun connection at the socket (A Gun - Fig. 9, page 8) and try again!
g) Repairs to the gun (Cont.)

2. Unfasten the two screws of the cable clamp.
3. Unsolder the wires of the connector (3 - Fig. 9, page 8).
4. Pull the cable out of the connector and the sleeve (2 - Fig. 15, page 14).
5. Introduce the cable into the new sleeve and connector.
6. Solder on the wires:

   Pin assignment:
   1 - black wire          4 - white wire
   2 - vacant              5 - vacant
   3 - blue wire           6 - brown wire
   ⬇️ centre - screening (ground)

7. Tighten the two screws of the cable clamp.
8. Screw on the sleeve (2 - Fig. 15, page 14) and tighten.
9. Tighten the sealing gland (1 - Fig. 15, page 14).

Spray nozzles

h) Cleaning
Daily or after each shift:
  – Clean the outside of the spray nozzles with compressed air, solvents or any other liquids.

Never immerse them in solvents for any length of time.
  – Check the seating of the spray nozzle.

Weekly:
  – Remove the spray nozzles and clean the inside with compressed air.
Sintered powder should be removed.

Monthly:
  – Check the spray nozzles for wear.

Replace the flat jet nozzle if:
  – the spray pattern is no longer a perfect oval.
  – deep grooves are present in the nozzle slot, or if the wall thickness has decreased.
  – the wedge at the rear of the electrode holder is worn.

By nozzles with deflectors
  – if the wedge at the rear of the electrode holder is worn, change the electrode holder.

Assembly - see next page
Important notes for assembling the nozzles

Round jet nozzle

1. Hold the electrode holder.

2. Push the black contact ring with the hole on the back of the electrode holder. **ATTENTION! The slot in the contact ring must be visible from the rear - see detail A!**

3. Push the electrode holder with the contact ring into the slot of the nozzle and press home. **IMPORTANT: The groove must face outwards!!**

4. Place the deflector onto the tip of the electrode holder and push it in as far as it will go. **Do not twist the deflector!**

Flat jet nozzle:
Assembly of the flat jet nozzle is the same a with the round jet nozzle.

Figure 16.
**Trouble shooting guide**
(Bold numbers in the text refer to Figure 14, page 13)

<table>
<thead>
<tr>
<th>Faults</th>
<th>Causes</th>
<th>Remedies</th>
</tr>
</thead>
</table>
| Green lamp does not illuminate although control module has been switched on. | No power:  
- Control unit is not connected to Mains  
- Fuse F1 defective  
- External power line fuse defective  
In equipment:  
- Lamp defective | Connect the gun with the power cable to the Mains  
Replace  
Replace or reset  
Replace |
| Needle of pressure gauge for conveying air stays at zero when making adjustments | Operating error:  
- No conveying air  
- Module is not switched on  
- Gun trigger is not pressed  
In the equipment:  
- Electronics board (PCB) defective | Connect the gun to the control module  
Switch on the control module  
Press gun trigger while regulating  
Mail in for repair |
| Powder does not spray | - Not conveying air  
- Pressure reducing valve defect | Connect the unit to the air line  
Replace |
| The "floating" ball in the flowmeter does not move, even when the pressure gauges show that pressure is in the system. | - Too little flow  
- Conveying air is not connected to the gun  
- The "floating" ball sticks because of contaminated compressed air | Increase conveying air  
Switch the gun on and off once or twice  
Connect the air hose  
The flowmeter must dismantled and cleaned by a specialist |
## Trouble shooting guide (Cont.)

<table>
<thead>
<tr>
<th>Faults</th>
<th>Causes</th>
<th>Remedies</th>
</tr>
</thead>
<tbody>
<tr>
<td>During spraying process air escapes from the gun shaft</td>
<td>- O-ring (22) defective or missing</td>
<td>Replace or insert</td>
</tr>
<tr>
<td>Gun does not spray powder although the control is on and the gun trigger (21) is pressed</td>
<td>- No conveying air</td>
<td>Connect the unit to the compressed air supply</td>
</tr>
<tr>
<td></td>
<td>- The injector valve or the gun is blocked</td>
<td>Clean accordingly</td>
</tr>
<tr>
<td></td>
<td>- The pressure reducing valve is closed</td>
<td>Open the valve</td>
</tr>
<tr>
<td></td>
<td>- Pressure reduction valve defect</td>
<td>Replace</td>
</tr>
<tr>
<td>Gun sprays powder, High-Voltage present, powder does not adhere to the work piece.</td>
<td>- High-Voltage too low</td>
<td>Increase the High-Voltage on the control module</td>
</tr>
<tr>
<td></td>
<td>- Gun connector, gun cable or gun cable connection is defective</td>
<td>Replace defective item(s) or mail it in for repair</td>
</tr>
<tr>
<td></td>
<td>- High-Voltage cascade is defective</td>
<td>Mail in the shaft or the whole gun for repair</td>
</tr>
<tr>
<td></td>
<td>- Electronics board (PCB) defective</td>
<td>Mail in for repair</td>
</tr>
<tr>
<td></td>
<td>- Workpiece not properly grounded</td>
<td>Check the ground connection, also refer to &quot;Safety regulations&quot;</td>
</tr>
<tr>
<td>Conveying air cannot be adjusted.</td>
<td>- Control knob turns freely on the shaft or the grub screw is loose.</td>
<td>Tighten the grub screw.</td>
</tr>
</tbody>
</table>
Assembly drawing - PG 1-Cup Gun /PGC 1

Figure 17.
Notes:
Ordering Spare Parts

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

1. Type, and serial number of your powder coating equipment.

2. Order number, quantity, and description of each spare part.

Example:

1. Type **PG 1-Cup Gun**    Serial no: XXXX XXXX

2. Order no: 201 073, 5 pieces, fine wire fuse.

Parts without a defined spare parts number can be ordered by giving the page number, item number on the drawing, and the item name:

1. Page 12.
2. Item 7.

When ordering cable or hose material the length required must also be given. The spare part number of yard ware always begins with 1... and is marked with an *. Wear parts are always marked with a #.

The dimensions of the plastic hoses are given with the outside diameter (o.d) first and then the inside diameter (i.d).

Example:

\[
\phi 6 / 4 \text{ mm} = 6 \text{ mm o.d} / 4 \text{ mm i.d}
\]
PG 1-Cup Gun

Remarks:

1. Only those parts have been included in the spare parts list that can be replaced by the user without difficulty.

2. If one of the following parts:
   - Shaft (26)
   - High-Voltage cascade (25)
   - Grip (20)

   is defective or broken, the complete gun should be returned for repair and inspection. *The shaft assembly, however, can be replaced as a spare part.*

3. If the gun cable (14) is defective, the complete gun connector assembly (11, 12, 13, 14, 17) should be returned for repair.

Figure 18.
### PG 1-Cup Gun

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Cover - Type D125 (Standard)</td>
<td>302 678</td>
</tr>
<tr>
<td></td>
<td>Cover - Type D100 (Option)</td>
<td>357 588</td>
</tr>
<tr>
<td>2</td>
<td>Funnel - Type D125 (Standard - 0.7 l)</td>
<td>302 651</td>
</tr>
<tr>
<td></td>
<td>Funnel - Type D100 (Option - 0.35 l)</td>
<td>357 570</td>
</tr>
<tr>
<td>3</td>
<td>Screw - M4 x 70 mm</td>
<td>248 401</td>
</tr>
<tr>
<td>4</td>
<td>O-Ring - ø 7.6 x 2.4 mm - Nitril</td>
<td>204 951#</td>
</tr>
<tr>
<td>5</td>
<td>Powder feed adjusting knob - complete (incl. item 4)</td>
<td>358 649</td>
</tr>
<tr>
<td>6</td>
<td>Injector sleeve (threaded)</td>
<td>357 359</td>
</tr>
<tr>
<td>7</td>
<td>Injector housing - complete (incl. item 27)</td>
<td>358 614</td>
</tr>
<tr>
<td>8</td>
<td>Grounding plate</td>
<td>328 863</td>
</tr>
<tr>
<td>9</td>
<td>Safety screw - M 4 x 10 mm</td>
<td>232 637</td>
</tr>
<tr>
<td>10</td>
<td>Rinsing air hose connection</td>
<td>328 820</td>
</tr>
<tr>
<td>11</td>
<td>O-Ring - ø 7.65 x 1.78 mm - Nitril</td>
<td>232 564#</td>
</tr>
<tr>
<td>12</td>
<td>O-Ring - ø 10.02 x 1.78 mm - Nitril</td>
<td>232 556</td>
</tr>
<tr>
<td>13</td>
<td>Cable - complete (incl. items 11, 12, 13, and 17)</td>
<td>328 740</td>
</tr>
<tr>
<td>14</td>
<td>Conveying air hose connection</td>
<td>201 324</td>
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<td>15</td>
<td>Conveying air tube connection</td>
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<td>Gun plug</td>
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<td>17</td>
<td>Conveying air tube</td>
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<tr>
<td>18</td>
<td>O-Ring - ø 8.73 x 1.78 mm - Nitril</td>
<td>248 428#</td>
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<tr>
<td>19</td>
<td>Grip</td>
<td>330 035</td>
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<td>20</td>
<td>Trigger with magnet</td>
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<tr>
<td>21.1</td>
<td>Trigger return spring</td>
<td>331 651</td>
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<td>22</td>
<td>O-Ring - ø 6.1 x 1.6 mm - Nitril</td>
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<td>23</td>
<td>Intermediate block</td>
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<td>24</td>
<td>Powder tube (Standard)</td>
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<td>Powder tube - Metallic (Option)</td>
<td>357 375</td>
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<tr>
<td>25</td>
<td>Shaft - complete (incl. items 22 and 25) Polarity – (negative)</td>
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<td>Polarity + (positive)</td>
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<td>26</td>
<td>O-Ring - ø 13.1 x 1.6 mm - Nitril</td>
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<tr>
<td>27</td>
<td>Threaded sleeve</td>
<td>328 774</td>
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<tr>
<td>28</td>
<td>Flat jet nozzle (see page 25)</td>
<td>318 744#</td>
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<td>29</td>
<td>End plate with hook</td>
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<td>30</td>
<td>O-Ring - ø 5.5 x 1.50 mm - Nitril</td>
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<td>31</td>
<td>Plastic screw - M8</td>
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<td>Air tube</td>
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<td>33</td>
<td>Fluidizing pad - M5-A</td>
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<td>34</td>
<td>SuperCorona® attachment (without extension)</td>
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<td>35</td>
<td>SuperCorona® attachment (for 150 mm extension-347 310)</td>
<td>354 384#</td>
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<td>36</td>
<td>SuperCorona® attachment (for 300 mm extension-353 310) - Option</td>
<td>354 392#</td>
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<td>37</td>
<td>SuperCorona® attachment (for 500 mm extension-352 500) - Option</td>
<td>354 406#</td>
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<td>38</td>
<td>Stop pin</td>
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<td>Tube extractor (not shown)</td>
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* Indicate length required

# Wear parts

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* * *
PG 1-Cup Gun

Accessories

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<th>Description</th>
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<tr>
<td>1</td>
<td>Conveying air hose</td>
<td>100 030*</td>
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<tr>
<td>2</td>
<td>Screw connector</td>
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<td>3</td>
<td>Adapter -</td>
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<td>2x 1/8&quot; connector</td>
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<td>Double nipple</td>
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<td>4</td>
<td>Rinsing air hose (transparent)</td>
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<td>5</td>
<td>Quick-release coupling</td>
<td>200 840</td>
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<td>Spare Parts set (not shown)</td>
<td>338 516</td>
</tr>
<tr>
<td></td>
<td>Spiral brush (not shown)</td>
<td>333 514</td>
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</tbody>
</table>

Figure 19.
Nozzle combination for PG 1-Cup Gun

Flat Jet Nozzle Set (items 1, 2, 3) 319 350
Round Jet Nozzle Set (items 1, 5, 6, 7) 347 337
1 Contact ring 318 760
2 Electrode holder - complete (Flat Jet Nozzle) 318 779#
3 Flat Jet Nozzle 318 744#
4 Threaded sleeve 328 774
5 Electrode holder - complete (Round Jet Nozzle) 347 329#
6 O-Ring - ø 5 x 1 mm 231 606#
7 Round Jet Nozzle 331 287#
8 Deflector - ø 16 mm 331 341#
9 Deflector - ø 24 mm 331 333#
10 Deflector - ø 32 mm 331 325#
11 Extension tube - 150 mm‡ 347 310#
12 Extension tube - 300 mm‡ 353 310#
12.1 Extension tube - 500 mm‡ 352 500#

Other lengths on request!

‡ When used with the SuperCorona® use the corresponding extension arm.