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<th>Page</th>
</tr>
</thead>
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</tr>
<tr>
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</tr>
</tbody>
</table>
1 About this manual

The manual shows the information necessary to:
- install
- operate
- perform basic maintenance
- correct small problems.

The X-PROTINT® and all its versions are referred to in the manual as the ‘machine’.

This manual contains the original instructions. The original language of the manual is English. All other language versions are translations of the original instructions.

1.1 How to work with the manual

For the safe use of the machine, it is important:
1. To familiarize yourself with the structure and content.
2. To read the safety chapter in detail and make sure you understand all the instructions. See chapter § 2.
3. To carry out the actions completely and in the given sequence.

1.2 Record of changes

<table>
<thead>
<tr>
<th>Edition</th>
<th>Editor</th>
<th>Check</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>WBS</td>
<td>-</td>
<td>05/2017</td>
<td>First edition</td>
</tr>
<tr>
<td>2.0</td>
<td>JSN</td>
<td>TB</td>
<td>10/2017</td>
<td>Modification brush, type plates</td>
</tr>
<tr>
<td>3.0</td>
<td>EVT</td>
<td>TB</td>
<td>06/2020</td>
<td>Complete revision</td>
</tr>
</tbody>
</table>
2 Safety

WARNING
Read the manual before you install or use the machine. Failure to do so can result in personal injury, death or property damage.

2.1 Intended use

The machine is designed to dispense colorants into a can. Any other use of the machine is strictly forbidden.

2.2 Liability

2.2.1 General liability

Our machines and accessories are fully compliant with the CE regulations. Any modification can result in not fulfilling the CE safety requirements and is therefore not allowed. Fast & Fluid Management B.V. will not accept any responsibility in case of modifications to machines and/or accessories.

Fast & Fluid Management B.V. is not liable if you do not follow the rules below:
- The machine is for indoors use only.
- This machine may only be used for commercial settings. The machine is not a household appliance.
- Observe all local safety regulations.
- Strictly obey the safety instructions in this manual.
- Mind the minimal requirement of the building structure of the load capacity of the floor.
- Place the machine in a well-lit and well-ventilated room.
- Place the machine on a flat, horizontal floor.
- Install and connect the machine according to the instructions in this manual.
- Connect the machine to a grounded wall socket.
- Do not use extension cords or inadequately rated power cables.
- Make sure that the power cable is freely accessible.
- Do not place objects on top of the machine.
- Keep lids, panels, and covers closed and in place whenever possible.
- Do not use a damaged machine. When you have doubts, contact your supplier.
- Keep the machine in good condition.
  - Clean the machine at the intervals and when dirty.
  - Make sure that defective parts are immediately replaced.
- Remove spilled liquids immediately, and unplug the machine in case of large spillages (> 500mL).
- Replace parts only with original Fast & Fluid Management B.V. spare parts.

All maintenance beyond the scope of this manual must be carried out by a qualified service technician that Fast & Fluid Management B.V. has trained and certified.

2.2.2 Machine-specific liability

This machine is designed to dispense colorants into a can in non-hazardous conditions.

In addition to following the instructions below, please consult with your paint supplier and/or colorant supplier, and review all applicable product information and safety data sheets to fully understand the risks associated with the use of their products, including how risks of fire and explosion may arise during use.
- Read and strictly comply with the safety data sheets for all colorants, (base) paint and brush liquids.

**WARNING**
The use of flammable colorants or colorants that diffuse potential explosive vapours may present fire and explosion risks. You are responsible for ensuring there is no build-up of explosive vapours both inside or around the dispenser.

**WARNING**
Do not use flammable liquids in the brush container.

**WARNING**
Risk of fire and personal injury if the temperature inside the dispenser when in use ("Operating Temperature") exceeds the flashpoint of the colorant or paint being used.

- You are responsible for ensuring that Operating Temperature never exceeds the flashpoint of the colorant in use, or, in the alternative, ensuring that there is no build-up of explosive vapors inside or around the dispenser.
- The Operating Temperature consists of the Ambient Temperature in the place of operation, plus an additional 15 °C / 27 °F generated by the dispenser when in use. The Ambient Temperature is determined by factors such as the temperature in the room or space where the dispenser is being operated, the amount of ventilation in and around the machine, or any other factors in your operating environment affecting temperature.
- In the event Operating Temperature exceeds the flashpoint of the colorant in use, you must take the following measures:
  - reduce the Operating Temperature by taking steps including but not limited to (a) operating the dispenser in a room or environment with a lower temperature; (b) increasing ventilation in and around the dispenser; and/or (c) taking any other steps to reduce the Ambient Temperature; and/or
  - select a different colorant or paint with a flashpoint higher than the likely Operating Temperature.
- An operational and environmental assessment is required before using flammable colorants in the dispenser, taking into account all local circumstances including ventilation around the machine, room and machine operating temperature and room size. Please consult your supplier for more details.
- The place of operation cannot be an ATEX zone or any kind of explosive atmosphere.
- In countries for which UL or CSA standards apply: this equipment cannot be used with colorants with a flashpoint below 38 °C / 100 °F.

### 2.3 User qualification for installation

Only install the machine when you are a qualified service technician who is trained and certified by Fast & Fluid Management B.V.

### 2.4 Certification

For some markets machines need a certification to prove the machine complies with the essential requirements concerning safety. The directives that have been taken into consideration in the design are available on the website.
If applicable to your market, the machine contains the logo of the certification either as a separate sticker or on the type plate.

<table>
<thead>
<tr>
<th>Logo</th>
<th>Certification</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE</td>
<td>CE</td>
<td><a href="http://www.fast-fluid.com">www.fast-fluid.com</a></td>
</tr>
</tbody>
</table>

2.5 Safety symbols on the machine

- Rotating parts hazard
- Electrical hazard
- Read the manual
- Return this part to its original position
- Do not use flammable liquids in the brush container.

2.6 Safety symbols in the manual

- WARNING
  Can cause personal injury.
- Note
  Shows further information.
- CAUTION
  Can cause damage to the machine.
2.7 Disposal of the machine

1. Sort the machine, the accessories and the packaging for environmentally friendly recycling.
2. Do not dispose of the machine into domestic waste. Dispose of the machine according to local regulations.
3. Dispose of the canisters as chemical waste, according to the local regulations.
3 Operator manual

3.1 Description

3.1.1 Overview of the machine (front)

A: Front door  
B: Shelf holder  
C: Can table  
D: Wheels  
E: Side cover  
F: Brush drawer with brush container  
G: Latch  
H: Pump with nozzle  
I: Canister  
J: Agitator  
K: Lid
3.1.2 Overview of the machine (back)

A: Net entry
B: Type plate
C: Knock-out plate for ventilation interface
3.1.3 Overview of the user interface (controls and indicators)

A: On/Off light
B: Emergency stop switch
C: Machine status LEDs
D: Can sensor

3.1.4 Machine status LEDs

<table>
<thead>
<tr>
<th>LED color</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>Indicator Valve Sensor</td>
</tr>
<tr>
<td>Blue</td>
<td>Indicator Pump Sensor</td>
</tr>
<tr>
<td>Green</td>
<td>Indicator Piston Sensor</td>
</tr>
</tbody>
</table>
3.1.5 On/Off light

<table>
<thead>
<tr>
<th>Status</th>
<th>Indicates</th>
</tr>
</thead>
<tbody>
<tr>
<td>On</td>
<td>Machine powered</td>
</tr>
<tr>
<td>Off</td>
<td>Machine not powered</td>
</tr>
<tr>
<td>Blinking</td>
<td>Emergency switch pressed</td>
</tr>
</tbody>
</table>

3.1.6 Type plate: serial number

![Type plate: serial number image]

3.1.7 Type plate: details

![Type plate: details image]
3.2 Operation

WARING
Only push the emergency stop switch in the case of a safety emergency.

Make sure that the problem is solved before you reset the emergency stop switch.

When you reset the emergency stop switch, the machine restarts automatically. When the machine is operational, you hear ‘beep beep’. The machine status LEDs will light up.

CAUTION
Do not remove the power from the machine. The machine must stir the colorants periodically.

3.2.1 General dispensing procedure

For all the software instructions: see the software documentation.

1. Place the can table in the correct slots for the correct height. See § 3.2.2.
2. Place the can. See § 3.2.2.
3. Choose the recipe and dispense. See the software documentation.
4. Remove the can.

3.2.2 Placing a can

1. Check the height of the can.

   Note
   The correct height of the can table depends on the height of the can.

2. Place the can table (A) between the correct shelf holders for the correct height.

   CAUTION
   Make sure that the can table is secure.

3. Place the can (B) at the center of the mark (C) on the can table.

   CAUTION
   Make sure that the can does not touch the turntable. Keep enough free space.
3.3 Maintenance

Note
Make sure that the can sensor (D) is able to detect the can.

3.3.1 General cleaning: after every dispensing operation

1. Clean the machine with a cloth and remove all spilled colorant or other liquid.

WARNING
Do not clean the drip plate and the brush during a dispense job.

CAUTION
Do not use cleaning agents based on organic solvents to clean plastic or painted parts of the machine.

3.3.2 Cleaning the brush container: daily

CAUTION
If you do not clean these items daily, severe pollution will occur.
Remove the brush container
1. Push the front side of the brush drawer, until the brush drawer is unlocked and comes out of the machine.
2. Remove the brush container (A). *Use the handle (B).*

Remove the brush
1. Remove the brush from the brush container.

Clean the brush container
1. Remove the liquid from the brush container. For the disposal of the liquid, follow the local regulations.
Fill the brush container
1. Fill the brush container with fluid. The level of the fluid must be between level A and level B. *Use the liquid your paint supplier indicates.*

**WARNING**
Do not put flammable liquids in the brush container.

---

Put back the brush into the brush container
1. Put back the brush into the brush container.

---

Put back the brush container in the brush drawer
1. Put back the brush container in the brush drawer.
2. Push the brush drawer to the back, until it is locked.

**Note**
Make sure that the brush drawer is closed, otherwise the brush does not function properly.
3.3.3 Refilling of a canister

**WARNING**
Check the material safety data sheet (MSDS) of the colorants for the personal protection measures that are required for handling the colorant.

**CAUTION**
Make sure that the colorant level in the canister is correct. If a canister is empty, it can cause an inaccurate dispensing and/or a recipe fault.

**Note**
The dispense software checks the level of colorant in each canister. The software on the machine shows when you need to refill a canister.

1. In the software, activate the fill canister option.

**Note**
The fill canister command of the dispense software controls the motor of the turntable. The turntable turns the empty canister to the front.

2. Open the front door.
3. Remove the lid (A) from the canister.
4. Add the colorant (B). Do not spill.

**CAUTION**
Do not fill the canister to the brim. Leave at least 2.5 cm (1 inch) unfilled.

**CAUTION**
Do not pour the colorant on the agitator.

5. Put back the lid on the canister.
6. Close the front door.
3.3.4 Using the emergency stop switch

1. Push the emergency stop switch (A). The machine stops immediately.

   **CAUTION**
   Only push the emergency stop switch in the case of a safety emergency. Do not use the emergency stop switch as an on/off function!

2. Solve the problem as quickly as possible.

   **CAUTION**
   When the machine is shut down, the stirring mechanism, which is necessary to keep the colorant in optimal condition, is also shut down.

3. Reset the emergency stop switch by turning the emergency stop switch. The machine restarts automatically.

   **Note**
   After the reset of the emergency stop switch, the machine is operational.
4 Installation

4.1 Unpack the machine

4.1.1 Remove the cardboard
1. Remove the straps.
2. Remove the cardboard (A).

4.1.2 Remove the plastic transportation parts
1. Remove the plastic wrap.
2. Remove the foam blocks.
4.1.3 Remove the plastic protection on the canisters
1. Open the front door.
2. Remove the foam.
3. Close the front door.

4.1.4 Remove the plastic protection of the brush
1. Open the brush drawer.
2. Remove the foam.
3. Close the brush drawer.

4.2 Put the machine in position

4.2.1 Move the machine to the final location

WARNING
Mind the minimum requirement of the load capacity of the floor. See § 6.2.

WARNING
Do not use a forklift.

Note
Make sure that the final location is well-lit and well-ventilated.

Note
Make sure that the surface of the floor is horizontal.
4.3 Install the computer

4.3.1 Remove the side cover

1. Open the side cover. *Use the latches.*
2. Remove the side cover.

4.3.2 Install the computer

1. Allocate the USB cable of the power board. It should be on the floor.
2. Put the computer (A) in the compartment.
3. Connect the USB cable to the computer.
4. Connect the dispenser and the computer to the wall socket.

4.3.3 Put back the side cover

1. Put back the side cover.
2. Close the side cover. *Use the latches.*

4.4 Turning on the machine

To turn on the machine:
1. Connect the power cable to the wall socket. When the machine is operational, you hear 'beep beep'.
2. Make sure that the emergency stop switch is reset. See § 3.3.4.
3. Make sure that the computer is on.
4. Run the dispense software.

### 4.5 First use

1. Fill and place the brush unit. See § 3.3.2.
2. Fill the canisters correctly. See § 3.3.3.
5 Troubleshooting

5.1 General troubleshooting procedure

1. Try to solve the problem with the information in this manual. See § 5.2.
2. If it is not possible to solve the problem with the information in this manual, contact service. See § 5.3.

5.2 Troubleshooting guide

<table>
<thead>
<tr>
<th>Problem</th>
<th>Possible cause</th>
<th>Possible solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main power supply is present but the machine does not work.</td>
<td>The emergency stop switch is active.</td>
<td>Reset the emergency stop switch. See § 3.3.4.</td>
</tr>
<tr>
<td>The machine has a failure and does not respond correctly to the request from the dispense software.</td>
<td>The failure could be mechanically or electronically.</td>
<td>Push the emergency stop switch to reset the machine. Reset the emergency stop switch. See § 3.3.4. If the machine still has a failure, contact service. See § 5.3.</td>
</tr>
<tr>
<td>The turntable is turning slowly and the machine does not stir the colorants.</td>
<td>The front cover is open</td>
<td>Close the front cover.</td>
</tr>
</tbody>
</table>

5.3 Contact service

1. Find the type plate on the lower front side of the machine. See § 3.1.5.
2. Take a note of the model number and the serial number of the machine.
3. Contact your supplier or manufacturer.
6 Technical data

6.1 General specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of canisters</td>
<td>16</td>
</tr>
<tr>
<td>Dispensing</td>
<td>Sequential</td>
</tr>
<tr>
<td>Pump type</td>
<td>Piston pump</td>
</tr>
<tr>
<td>Cleaning system</td>
<td>Rotary and static brush</td>
</tr>
<tr>
<td>Suitable for</td>
<td>Water and universal colorants (solvent optional)</td>
</tr>
<tr>
<td>Canister size [L]</td>
<td>2.3 / 4.6</td>
</tr>
<tr>
<td>Pump speed [mL/min]</td>
<td>500</td>
</tr>
<tr>
<td>Maximum can height [cm]</td>
<td>41</td>
</tr>
<tr>
<td>Can table dimensions, width x depth [cm]</td>
<td>23 x 37</td>
</tr>
<tr>
<td>Turntable</td>
<td>Bi-directional</td>
</tr>
</tbody>
</table>

6.2 Dimensions and mass

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions, height x width x depth [cm]</td>
<td>123 x 82 x 87</td>
</tr>
<tr>
<td>Packed dimensions, height x width x depth [cm]</td>
<td>141 x 98 x 98</td>
</tr>
<tr>
<td>Mass incl. packaging [kg]</td>
<td>165</td>
</tr>
<tr>
<td>Mass filled machine [kg]</td>
<td>220</td>
</tr>
<tr>
<td>Required load capacity of the floor [kg]</td>
<td>880</td>
</tr>
</tbody>
</table>
6.3 Ambient conditions

**WARNING**
Risk of fire and personal injury for failing to read and follow instructions in § 2.2.

**Note**
This machine must be used or stored within the ambient temperature, altitude, and humidity ranges listed in the table below.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature [°C], when in use¹</td>
<td>+10 to +35</td>
</tr>
<tr>
<td>Temperature [°C], when not in use¹</td>
<td>-25 to +55</td>
</tr>
<tr>
<td>Altitude above sea level [m], operational</td>
<td>-10 to 2000</td>
</tr>
<tr>
<td>Altitude above sea level [m], out of operation</td>
<td>-10 to 12000</td>
</tr>
<tr>
<td>Maximum relative humidity [RH], without condensation [%]</td>
<td>90</td>
</tr>
</tbody>
</table>

¹. As defined in § 2.2.2.

6.4 Noise level

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum noise level [dB(A)]</td>
<td>&lt; 65</td>
</tr>
</tbody>
</table>

6.5 Safety classifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP (Ingress Protection) classification</td>
<td>32</td>
</tr>
<tr>
<td>EMC (ElectroMagnetic Compliancy) classification</td>
<td>Class B</td>
</tr>
<tr>
<td>Overvoltage category</td>
<td>Class II</td>
</tr>
</tbody>
</table>

6.6 Electrical specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum power consumption of the dispenser [W]</td>
<td>75 / 100</td>
</tr>
<tr>
<td>Maximum leakage current [mA]</td>
<td>3.5</td>
</tr>
<tr>
<td>Parameter</td>
<td>Specification</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Voltage [V AC], region dependent (service engineer only)</td>
<td>110 ±10%</td>
</tr>
<tr>
<td></td>
<td>230 ±10%</td>
</tr>
<tr>
<td>Frequency [Hz]</td>
<td>50 / 60</td>
</tr>
<tr>
<td>Fuse specifications [A] slow</td>
<td>5</td>
</tr>
</tbody>
</table>
6.7 Electrical diagram