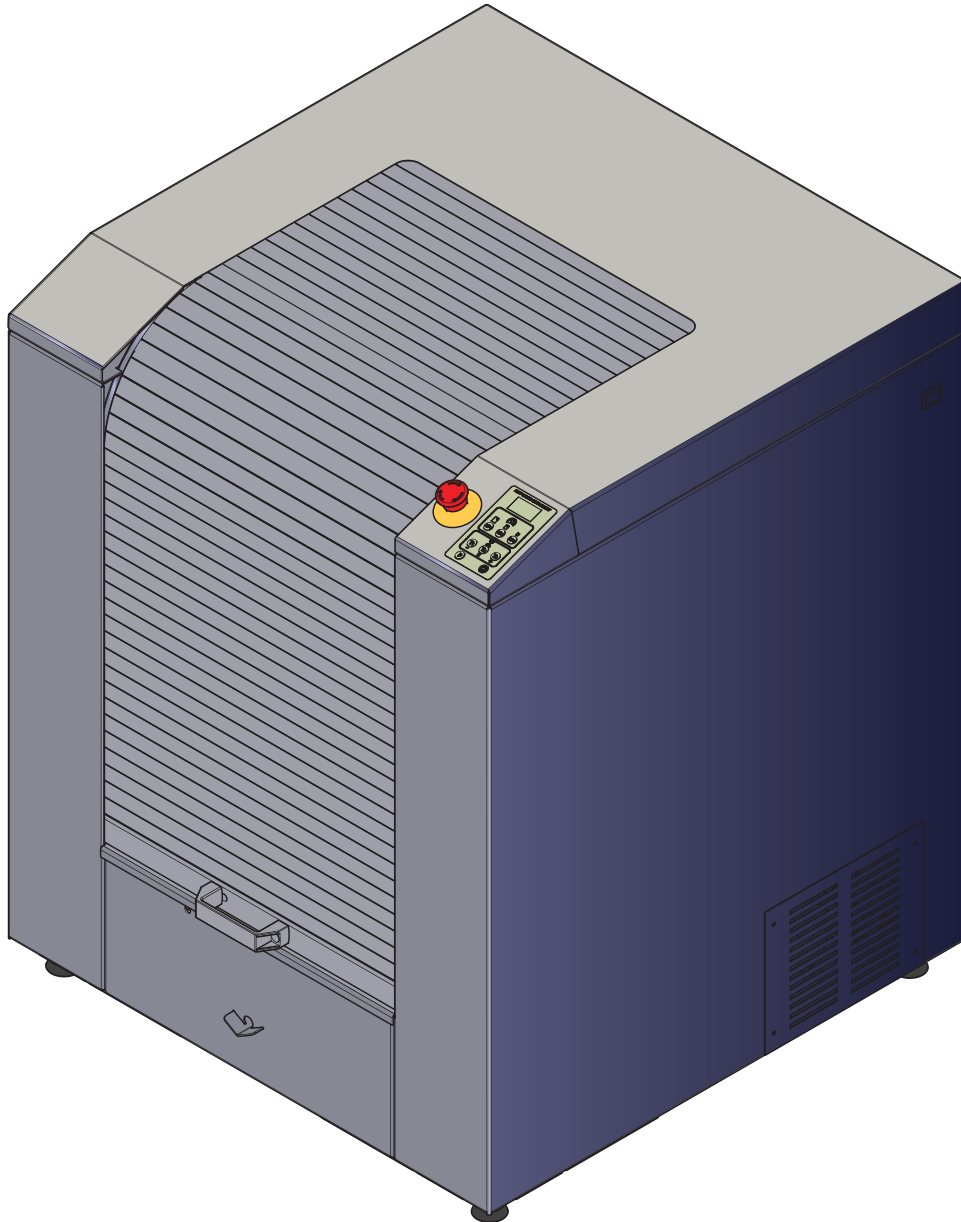


Manual GA350



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1 About this manual

The manual shows the information necessary to:

- install
- operate
- perform basic maintenance
- correct small problems

The GA350 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.

1.1 How to work with the manual

1. Familiarize yourself with the structure and content.
2. Read the safety chapter in detail and make sure you understand all the instructions. See § 2.
3. Carry out the actions completely and in the given sequence.

1.2 Record of changes

Edition	Editor	Check	Date	Description
1.0	MP	MB/TB	05/2014	First edition

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 mix paint in a can. Any other use of the machine is strictly forbidden.

2.2 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.

The mixer cannot be used in an environment where explosive vapours may occur (ATEX zone). Paints that contain flammable solvents can be mixed, as long as they are packed in a suitable UN approved container.

Fast & Fluid Management B.V. is not liable if you do not follow the rules below:

- Place machine in a well-lit and well ventilated room.
- Mind the minimal requirement of the building structure of the load capacity of the floor.
- Do not use a damaged machine. When you have doubts, contact your supplier. See § 5.1.
- Do not use extension cords.
- The machine is for indoors use only.
- Install and connect the machine according to the instructions in this manual.
- Observe all local safety regulations.
- Connect the machine to a grounded wall socket.
- Keep the machine in good condition. Make sure that defective parts are immediately replaced.
- This machine may only be used for commercial settings. The machine is not a household appliance.
- Make sure that the machine is installed as prescribed in this manual
- 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.

2.3 User qualification for installation

Only install the machine if you have written permission from the supplier of the machine.

2.4 CE certification

The machine is CE certified. This means that the machine complies with the essential requirements concerning safety. The directives that have been taken into consideration in the design are available on www.fast-fluid.com.

2.5 Safety symbols on the machine



Read the manual.



Electrical hazard. Read the manual.



Central earthing point.



Pinch hazard.



Electrical hazard.



Rotating parts.



On-Off

2.6 Safety symbols in the manual



WARNING
Can cause personal injury.



WARNING
Pinch hazard.



CAUTION
Can cause damage to the machine.



Note
Shows further information.

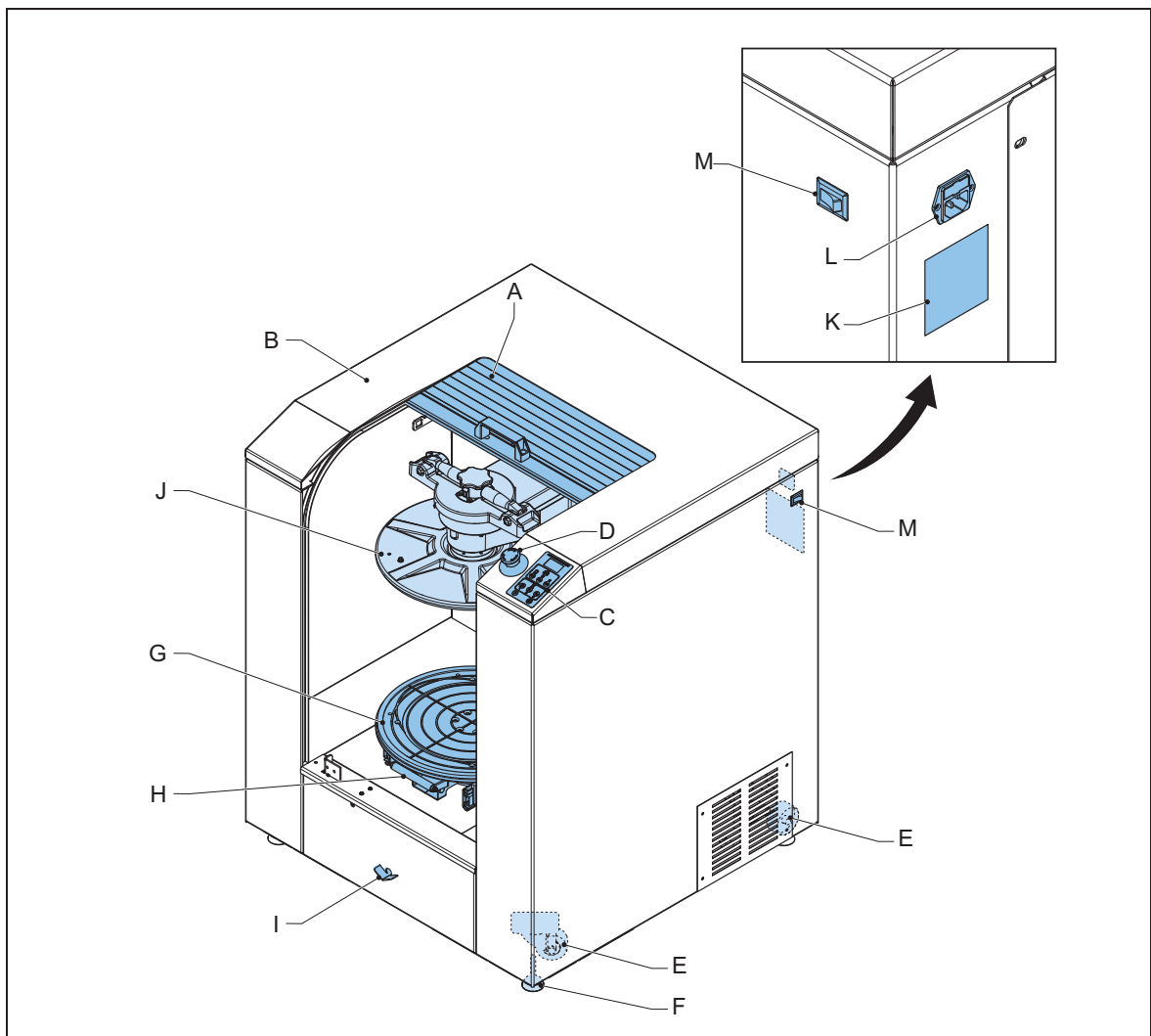
2.7 Disposal of the machine

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 Operator manual

3.1 Description

3.1.1 Overview of the machine



- A: Door
- B: Casing
- C: Control panel. See also § 3.1.2.
- D: Emergency stop
- E: Wheel
- F: Adjustable foot
- G: Can plate (bottom)

- H: Can table
- I: Drain orifice
- J: Can plate (top)
- K: Type plate. See also § 3.1.4.
- L: Net entry
- M: Main switch

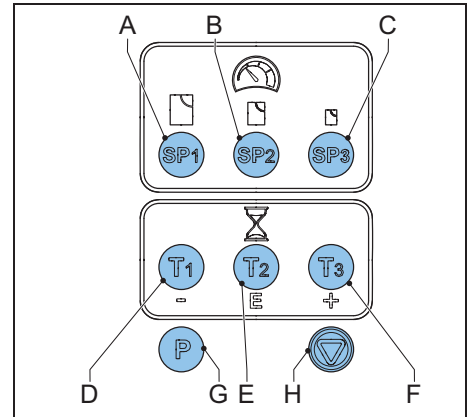
3.1.2 Overview of the control panel

- A:** SP1 key (mix speed 1)
- B:** SP2 key (mix speed 2)
- C:** SP3 key (mix speed 3)
- D:** T1 key (mix time 1)
- E:** T2 key (mix time 2)
- F:** T3 key (mix time 3)
- G:** Program key
- H:** Stop key

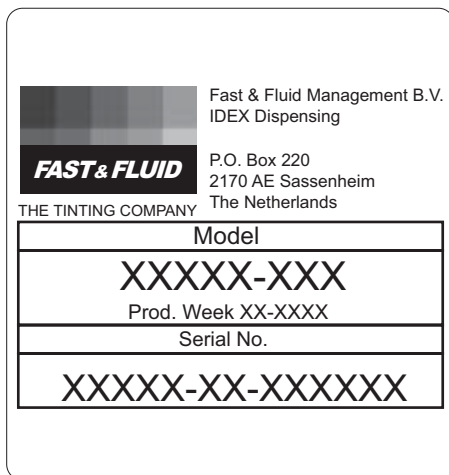


Note

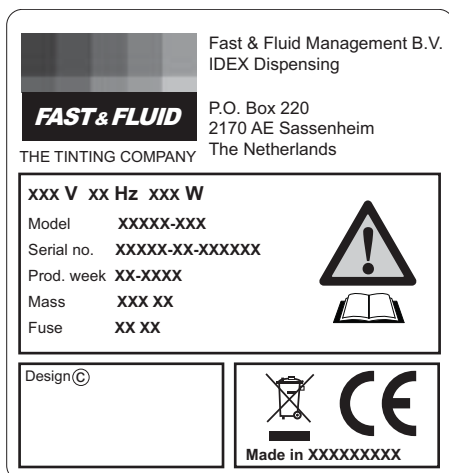
The function of the T1 to T3 keys changes when you adjust the default values of the machine.
See also § 3.2.9 and § 3.2.10.



3.1.3 Type plate: serial number



3.1.4 Type plate: details



3.2 Operation



WARNING

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



CAUTION

Make sure that the machine is empty or that a can is clamped.

3.2.1 Turning on the machine - if cradle is in correct position

1. Connect the power cable to the grounded wall socket.
2. Make sure that the emergency stop is released.
3. Set the Main switch to 'ON'. *When the machine is on, you hear two 'beeps' and the display shows 'rdY'.*
4. Press any key. *The machine is operational, the display shows 'rdY'.*

3.2.2 Turning on the machine - if cradle is not in correct position

1. Connect the power cable to the grounded wall socket.
2. Make sure that the emergency stop is released.
3. Set the Main switch to 'ON'. *When the machine is on, you hear two 'beeps' and the display shows '...'.*
4. Press any key. *When the machine is operational, the display shows 'rdY'.*

3.2.3 Turning on the machine when the machine is in hibernation

When the machine is in hibernation, the display shows '.'

1. Push the Stop key. *When the machine is operational, the display shows 'rdY'.*
2. Or immediately choose the correct speed and time key to start the machine.

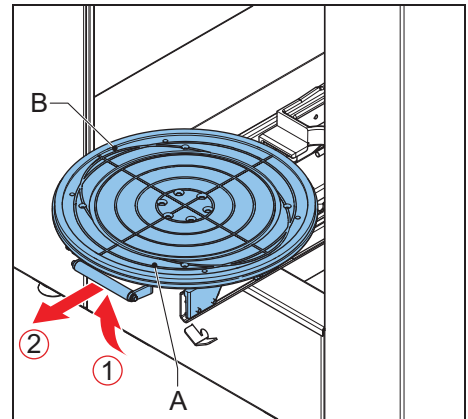
3.2.4 Normal mix procedure

1. Place the can. See § 3.2.5.
2. Clamp the can.
3. Choose the requested mix speed and time. See § 3.2.9 and § 3.2.10.
4. Start the machine, See § 3.2.6.
5. Wait till you hear "beep".
6. Remove the can. See § 3.2.7.

3.2.5 Placing the can

Pull out the can table

1. Open the door.
2. Pull up the handle (A) to unlock the can table (B).
3. Pull out the can table until you hear a 'click'. *The can table is locked.*



Place the can

1. Put one or more cans (A) in the centre of the can table, or in a pattern that has its gravitational centre in the middle of the can table.



WARNING

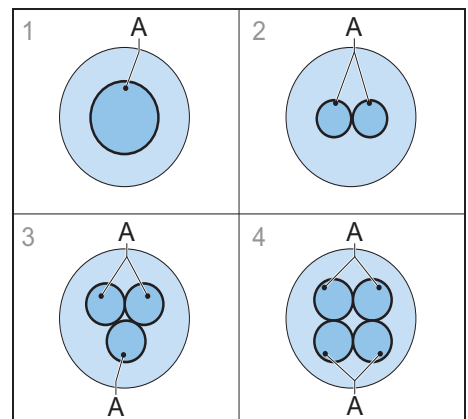
It is possible that the can is heavy. Use the correct lifting tool when appropriate. Obey the local regulations.



CAUTION

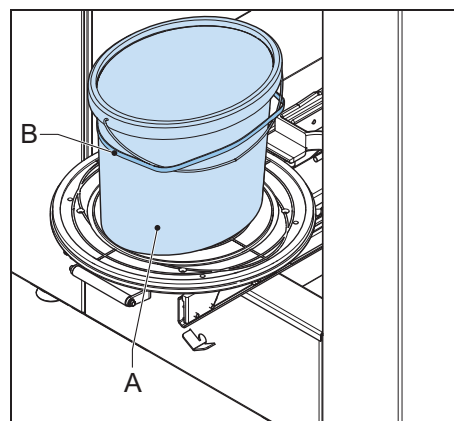
Make sure that all cans have the same height. Do not stack cans upon each other.

2. If the can plates are too close to each other, use the handles to turn the upper can plate upwards until you can place the can.
3. If you mix more than one can at the same time, make sure that the can handles can not move. Use self-adhesive tape, for example.

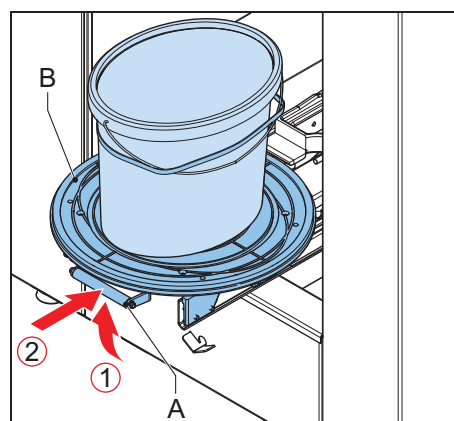


If you mix one can:

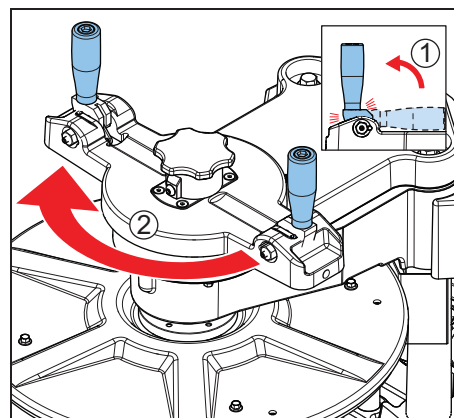
1. Retain the can handle with an elastic band or self-adhesive tape.

**Push the can table**

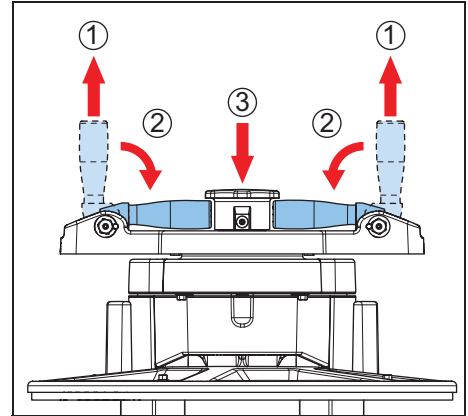
1. Pull up the handle (A) to unlock the can table.
2. Push the can table (B) inwards until you hear a 'click'. *The can table is locked.*

**Clamp can**

1. Use the handles to move the can plates towards each other.
2. If you feel resistance, turn the upper can plate another quarter turn.



3. Lift the handles and move the handles inwards.
4. Push the lock button to secure the handles.
5. Close the door.



3.2.6 Start the machine

1. Select the speed by pushing the SP1, SP2 or SP3 key. See § 3.2.9.
2. Select the mix time by pushing the T1, T2 or T3 key. See § 3.2.10.

**Note**

The display shows the time in seconds that remain before you can open the door.

**Note**

While the machine operates, you can adjust the mix speed with the SP1, SP2 and SP3 keys. The machine shows the chosen speed every several seconds.

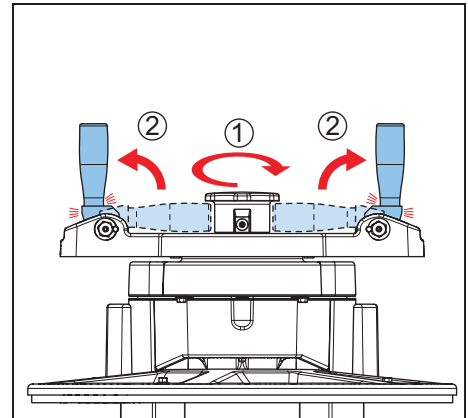
**Note**

While the machine operates, you can adjust the mix time with the + and - keys.

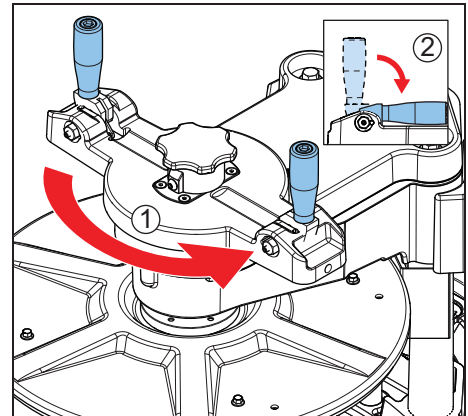
3. The machine starts automatically.

3.2.7 Remove the can

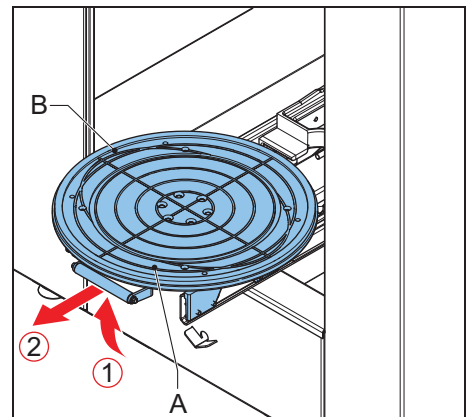
1. Open the door.
2. Turn the lock button counterclockwise to loosen the handles.
3. Move the handles upwards.



4. Use the handles to unclamp the can.



5. Pull up the handle (A) to unlock the can table (B).
6. Pull out the can table until it is locked into the outer position.
7. Remove the elastic band.
8. Remove the can.



3.2.8 Stop the operation manually

1. Push the Stop key.
2. Wait until the door is unlocked. The display shows 'rdY'.
3. If necessary, remove the can. See § 3.2.7.

3.2.9 Choose the mix speed



Note

You can choose the mix speed when the display shows 'rdY'.



Note

While the machine operates, you can adjust the mix speed with the SP1, SP2 and SP3 keys. The machine shows the chosen speed every several seconds.



Note

If you choose the wrong speed, the machine will adjust the speed automatically. *The display will show 'SCx'. The x is the new value for the speed.*

Key	Mix speed (Rpm)	Recommended weight (Kg)
SP1	110	20-35
SP2	140	8 - 19
SP3	200	0 - 7

1. While the machine operates, the display shows the last-chosen speed every several seconds (SP1, SP2 or SP3).
2. Push a SP key to select the required speed.

3.2.10 Choose the mix time

Key pushed	Mix time [s]
T1	30
T2	120
T3	240
T1 + T2 at the same time	$30 + 120 = 150$
T1 + T3 at the same time	$30 + 240 = 270$
T2 + T3 at the same time	$120 + 240 = 360$



Note

The table shows the default values.

1. Push a T-key or combination to choose the mix time.

3.2.11 Adjust default mix time

**Note**

You can adjust the default mix time when the display shows 'rdY'.

1. At the same time, push the Program key and the T1, T2 or T3 key. Hold for 2 seconds.
2. Push the + or - key to adjust the mix time for T1, T2 or T3.
3. To save the new mix time, push the E-key.
4. If you do not want to save the new mix time, push the Stop key.

3.3 General cleaning: after every operation

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

**CAUTION**

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

3.4 Periodic maintenance: weekly

1. Remove the paint. Refer to § 3.6.

**CAUTION**

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

2. Grease the spindles.

3.5 Periodic maintenance: monthly

**WARNING**

Check the MSDS of the Colorants about personal protection measures required for handling the colorant.

1. Remove paint and dirty grease. Add new grease.

**CAUTION**

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

2. Grease the axle and other sliding parts.

3.6 Remove spilled paint

Do this procedure when paint is spilled inside the machine.

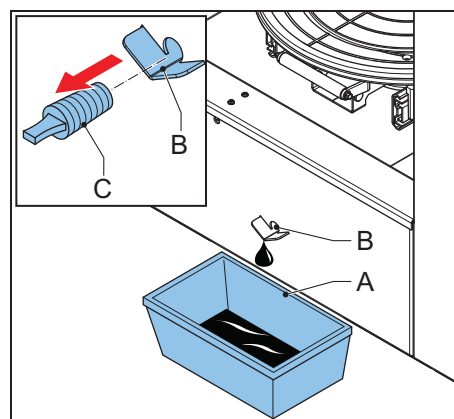
1. Make sure that the machine is stopped. See § 3.2.6 or § 3.2.8.
2. Put a reservoir (A) below the drain orifice (B).



CAUTION

Make sure that the reservoir is big enough to hold all the spilled paint.

3. Remove the cap (C) from the drain orifice. The spilled paint comes out of the machine.
4. Dispose of the spilled paint according to local regulations.
5. Install the cap to the drain orifice.
6. Clean the machine. See § 3.3.

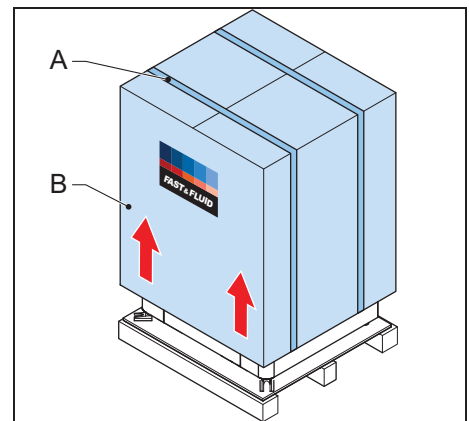


4 Installation

4.1 Unpack the machine

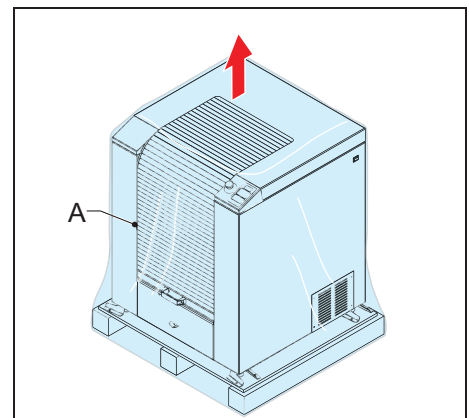
4.1.1 Remove the cardboard

1. Remove the tensioning straps (A).
2. Remove the cardboard (B).



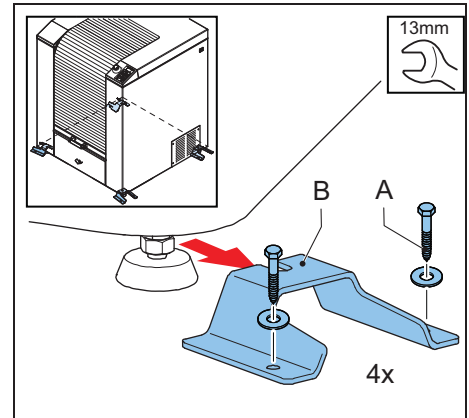
4.1.2 Remove the plastic protection and foil

1. Remove the plastic foil (A).



4.1.3 Remove the transport brackets

1. Remove the screws (A).
2. Remove the transport brackets (B).



4.1.4 Dispose of the packaging material

1. Dispose of the packaging material in an environmentally friendly way, according to local regulations.

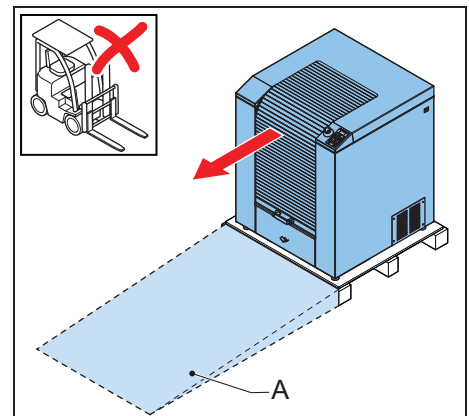
4.2 Put the machine in position

4.2.1 Move the machine from the pallet

1. Place the optional ramp (A).
2. Push the machine from the pallet on to the ground.



CAUTION
Do not use a fork-lift truck.



4.2.2 Move the machine to the final location



WARNING
Mind the minimal requirement of the building structure of the load capacity of the floor. Refer to § 6.2.

1. Push the machine to the final location.

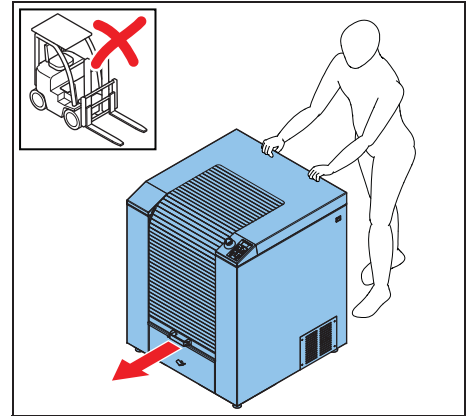
**CAUTION**

Do not use a fork-lift truck.

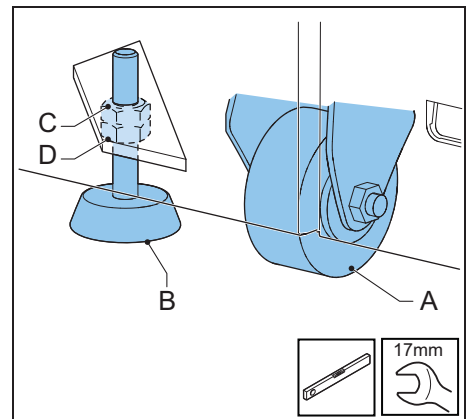
**Note**

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

2. Connect the power cable to the net entry.
3. Connect the power cable to the wall socket.

**4.2.3****Level the machine**

1. Move down the adjustable feet (B) until the wheels (A) are off the ground.
2. Adjust the height of the feet and make sure that the machine is leveled.
3. Tighten the nuts (C) to lock the feet.

**4.3****Finish the installation**

1. Turn on the machine. See § 3.2.1.

5 Troubleshooting

5.1 General troubleshooting procedure

1. Try to solve the problem with the information in this manual. See § 5.3.1.
2. If it is not possible to solve the problem with the information in this manual, contact service. See § 5.2.

5.2 Contact service

1. Find the type plate on the rear of the machine. See § 3.1.3 or § 3.1.4.
2. Take a note of the model number and the serial number of the machine.
3. Contact your supplier or manufacturer. See www.fast-fluid.com.

5.3 Troubleshooting guide

5.3.1 Errors

Problem	Possible cause	Possible solution
The display shows 'E01'	The door is open.	Close the door.
The display shows 'E08'	Emergency stop is pressed during running state.	Release the emergency stop. See § 5.4.
The display shows 'E40'	Cradle not in home position.	Release the emergency stop. See § 5.4. Press any key to put cradle in home position.
The display shows 'E50' to 'E99'	Inverter is in error mode.	Reset the machine. See § 5.4. When the problem persists, contact service. See § 5.2.

5.4 Reset after an emergency stop



WARNING

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

1. Unlock the emergency stop.
2. Push any key. *When the machine is operational, the display shows 'rdY'.*

5.5 Restart the machine

1. Set the main switch to 'OFF'.
2. Wait 30 seconds.
3. Turn on the machine. See § 3.2.

6 Technical data

6.1 General specifications

Parameter	Specification
Materials used are suitable for	Water, universal and solvent colorants
Maximum load weight [kg]	35
Can plate diameter [cm]	38
Can plate bottom seating diameter [cm]	36
Maximum can height [cm]	40
Minimum can height [cm]	7.5
Mix ratio [horizontal:vertical]	1:2

6.2 Dimensions and mass

Parameter	Specification
Minimum requirement of load capacity of the floor according to EN 61010-1:2010	720 [kg]
Main dimensions, height x width x depth [cm]	82 x 82 x 101
Detailed dimensions, height x width x depth [cm]	83 x 82 x 101
Packed dimensions, height x width x depth [cm]	116 x 97 x 90
Net mass [kg]	180
Packed mass [kg]	217

6.3 Ambient conditions

Parameter	Specification
Transportation temperature [°C]	-25 to +55
Temperature [°C]	+5 to +40
Altitude above sea level [m], operational (Max.)	2000
Altitude above sea level [m], out of operation (Max.)	12000
Relative humidity, without condensation [%]	20 to 90

6.4 Noise level

Parameter	Specification
Maximum noise level [dB(A)]	<65

6.5 Safety classifications

Parameter	Specification
Overvoltage category	Class II
IP (Ingress Protection) classification	32
EMC (ElectroMagnetic Compliancy) classification	Class B

6.6 Electrical specifications

Parameter	Specification
Power consumption, maximum [W]	1500
Voltage [V]	230 (/115 optional)
Frequency [Hz]	50/60
Speed [rpm]	110 - 140 - 200
Fuse specifications [A]	T10
Country specific net cables	European
Maximum mix time [s]	999

6.7 Electrical diagram

