USER MANUAL

Seismo L16R



DTF STATION

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BEFORE YOU BEGIN

USER MANUAL

Powder Shaker and Curing System

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Thank you for purchasing this product.

To ensure correct and safe operation of the system and to fully understand its features, requirements, and limitations, read this manual completely before installing, configuring, or operating the equipment.

This manual is provided to help users operate the product correctly and safely. Please retain it for future reference.

Product specifications and the information contained in this manual are subject to change without notice.

This manual and the product have been prepared and reviewed with the greatest care. If you identify any errors, omissions, or unclear information, contact your authorized representative for clarification.

The manufacturer shall not be liable for any direct, indirect, incidental, or consequential damages arising from the use of this product, including those resulting from product malfunction or performance issues.

The manufacturer assumes no liability for any direct or indirect loss or damage resulting from items, materials, or output produced using this product.

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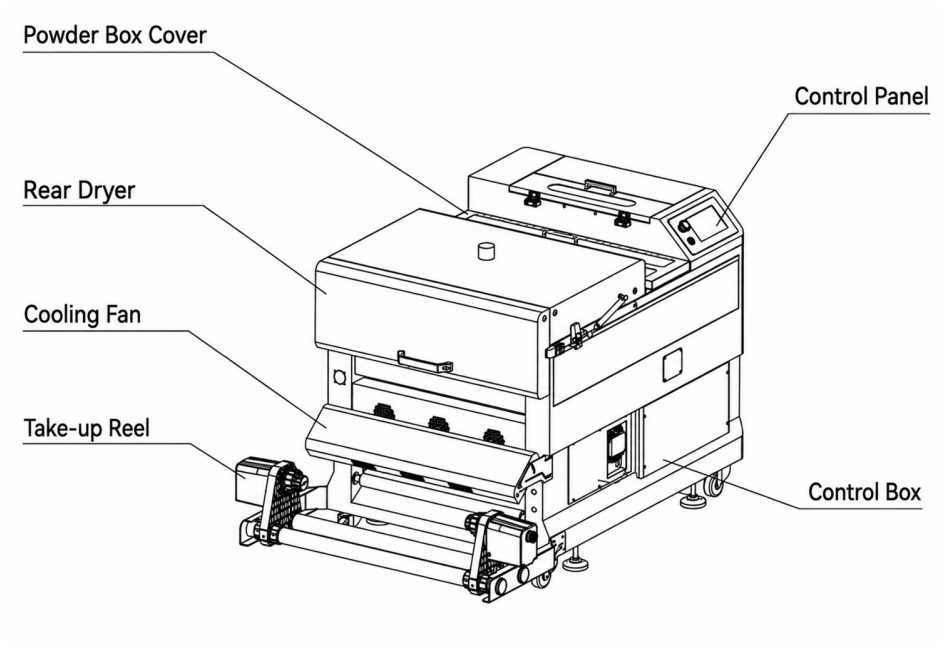
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7. Maintenance Overview

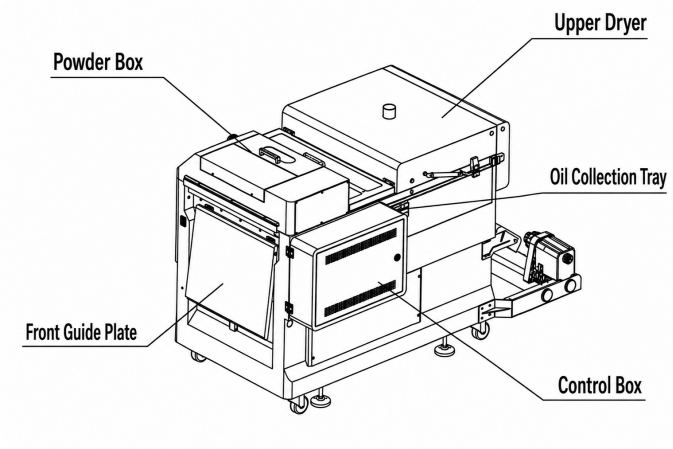
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Machine Overview



Front-side component overview



Rear-side component overview

1. Safety Instructions

1.1 Safety Symbol

The symbol shown below identifies important safety information. Read and follow all instructions marked with this symbol. Failure to comply may result in product damage, personal injury, or other losses.



WARNING
This machine is a high-power, high-temperature device. The user must provide suitable industrial power and an appropriate operating location. Do not touch any area marked with a high-temperature warning label to avoid burns.

1.2 Equipment Parameters

ITEM	SPECIFICATION
Rated voltage	220 V
Rated current	16 A
Rated power	3.5 kW
Power consumption	2.5-3.5 kW
Net weight	170 kg
Gross weight	220 kg
Equipment size	1,620 x 872 x 992 mm
Wooden crate size	1,420 x 1,130 x 1,113 mm

1.3 Before Power-On

Electrical hazard. The machine must be properly grounded before power-on. Failure to connect the grounding wire may result in serious personal injury.

The input power supply must match the machine requirements. The incoming power cable diameter must meet the rated electrical requirements.

Check that the incoming power connection is correct and compliant. Pay special attention to correct live and neutral wiring.

If the operator is sensitive to static electricity, appropriate personal protection measures should be taken during operation.

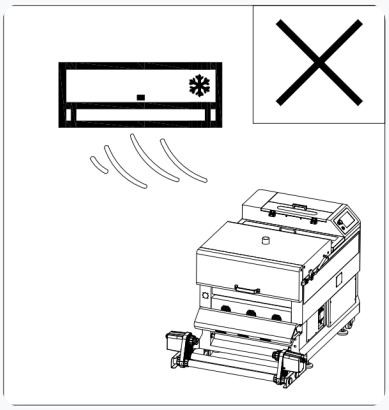
1.4 Operating Location Precautions

Direct cold airflow may interfere with the internal working temperature of the shaker, increase power consumption, or prevent hot-melt powder from curing properly.

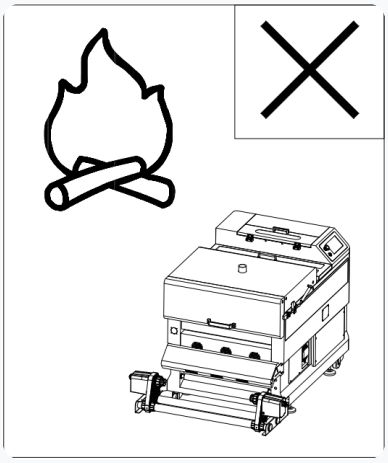
High-temperature sources near the machine may increase the risk of fire or cause internal electronic component failure.

Long-term exposure to direct sunlight may accelerate machine aging.

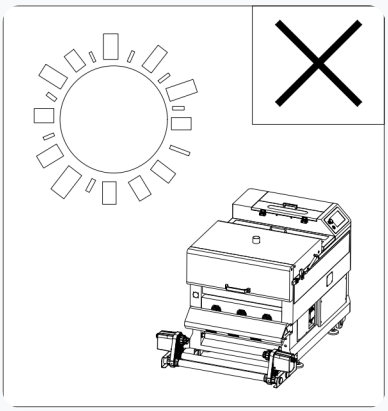
Operating the machine on an uneven surface may affect the internal mechanical structure.



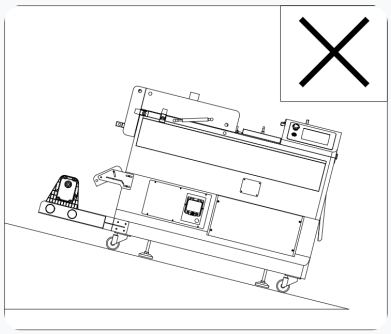
Do not place the machine under direct cold airflow



Keep the machine away from fire or high-temperature sources



Avoid direct sunlight

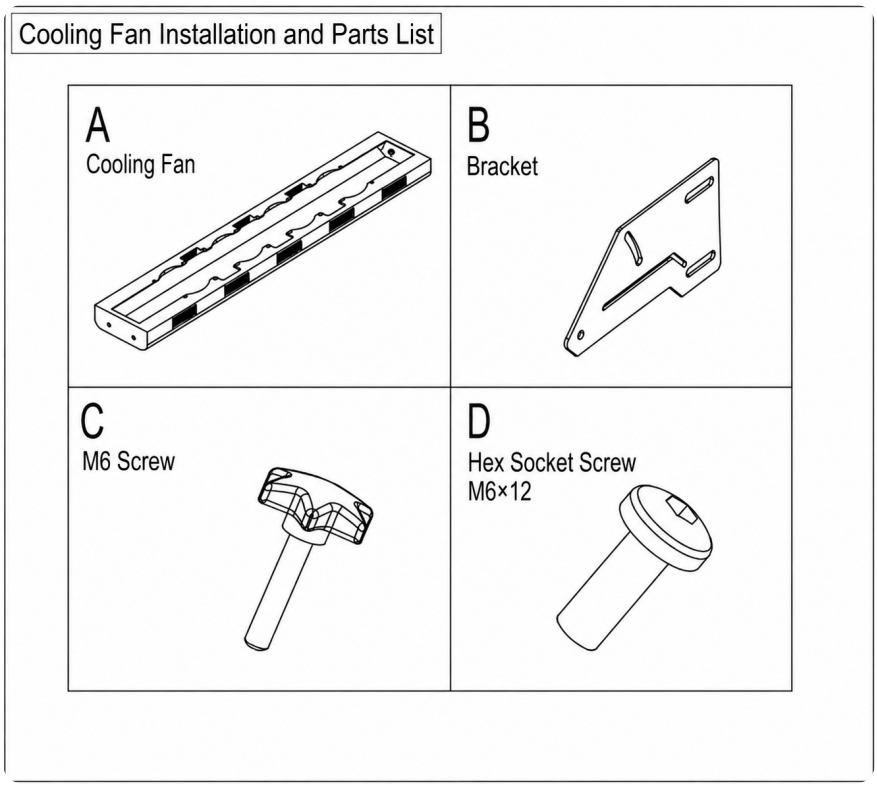


Install the machine on a level surface

2. Installation Overview

2.1 Cooling Fan

Parts List:



ITEM	DESCRIPTION
A	Cooling fan x 1
B	Bracket x 2
C	M6 star screw x 4
D	M6 x 16 mm hex socket screw x 4

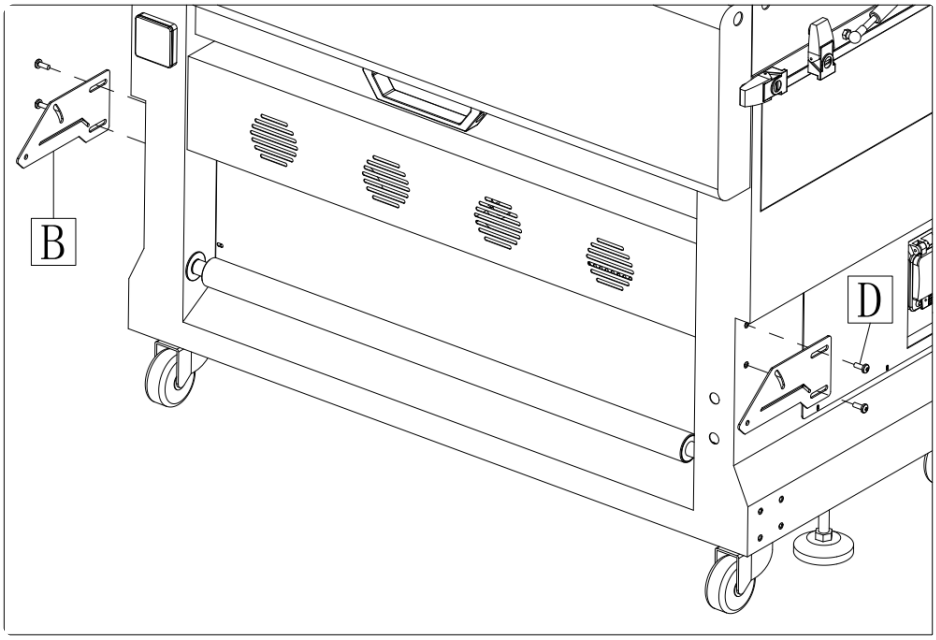
Cooling fan parts

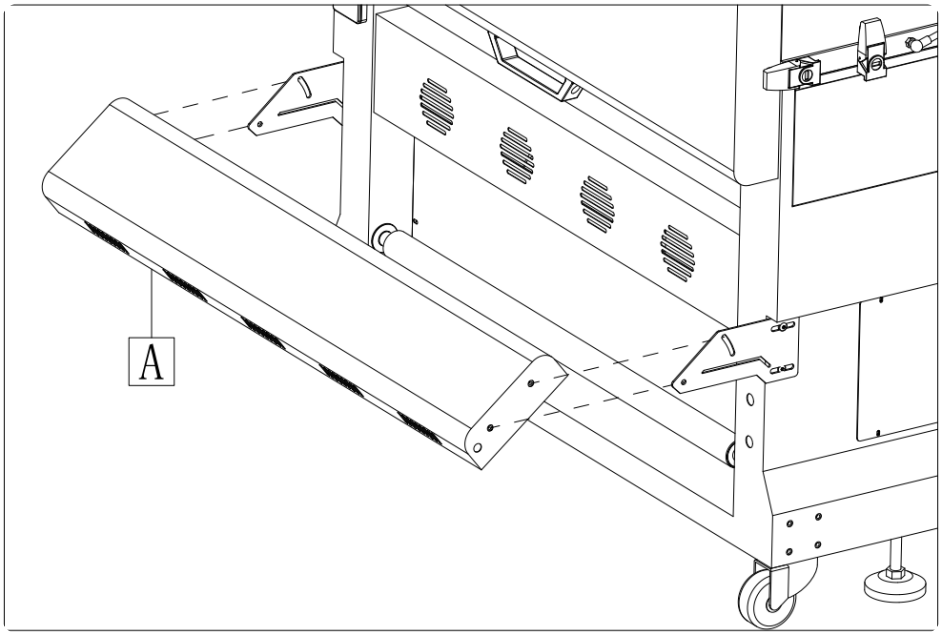
Installation

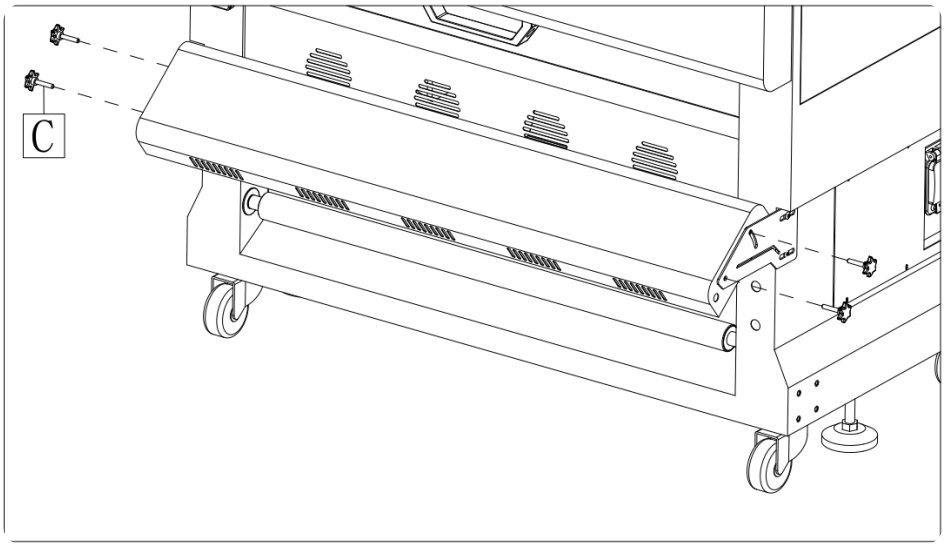
Install the brackets. Align the bracket mounting holes and secure the brackets using M6 hex socket screws.

Position the cooling fan. Align the cooling fan with the mounting holes on both side brackets.

Secure the cooling fan. After the holes are aligned, fasten both sides using the star screws.

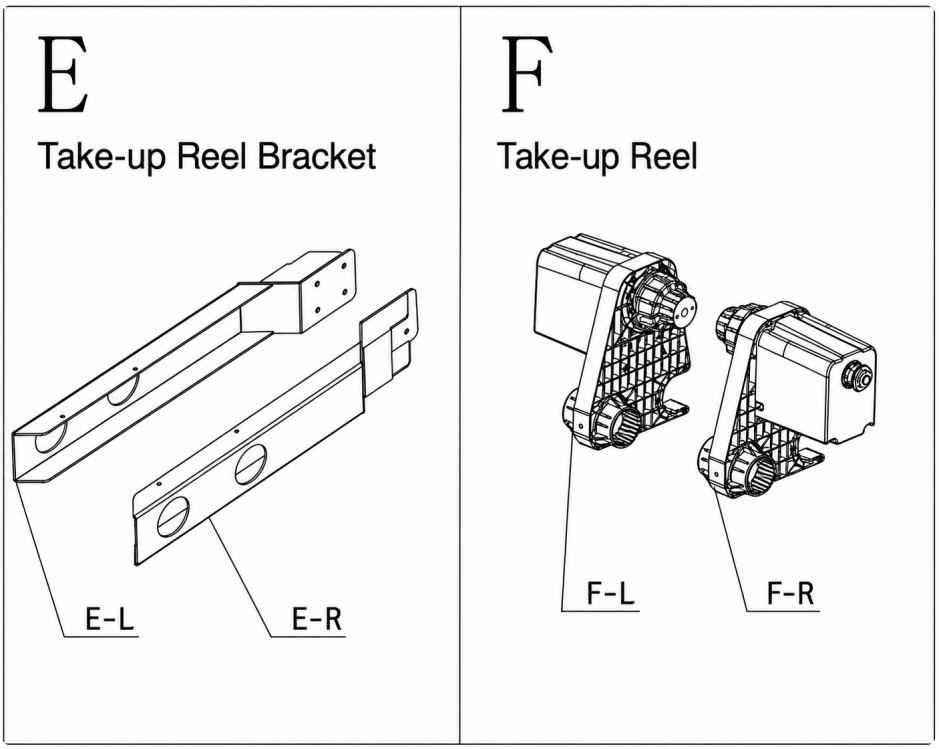


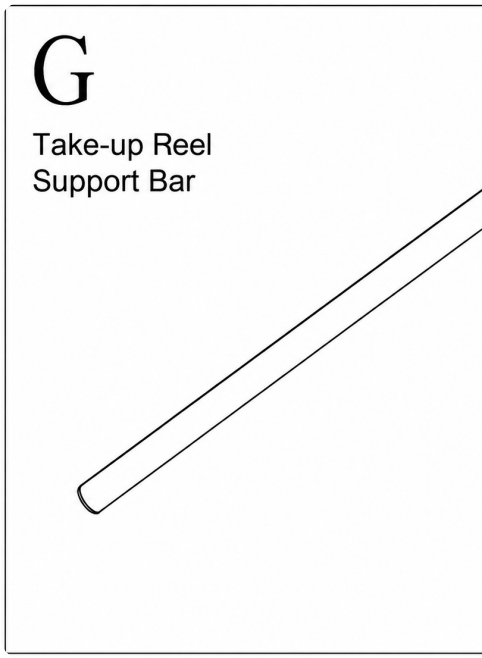




2.2 Take-Up System

Parts List:





ITEM	DESCRIPTION
E	Take-up bracket, left/right - E-L, E-R
F	Take-up unit, left/right - F-L, F-R
G	Take-up fixing bar x 2
H	M6 x 16 mm hex socket screw x 16

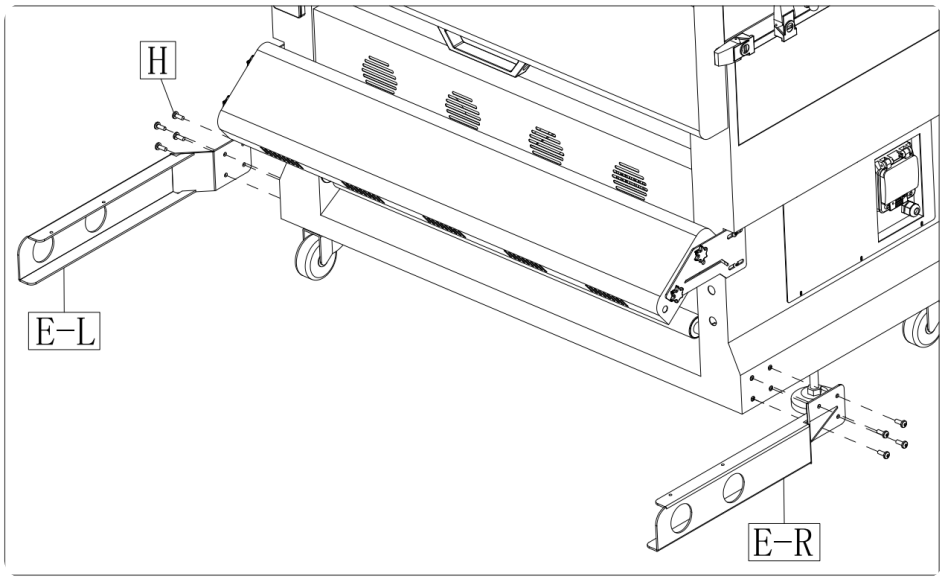
Installation

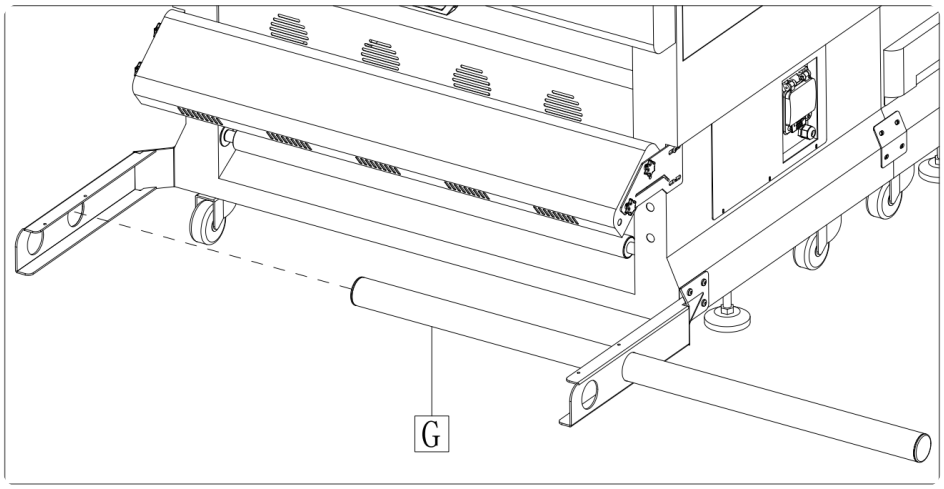
Attach the take-up brackets. Secure the left and right take-up brackets to the machine using four M6 screws on each side.

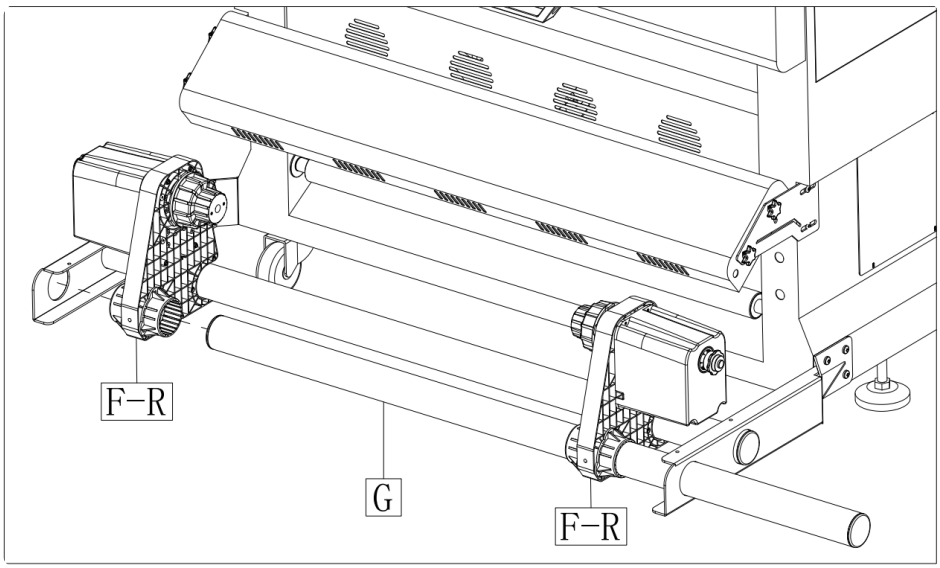
Install the first take-up fixing bar. Insert the first bar into the inner mounting holes and center it between the brackets.

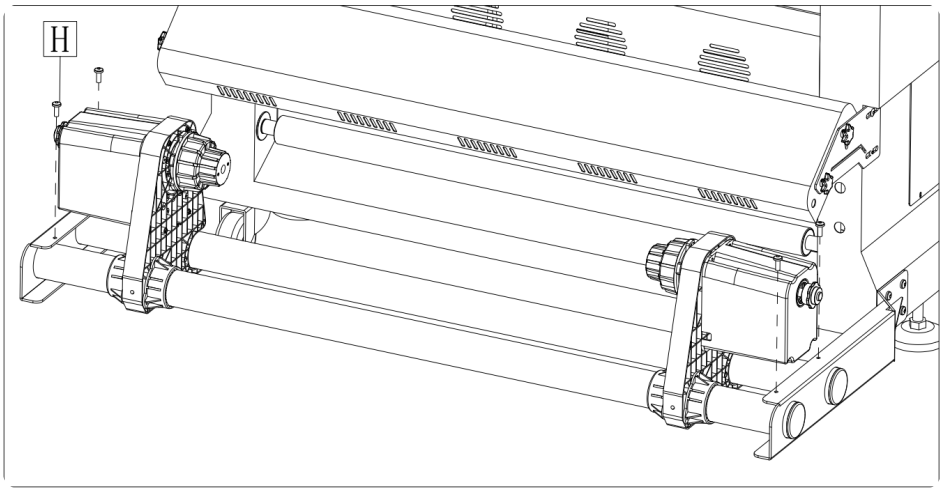
Install the take-up unit. Insert the second take-up fixing bar into the outer mounting holes and install the take-up unit during this step.

Secure the bars. After installing the second bar, ensure both bars are centered and aligned. Secure each side using two M6 screws.

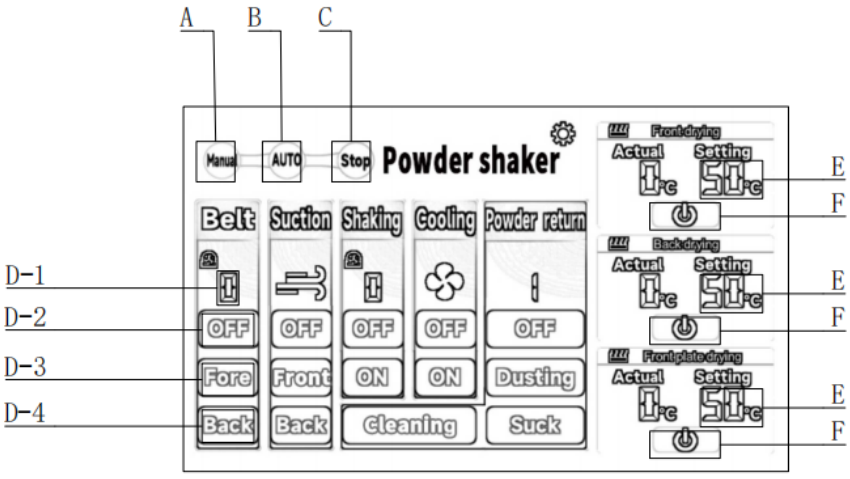







H

3. Control Panel Overview



Control panel reference

A-C: Mode Selection Keys

KEY	DESCRIPTION
A	Manual Mode. Press to activate Manual Mode. This mode remains active until B or C is selected. When Manual Mode is active, the shaker operates according to the set parameters and is not controlled by the sensor.
B	Automatic Mode. Press to activate Automatic Mode. This mode remains active until A or C is selected. When Automatic Mode is active, the shaker operates when media is detected.
C	Stop Mode. Press to activate Stop Mode. This mode remains active until A or B is selected. When Stop Mode is active, the shaker stops the current operation.

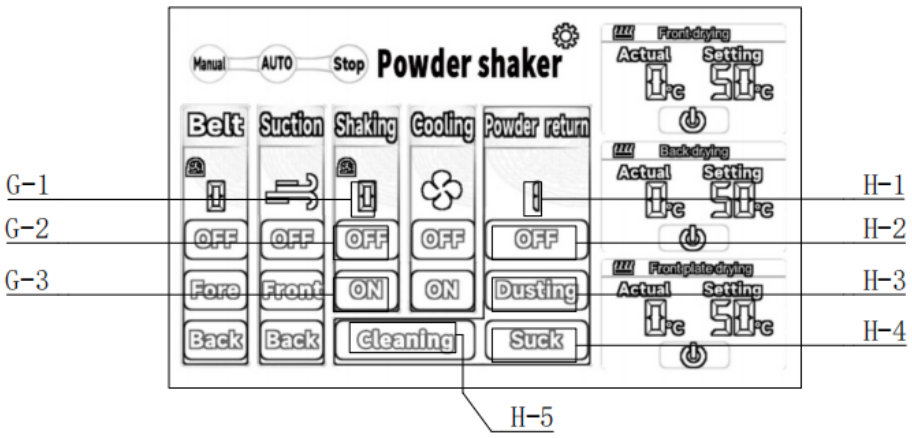
Note: Keys A, B, and C are mutually exclusive. Selecting one mode automatically deactivates the previously active mode.

D: Belt Drive

KEY	FUNCTION
D-1	Opens the speed setting interface. Enter the desired value and confirm to return to the main screen.
D-2	Controls the belt on/off status.
D-3	Moves the belt forward.
D-4	Moves the belt backward. Forward and reverse movement cannot be activated at the same time.

E-F: Drying Temperature and Heating Switches

KEY	FUNCTION
E	Opens the drying temperature setting interface. Enter the desired value and confirm to return to the main screen.
F	Turns heating on or off. When the power icon is red, heating is off. When the icon turns green, heating is on. The same operation applies to rear drying and front guide plate heating.



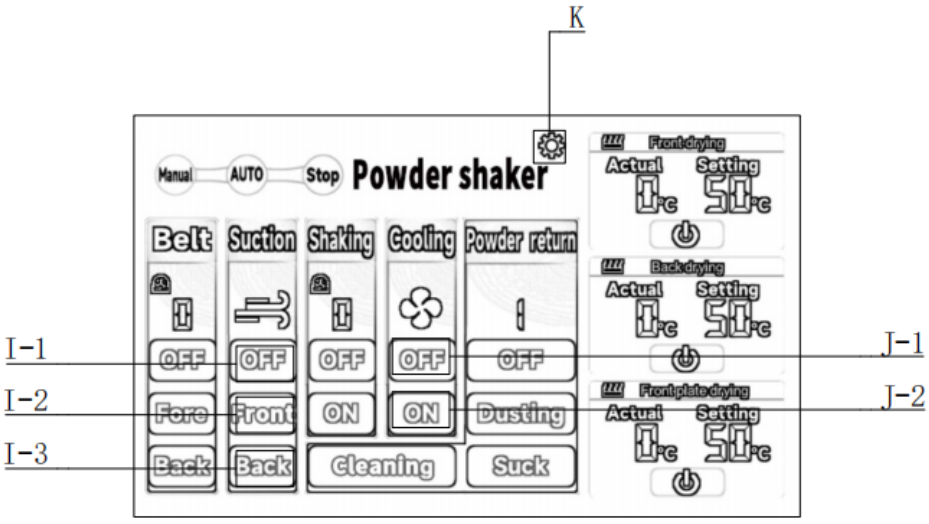
Control panel reference

G: Powder Shaking System

KEY	FUNCTION
G-1	Opens the shaking speed setting interface. Enter the desired value and confirm to return to the main screen.
G-2	Stops powder shaking.
G-3	Starts powder shaking.

H: Powder Return Control

KEY	FUNCTION
H-1	Opens the powder return speed setting interface. Enter the desired value and confirm to return to the main screen.
H-2	Activates automatic powder return mode.
H-3	Activates manual powder dispensing mode.
H-4	Activates manual powder return mode.
H-5	Press and hold for 3 seconds to enter cleaning mode.



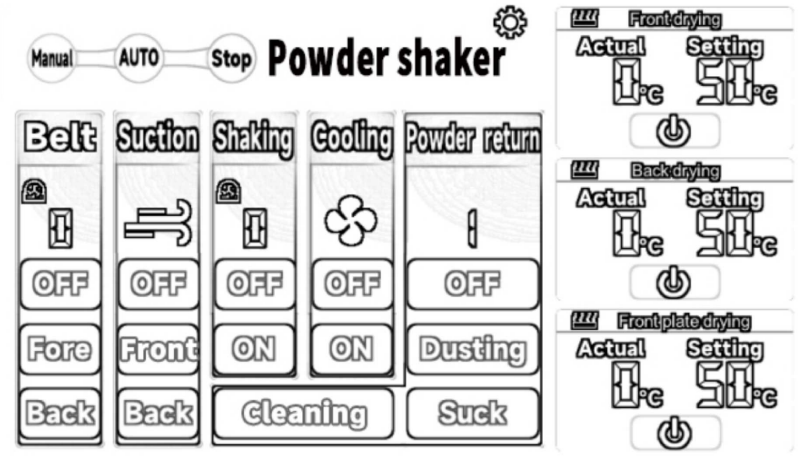
Control panel reference

I: Belt Vacuum

KEY	FUNCTION
I-1	Controls the overall belt vacuum on/off status.
I-2	Turns on the front vacuum.
I-3	Turns on the rear vacuum. The front and rear vacuums may operate at the same time.

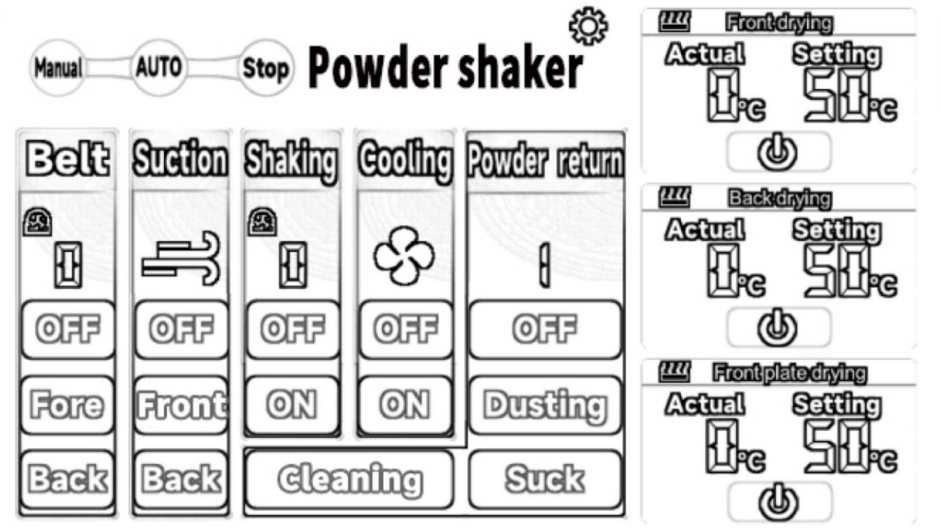
J-K: Cooling Fan and Settings

KEY	FUNCTION
J-1	Turns the cooling fan off.
J-2	Turns the cooling fan on.
K	Press and hold to enter the settings interface, where language, time, and other settings can be adjusted.



Main control panel

4. Operation Procedure



Control panel reference

Verify that the external power supply is connected (AC 220 V, 50/60 Hz).

Verify that the ground wire is securely connected.

Before operation, align the printer with the powder shaker to reduce media misalignment during take-up.

Secure the media onto the printer media holder and load it into the printer. Refer to the media path instructions for details.

Turn on the main power switch on the control box.

Set the required functions from the touch screen. For example, tap the shaking speed value to open the setting interface, enter the desired value, and confirm to return to the main screen. The same procedure applies to belt speed, front dryer heating, front guide plate heating, and other speed and temperature settings.

Turn the powder shaking function on or off by tapping On or Off below Shaking on the screen.

Set the automatic powder return function as required.

Control the belt by tapping Off, Forward, or Reverse below Belt on the screen.

Turn front dryer heating on or off by tapping the power icon on the front dryer. Red indicates Off; green indicates On. The same operation applies to rear drying.

Turn front guide plate heating on or off by tapping the power icon on the front guide plate. Red indicates Off; green indicates On.

Turn the cooling fan and belt vacuum on or off from the corresponding On/Off keys on the screen.

In Manual Mode, the shaker operates continuously according to the set parameters and is not affected by the sensor. In Automatic Mode, the shaker operates when the sensor detects media. When no media is detected, the belt stops immediately, and powder dispensing and shaking stop after 10

seconds. In Stop Mode, powder dispensing, shaking, and belt movement stop while other functions continue to operate normally.

Press and hold the gear icon in the upper-right corner to enter the settings interface. Available options include language, time, and other settings.

Auto standby heating: In Automatic Mode, if printing stops for 20 seconds, the standby heating function starts automatically and lowers the temperature by 20 °C. For example, if the set temperature is 100 °C, the machine maintains 80 °C during standby. When printing resumes, the temperature returns automatically to the set value. This function does not activate in Manual Mode or Stop Mode.

After all functions are adjusted, begin the powder shaking and curing process.

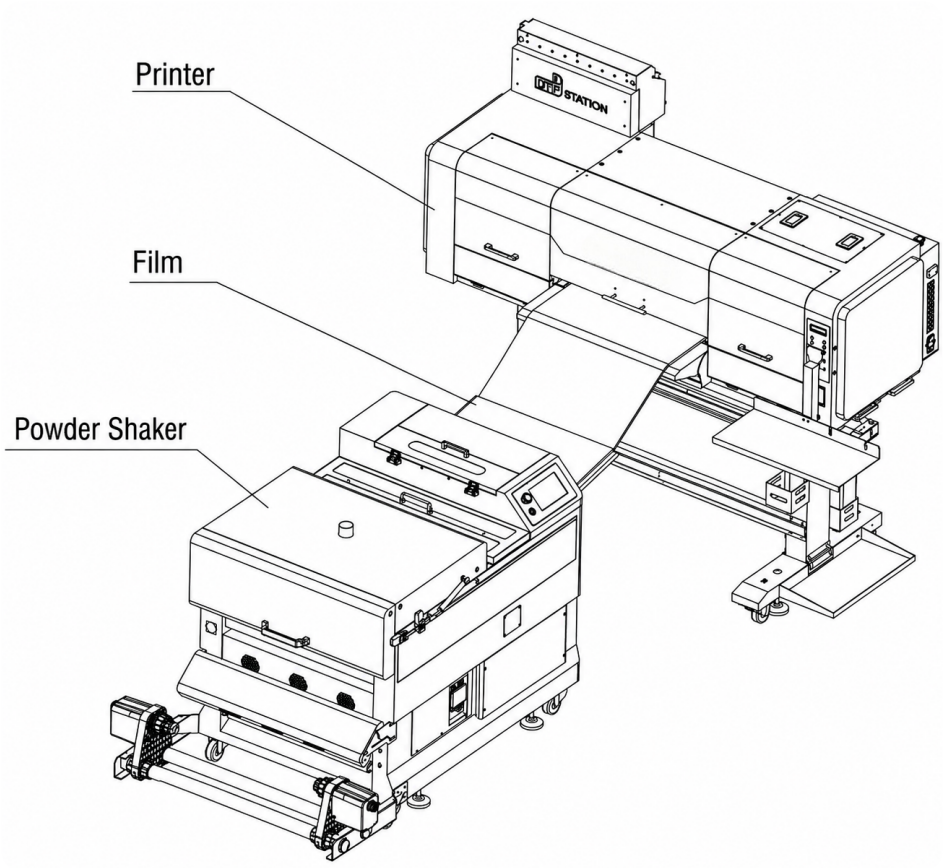
After curing is complete, turn off all heating switches.

Recommended Settings (Reference Values)

PARAMETER	SETTING
Belt speed	Level 30
Shaker speed	Level 15
Powder return speed	Level 15
Front dryer temperature	130 °C
Rear dryer temperature	120 °C
Front guide plate temperature	60 °C

Note: These values are for reference only. Adjust temperature according to the melting point of the powder and the material being used. Fine-tune the settings based on actual operating conditions.

5. Media Alignment and Powder Application Guidelines



Media loading reference

Refer to the operation diagrams below. The symbols indicate the recommended placement conditions:

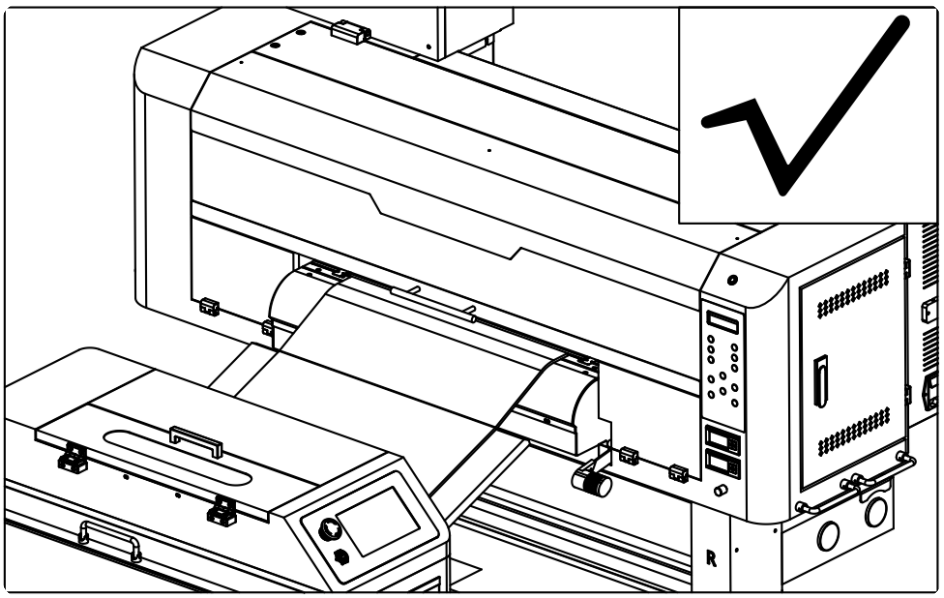
✓ = Optimal / Recommended

× = Incorrect

○ = Acceptable but not recommended

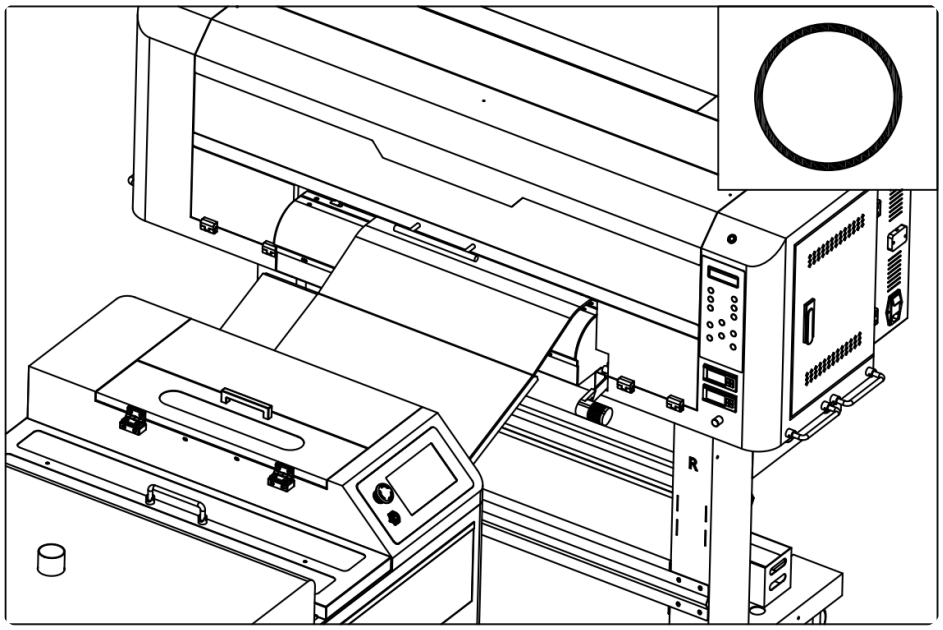
A - Media Centered (✓)

Position the media at the center of the machine. This is the optimal working condition.



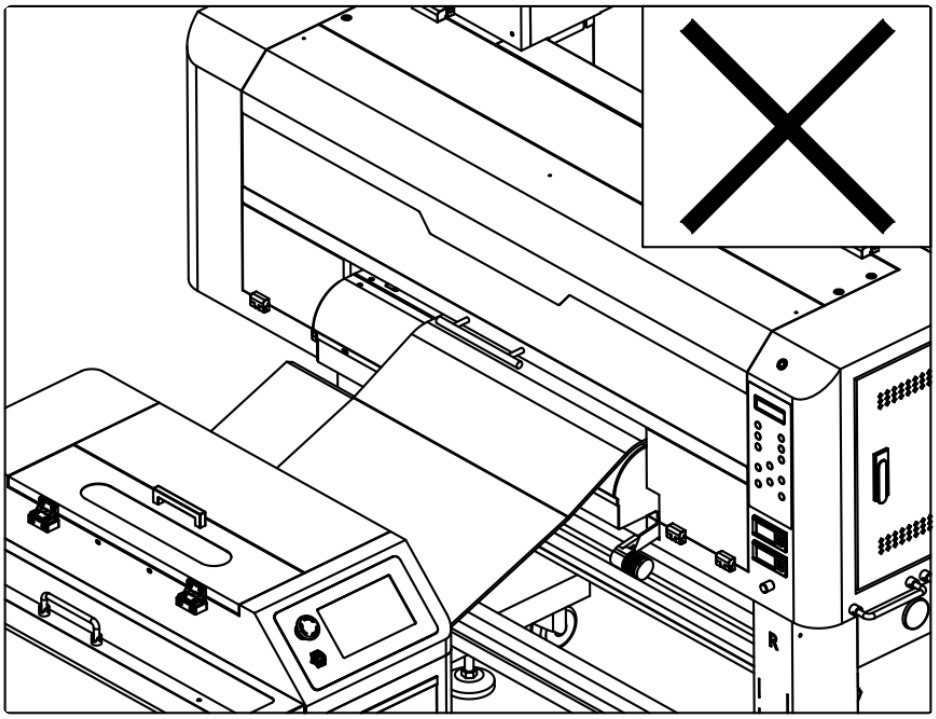
B - Media Flush with Front Guide Plate (○)

The media can be aligned flush with the front guide plate or positioned close to it. However, this configuration may not provide sufficient clearance during operation. Part of the media may extend beyond the guide plate, causing insufficient heating and possible defects in the final product.



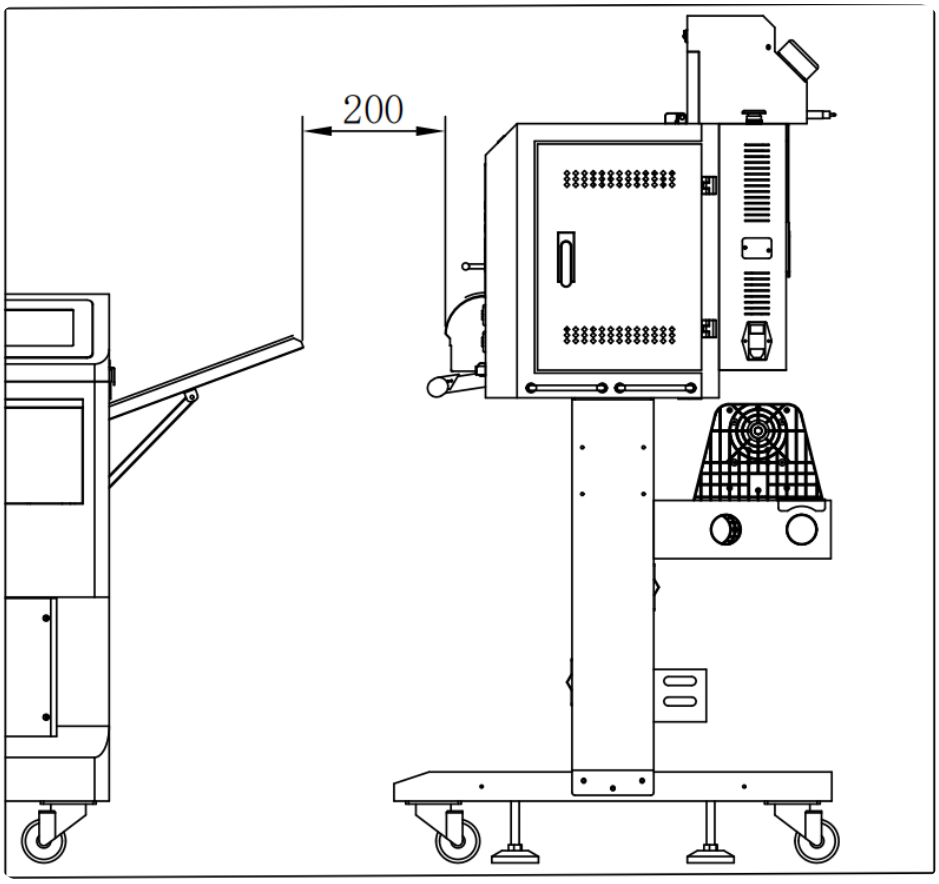
C - Media Extends Beyond Front Guide Plate (×)

This is an incorrect placement. When the media extends beyond the front guide plate, part of the media does not receive proper heating and the media position is already misaligned. This may result in defective output.



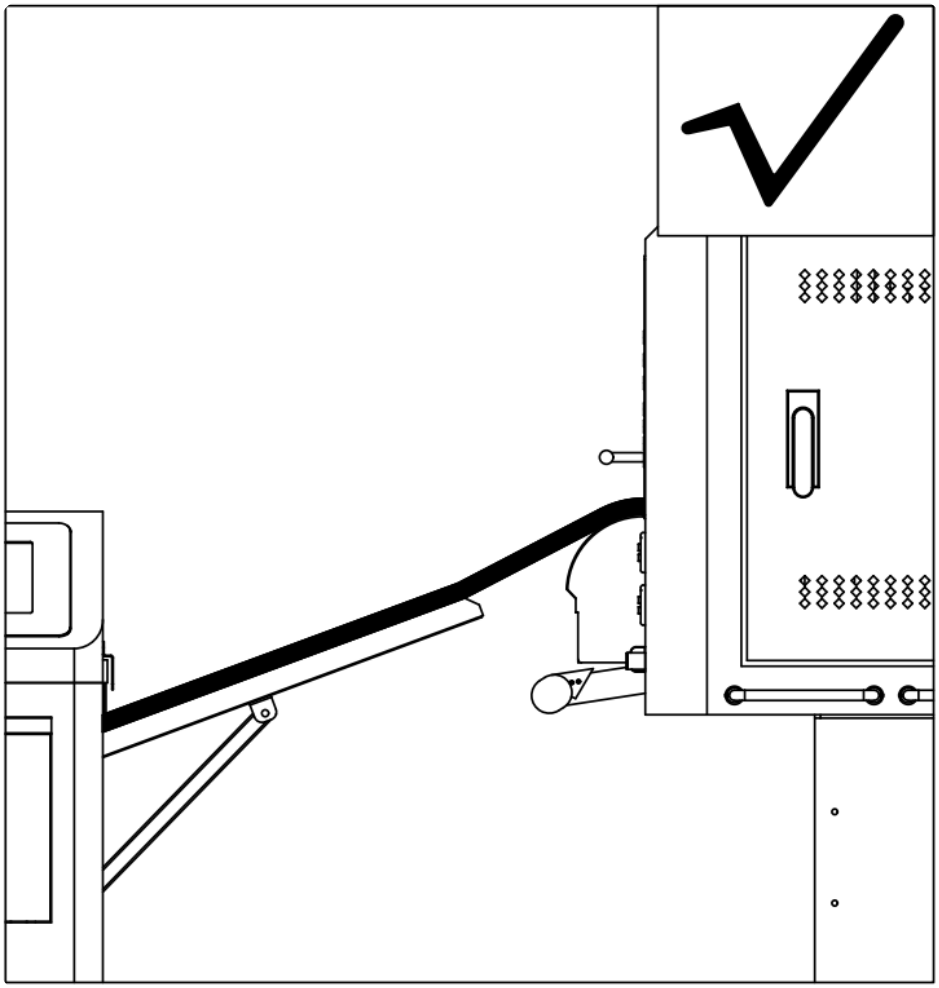
D - Printer-to-Shaker Distance (✓)

Maintain an approximate 200 mm gap between the media directly below the printer and the powder shaker. This is the optimal spacing.



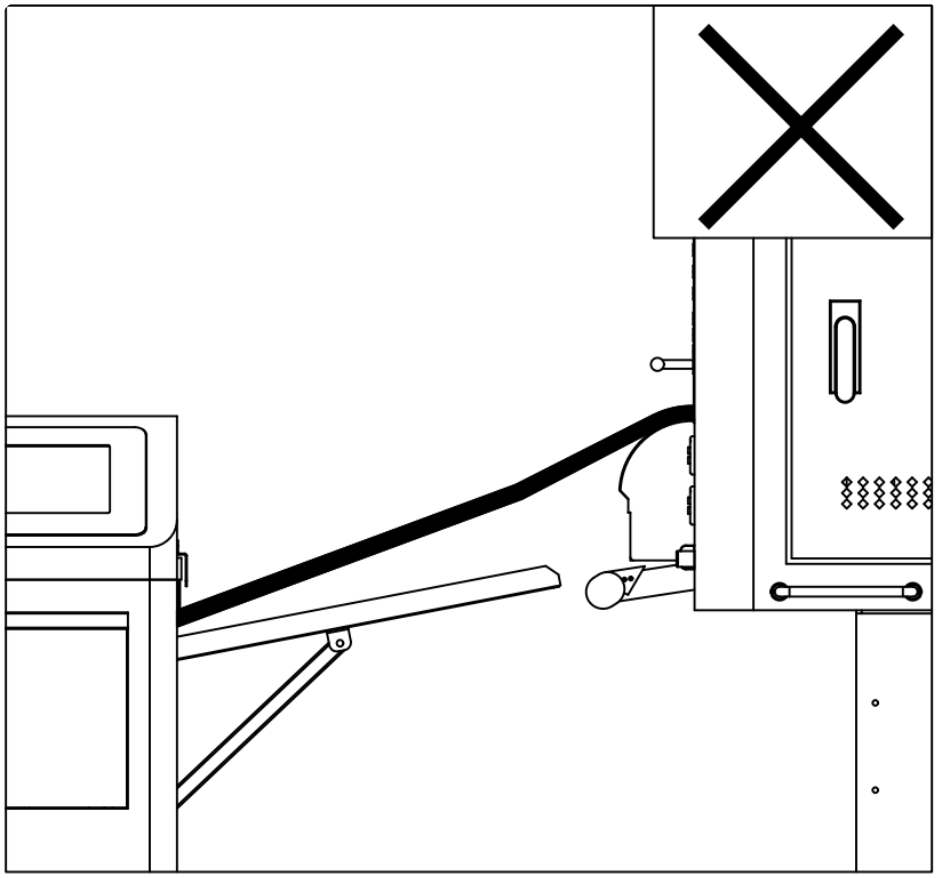
E - Media Tangent to Front Guide Plate (✓)

Position the media so that it is perfectly tangent to the front guide plate. This is an optimal placement and should be used together with the centered positioning described in A.



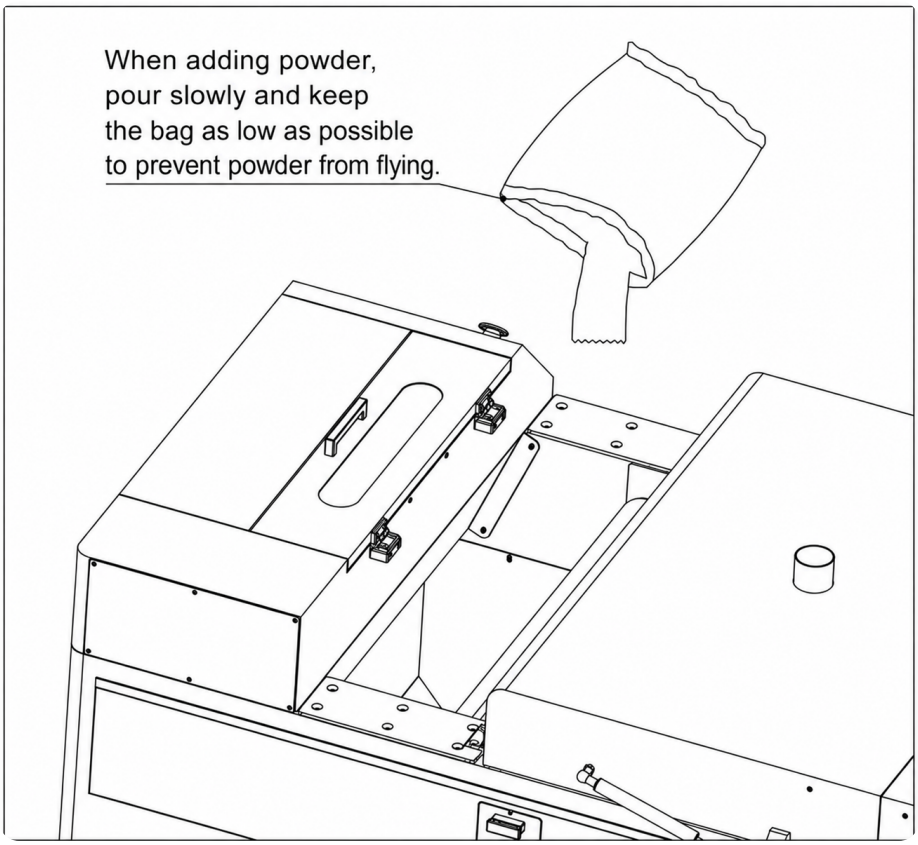
F - Media Not Tangent to Front Guide Plate (×)

If the media is not perfectly tangent to the front guide plate, part of the media may not receive adequate heating from the guide plate. This may result in defects in the final product.



Powder Application

After the media is properly positioned, apply powder manually. Spread the powder evenly over the media using approximately 0.25 kg of powder.



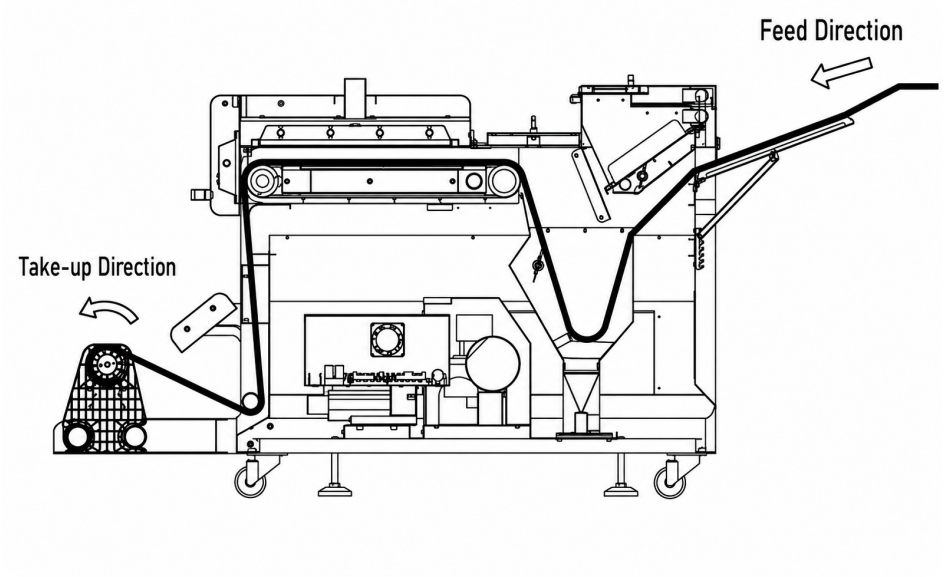
After manual powder application is complete, open the powder box cover and add powder as needed.

6. Media Path

Feeding Process

Guide the material to be cured into the bottom of the powder box, then pass it above the shaking bar and between the platform for curing.

After curing, wind the cured material onto the take-up paper core. The printed image may also be carried out through the belt and belt vacuum for printing and cutting during continuous operation.

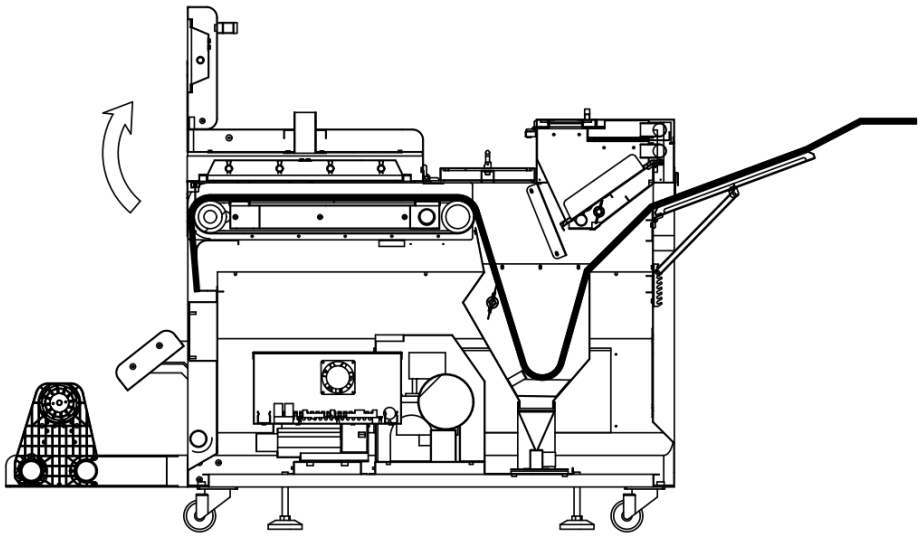


Media path reference

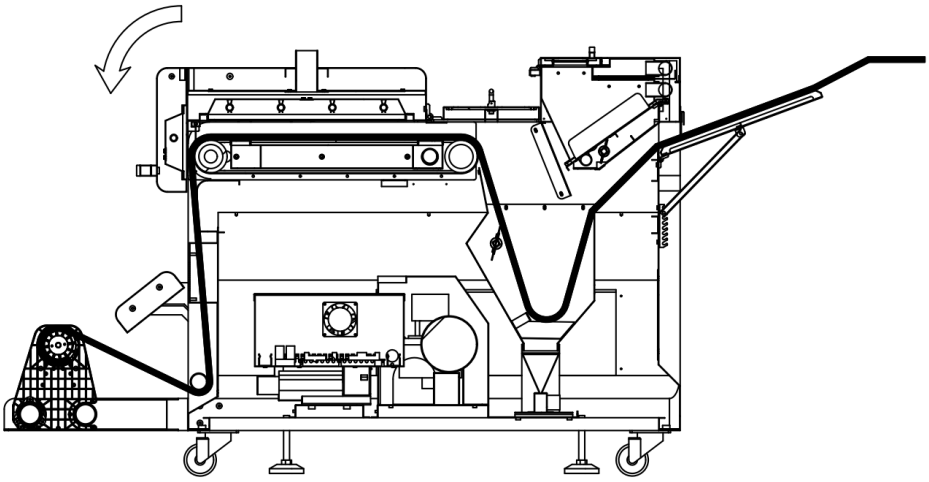
NOTICE
Ensure that the cured material lies flat without wrinkles and that the material edges at the front and rear of the machine are aligned.

Loading Sequence

Before the material reaches the paper take-up receiver, keep the rear cover open and ensure that personnel are present to monitor the machine. Otherwise, there may be a fire risk.



After the material reaches the paper take-up receiver, close the rear cover of the machine.



7. Maintenance Overview

Disconnect the external power supply before performing maintenance or cleaning.

At the end of each working day, clean residual powder from the inner walls of the shaker chamber.

Clean the powder shaking paddle.

Remove residual powder from the control panel.

Clean powder from the media pressing rod.

Clean the control box regularly and keep it dry.

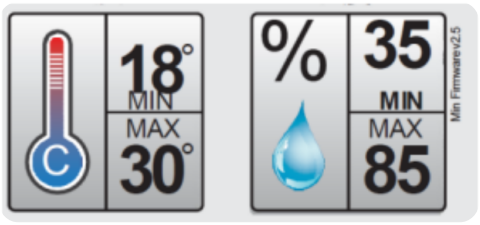
At the end of each working day, empty and clean the powder box completely. Do not leave powder in the box. Moisture may cause powder clogging, poor powder feeding, or motor failure. If the powder outlet becomes clogged, remove and clean the powder brush.

Before reusing powder, sift it through a 60-mesh screen to remove contaminants. This prevents clogging of the powder brush and helps maintain image quality and transfer adhesion strength.

Keep the shaker chamber cover closed during operation. This prevents powder from entering the belt area and also reduces noise.

When adding powder, avoid large or sudden movements. Powder may scatter onto the belt and enter the vacuum platform. If powder remains on the platform and bonds with the belt, the belt may stick to the vacuum platform after cooling, causing motor failure or belt deformation.

Operating environment: maintain ambient temperature between 20 and 28 °C and relative humidity between 40% and 60%.

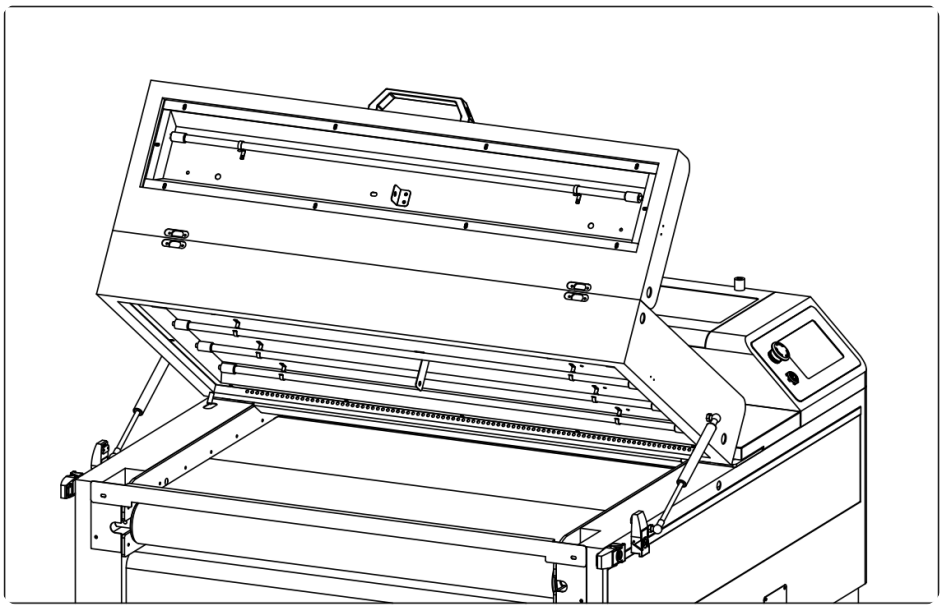


Operating environment reference

8. Reference Diagrams

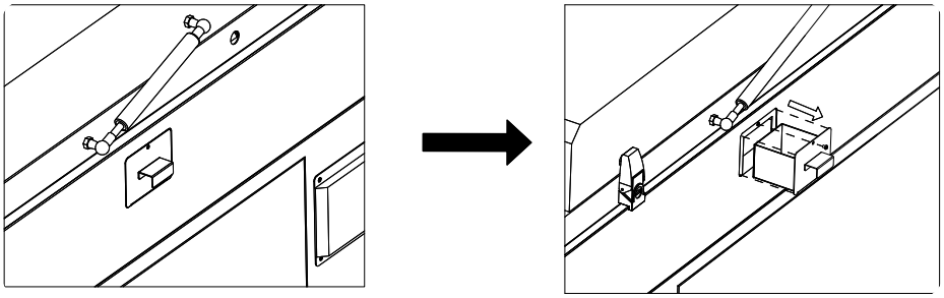
Cleaning Residual Oil

After each day of use, open the front dryer to allow residual oil on the pipe wall and dryer to flow into the oil collection tray. After 1 hour, close the front dryer. Periodically check the oil collection tray and empty it when necessary.



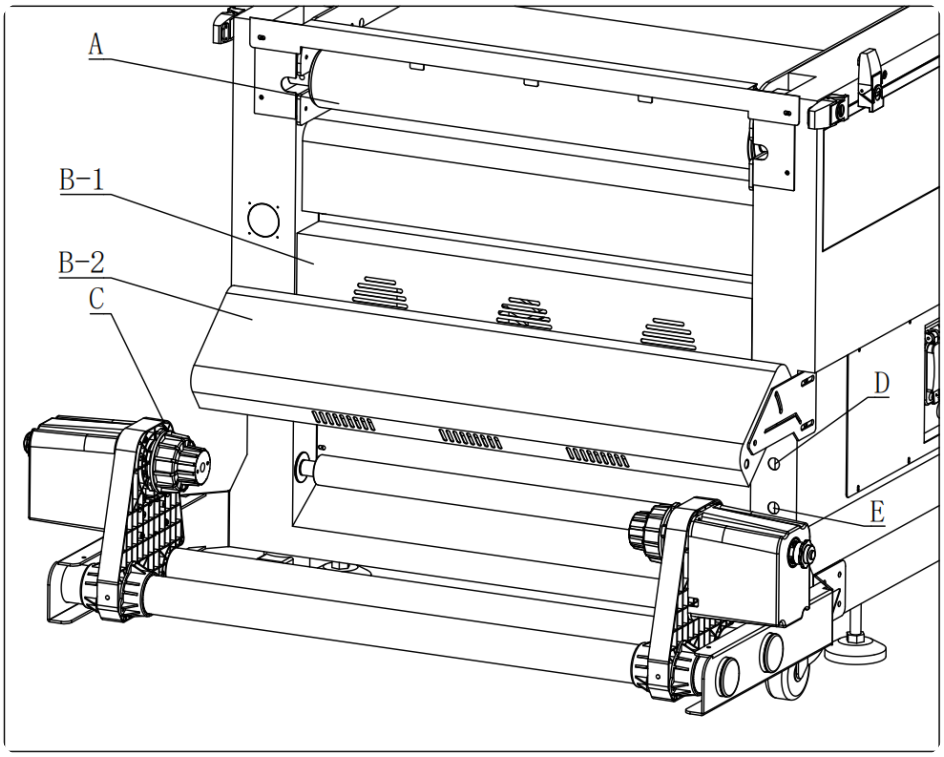
Oil Tray Removal

Loosen the screws and remove the oil collection tray.



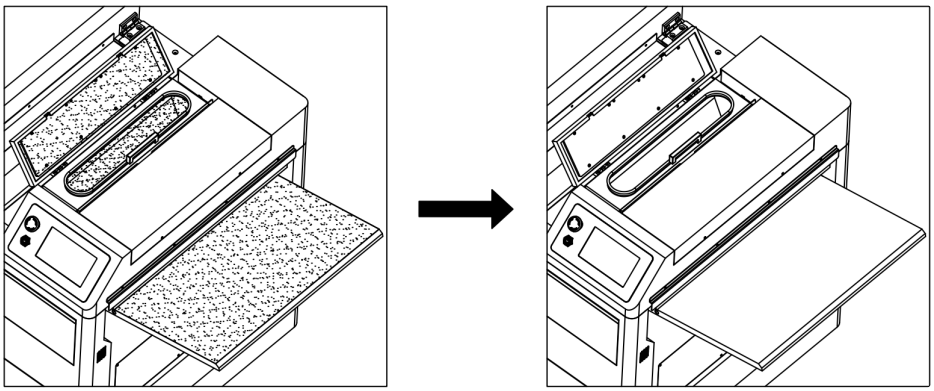
Cleaning Components

Clean the following components promptly after use to prevent contamination during the next operation: A = belt, B-1 = vacuum device, B-2 = cooling fan, C = take-up system. Hole D connects to the cooling fan wiring; Hole E connects to the take-up system wiring.

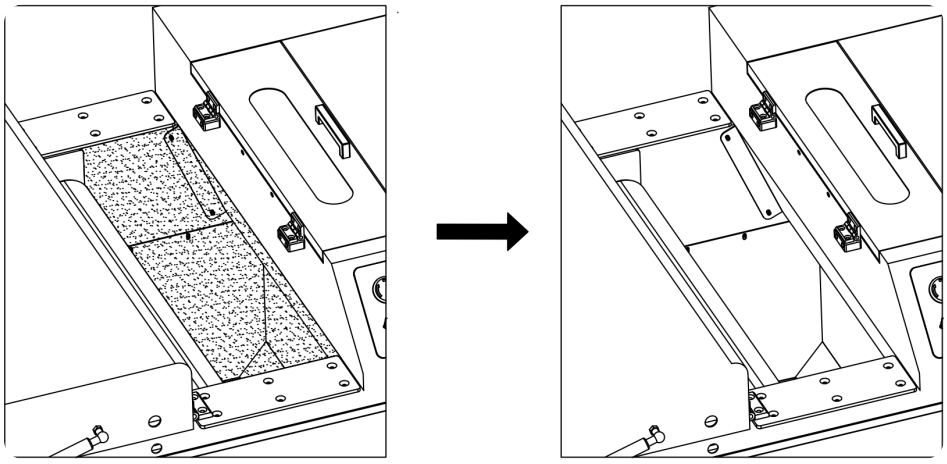


Cleaning Residual Powder

Clean residual powder from the powder box liner and front guide plate after use to prevent contamination.

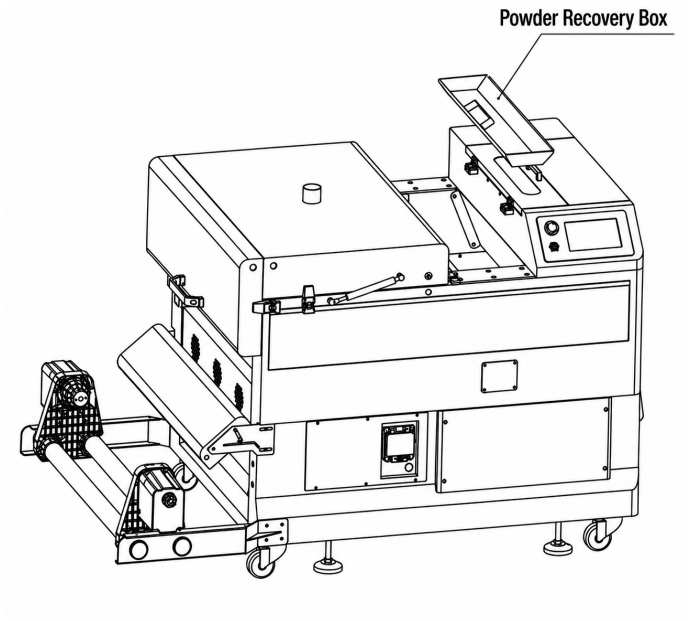


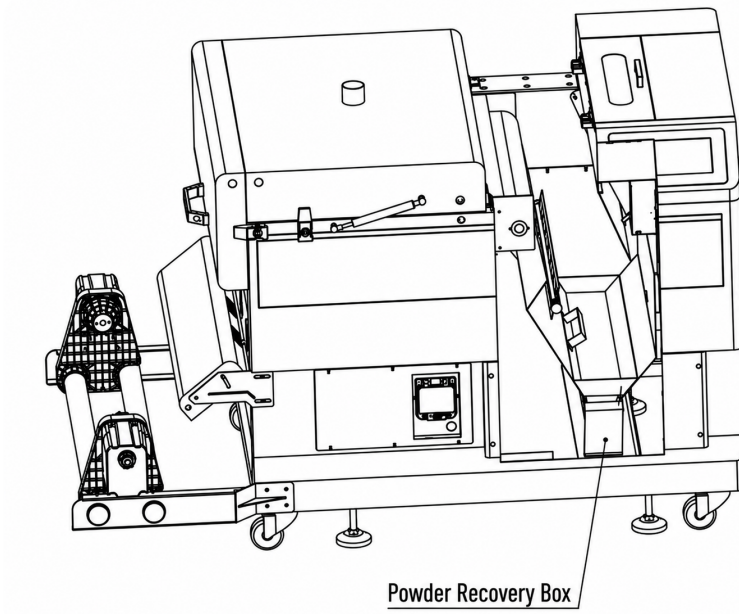
Clean residual powder from the shaker working area after use to prevent contamination.



Powder Recovery During Powder Change

When changing powder, open the powder bin cover and place the powder recovery box at the bottom. Start the powder box cleaning mode. The remaining powder will be collected in the recovery box. Check whether the powder box has been fully emptied. If powder remains, start the powder box cleaning mode again.





9. Warranty Information

Warranty coverage for the powder shaker is summarized below. The actual warranty terms are subject to the final sales and service policy.

No.	Part	Warranty Period	Details
1	Circuit boards (main board, powder return board, operation panel, fume extractor board, etc.)	12 months	Free replacement within 12 months if a fault occurs. After the warranty period, repair fees are charged according to the board type. Return faulty boards with the cause clearly noted for failure analysis.
2	Motors (shaking motor, powder dispensing motor, etc.)	12 months	Free replacement within 12 months if a fault occurs. After the warranty period, repair fees are charged according to the motor type. Return faulty motors with the cause clearly noted for failure analysis.
3	Power supplies (machine power supply, 24 V power supply, etc.)	12 months	Free replacement within 12 months if a fault occurs. After the warranty period, repair fees are charged according to the power supply type. Return faulty power supplies with the cause clearly noted for failure analysis.
4	Sensors (limit switches, photoelectric switches, micro switches, etc.)	12 months	Free replacement within 12 months if a fault occurs. After the warranty period, repair fees are charged according to the sensor type. Return faulty sensors with the cause clearly noted for failure analysis.
5	Cooling fan, front guide plate heating, belt, take-up/feeding system, blower, heating tubes, and related accessories	12 months	Free replacement within 12 months if a fault occurs. After the warranty period, repair fees are charged according to the accessory type. Return faulty accessories with the cause clearly noted for failure analysis.
6	Machined parts, sheet metal parts, and aluminum profiles	N/A	New parts that are damaged or supplied in the wrong model can be replaced with supporting photos and video evidence.

Notes

Each machine component is labeled with a machine code and fragile label. If a replacement is required, provide clear photos and videos of the relevant component labels.

Replaced parts must be returned within 15 working days. If the return cannot be completed within 15 working days, notify the service team in advance. Parts not returned on time may be charged.

The warranty period starts from the machine shipment date. If there is any question regarding after-sales service, contact your authorized representative.

Thank you for using this product.