

HD - 24 M

POWDER SHAKER

OPERATION MANUAL



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I. Instructions For Safe Use

1. Safety Sign

Dear users:

Thank you for using this product. To help you better read this manual and use this product, we hereby have the signs and symbols referred to in our first manual explained as follows:



Users must pay special attention to contents indicated with this sign, so as not to cause product damage or other losses due to improper operation.

2. Product Description:

Featuring high power and high temperature, this machine should be positioned in a proper place and powered with suitable industrial electricity. Never touch any position of the machine indicated with high temperature sign with your hand to avoid burns and scalds. Please understand relevant parameters before using the machine to prepare for operation.

Parameters of the PAT-24-02A powder shaking and color fixing machine:

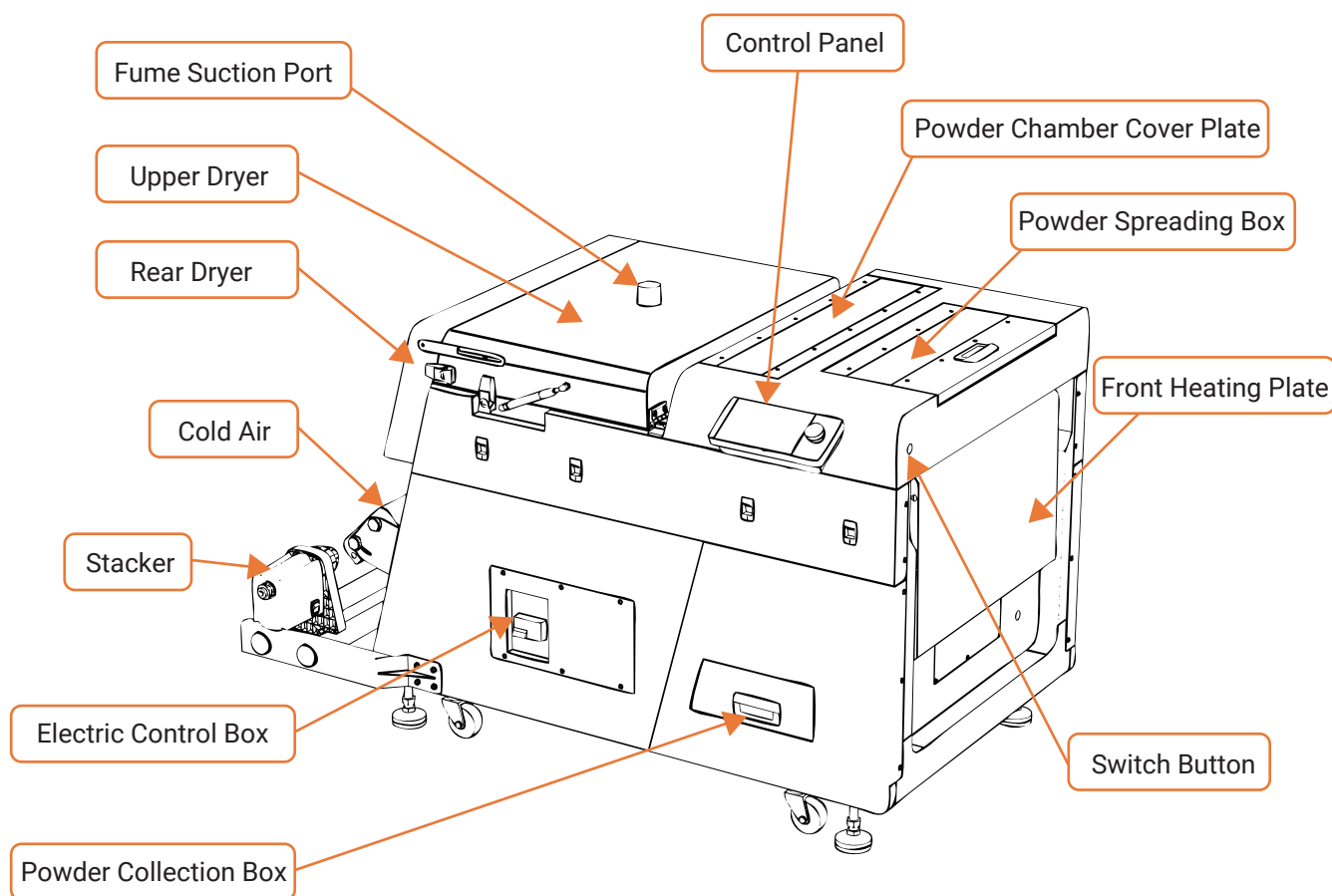
Rated Voltage	220 V	Rated Current	15 A	Rated Power	4.5 KW
Energy Consumption	3 KW - 4.5 KW	Net Weight	189.6 kg	Gross Weight	226.8 kg
Equipment Dimensions	1645 mm x 976mm x 1000 mm		Packaging Dimensions	1540 mm x 1150 mm x 1220 mm	

3. Precautions For Machine Starting:



- Electric hazard! The ground cable must be well grounded prior to machine starting, so as not to cause serious personal injury;
- The access power supply must match the power supply used by the machine, and the diameter of the access wire must meet the rated requirements;
- Power supply must be properly connected, and both the zero line and the live line must be correctly connected;
- Those who are sensitive to static electricity should take personal protection measures when operating the machine.

II. Installation Diagram



III. Equipment Operation Procedures

1. Ensure that the external power supply is well connected (AC220V50/60HZ).
2. Ensure that the grounding wire is firmly connected.
3. Align the printer with the powder shaking machine in advance to minimize the deviation in material reception.
4. Have materials fixed in the feeder and then put into the printer for printing.

See the “material winding method” section for specific operation.

5. Turn on the “main power switch” of the control box, press the switch button on the right front of the machine, turn on the emergency stop on the right side of the screen, and then click the startup in the upper right corner of the screen.

6. When the manual function is enabled by clicking the “Manual” tab in the upper right corner of the screen, the powder shaking machine will work according to the set parameters without being affected by the sensor.

- a. When the automatic function is enabled by clicking the “Automatic” tab in the upper left corner of the screen, the sensor of the powder shaking machine can sense that the film will work according to the set parameters. Without such film, the guide belt function will be disabled immediately, followed by the disabling of powder spreading and shaking functions 10 seconds later. If the film is available, the powder shaking machine will work normally

- b. in this case, you may click the “Automatic” tab or the “Manual” tab to respectively recover the automatic and manual working state

7. Function setting: Click the screen for function setting.

- a. Powder Shaking function off and on settings; click the screen ‘Powder Shaking’ ‘off’ and ‘on’ to turn off and on the function, and at the same time, on the right side of the button, you can adjust Powder Shaking speed. There are 1-9 steps can be adjusted, input or click (+, -) the desired value to set Powder Shaking speed, so that Powder Shaking speed is set;

- b. Powdering function off and on settings: Tap the ‘off’ and ‘on’ of ‘Powdering’ on the screen to turn off and on the function, and at the same time, on the right side of the button, you can adjust the Powdering speed. There are 1-9 steps can be adjusted, input or click (+, -) the desired value to set the Powdering speed, so that the Powdering speed is set;

- c. Guide Belt function off and on settings: Tap the 'off' and 'on' of 'Guide Belt' on the screen to turn off and on the function, and at the same time, on the right side of the button, you can adjust the Guide Belt speed. There are 1-9 steps can be adjusted, input or click (+, -) the desired value to set the Guide Belt speed, so that the Guide Belt speed is set;
 - d. Top Drying Heating function off and on settings: Tap the 'off' and 'on' of 'Top Drying Heating' on the screen to turn off and on the function, and at the same time, on the right side of the button, you can enter the preset temperature for Top Drying Heating and see the actual temperature in the upper right corner of the 'Top Drying Heating' column.
 - e. Heating Of The Front Guide Plate function off and on settings: Tap the 'off' and 'on' of 'Heating Of The Front Guide Plate' on the screen to turn off and on the function, and at the same time, on the right side of the button, you can enter the preset temperature for Heating Of The Front Guide Plate and see the actual temperature in the upper right corner of the 'Heating Of The Front Guide Plate' column.
 - f. Cooling Fan function off and on settings: Tap the 'off' and 'on' of 'Cooling Fan' on the screen to turn off and on the function
 - g. Guide Belt Suction Wind function off and on settings: Tap the 'off' and 'on' of 'Guide Belt Suction Wind' on the screen to turn off and on the function
- 8. Powder shaking and color fixing can be conducted upon adjustment of the above functions.
 - 9. Temperature setting of front dryer: 100°C - 170°C (subject to the melting point of powder) .
 - 10. Temperature setting of front heating plate: roughly 60°C - 80°C.
 - 11. Turn off all "heating switches" upon the completion of material color fixing.
 - 12. Long press the gear symbol in the upper right corner for language setting (English or Chinese), time setting, screen calibration, etc.
 - 13. As a new function of this machine, the automatic insulation function can effectively keep the protective film within the machine. The function does not need to be set and will automatically work when the machine is in the automatic mode.
- When the printer stops working for 20 seconds, the insulation function will be automatically enabled, making the temperature automatically kept 20°C lower than the current setting (for example, if the current temperature is 100°C, it will be reduced to and kept at 80°C after the printer stops working for 20 seconds). When the printer is restarted, the temperature will automatically return to the set value.
- This function is unavailable when the machine is in the manual mode.

14. Recommended settings:

Guide belt speed: 30;

powder shaking speed: 15;

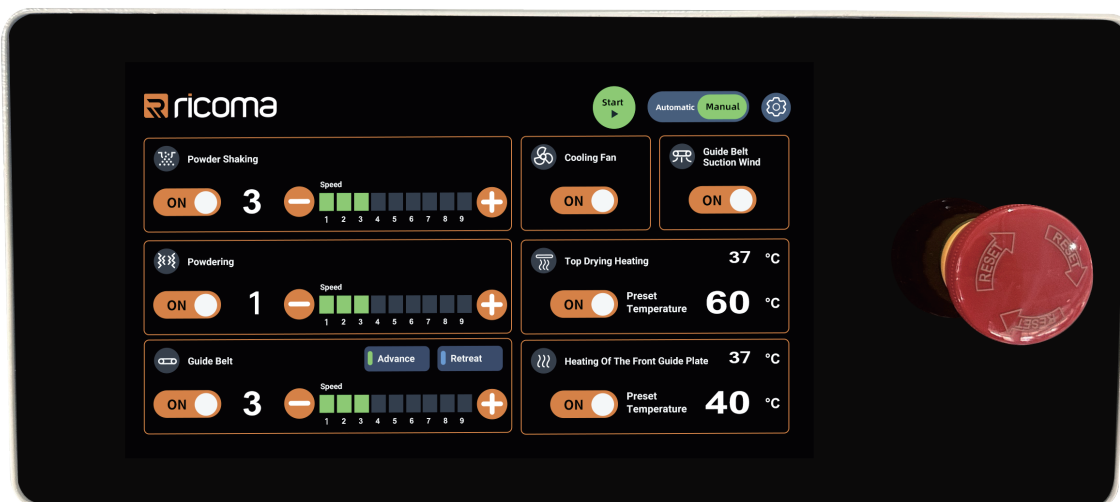
powder spreading speed: 10;

upper drying temperature 110: 110;

rear drying temperature: 110;

front guide plate: 60.

All the aforesaid values are for reference only, which may be adjusted for different materials as appropriate.



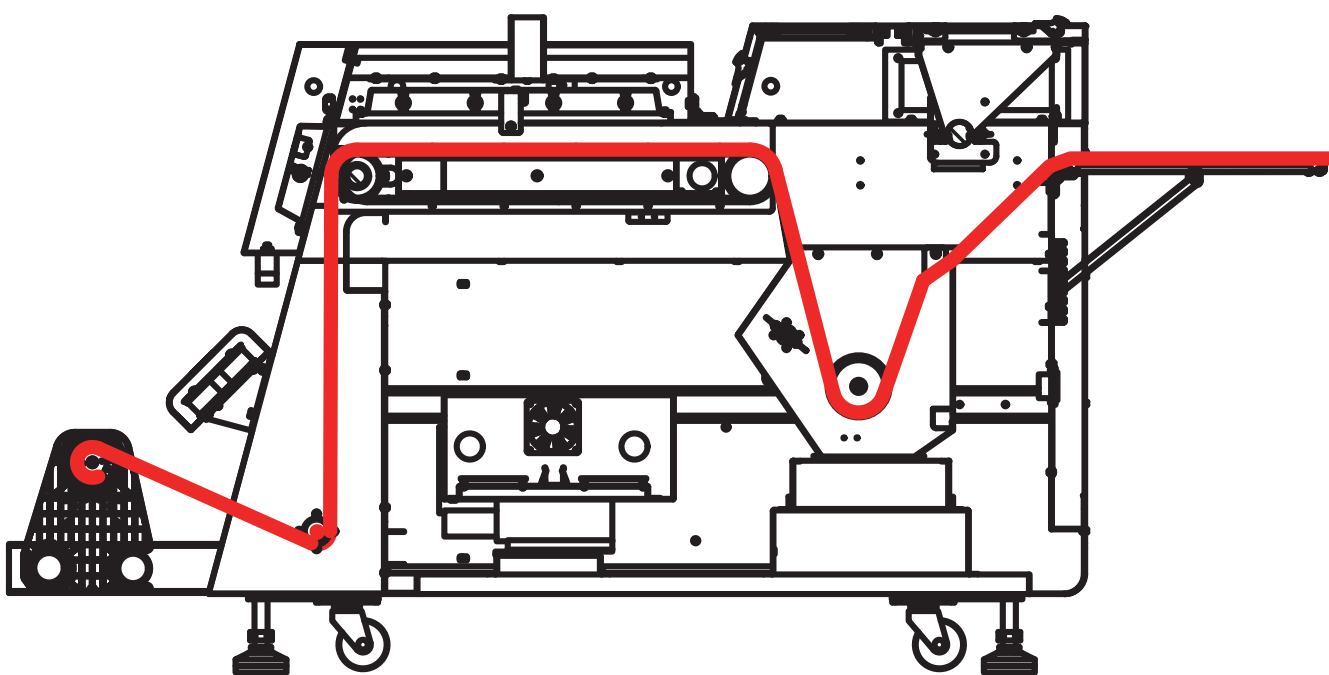
Schematic Diagram Of Control Panel

IV. Material Winding Method

Lead color fixing materials to the bottom of the powder spreading box into the space between the top of the powder shaking rod and the platform for color fixing, and then roll such materials into the paper tube of the material collector, or take out the printout through the guide belt and the aspirator thereof for simultaneous printing and cutting.



Attention: Ensure that the materials are smooth and wrinkle-free after color fixing, and material edges are flush at both ends of the machine.



Schematic Diagram Of Winding Material Section

V. Maintenance:

1. The external power supply must be disconnected when repairing or cleaning the machine;
2. Clean the powder left on the wall of shaking powder chamber every day;
3. Clean the powder shaking film;
4. Clean the powder left on the panel;
5. Clean the powder on the locating shaft;
6. Regularly clean and keep dry the electric control box;
7. Clean the powder spreading box every day after getting off work to thoroughly remove the residual powder therein, so as to prevent powder spreading from being obstructed or the motor from being stuck or burned out due to the wetting of rubber powder. In case of powder spreading obstruction, the powder spreading brush may be removed for cleaning;
8. Rubber powder should be screened with a 60-mesh screen before being reused, so as to prevent the powder spreading brush from being obstructed by any impurity mixed into rubber powder, or prevent the effect and hot stamping firmness of printouts from being affected by such impurities;
9. When the powder shaking machine is under operation, the top cover of powder shaking chamber should be closed to prevent the rubber powder from flying into the guide belt during powder addition, while minimizing the impact of noise;
10. Don't move too much when adding powder, so as not to make powder fly to the guide belt and enter the aspiration platform. Otherwise, the powder may remain on the aspiration platform and bind together with the guide belt. Accordingly, the guide belt may stick to the aspiration platform upon cooling, leading to the burnout of motor or the deformation of guide belt.