

LABORATORY MINI-DRYER

M-3

OPERATION MANUAL

COPOWER TECHNOLOGY CO., LTD.

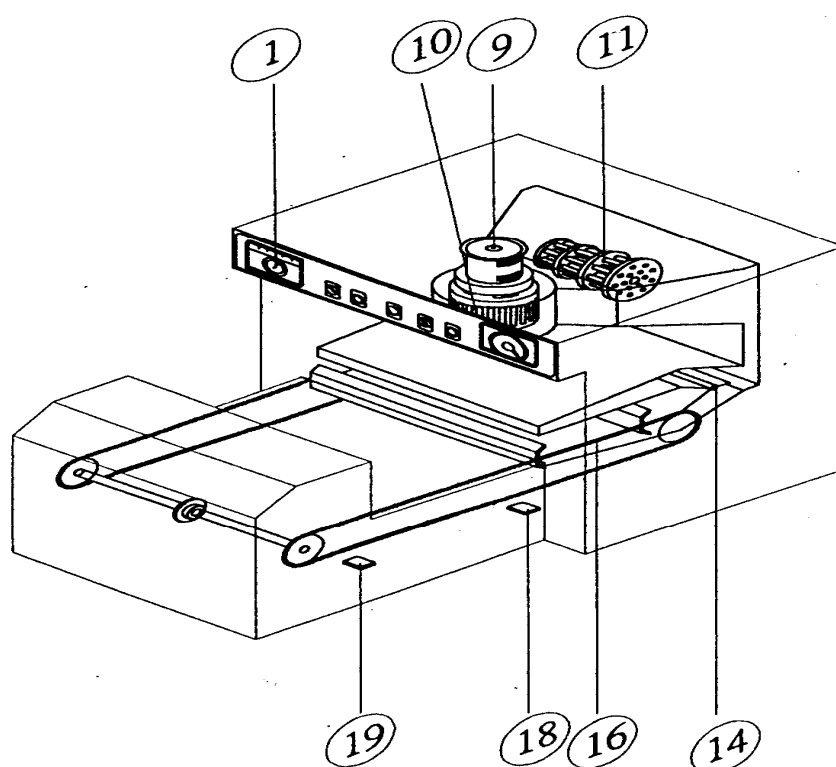
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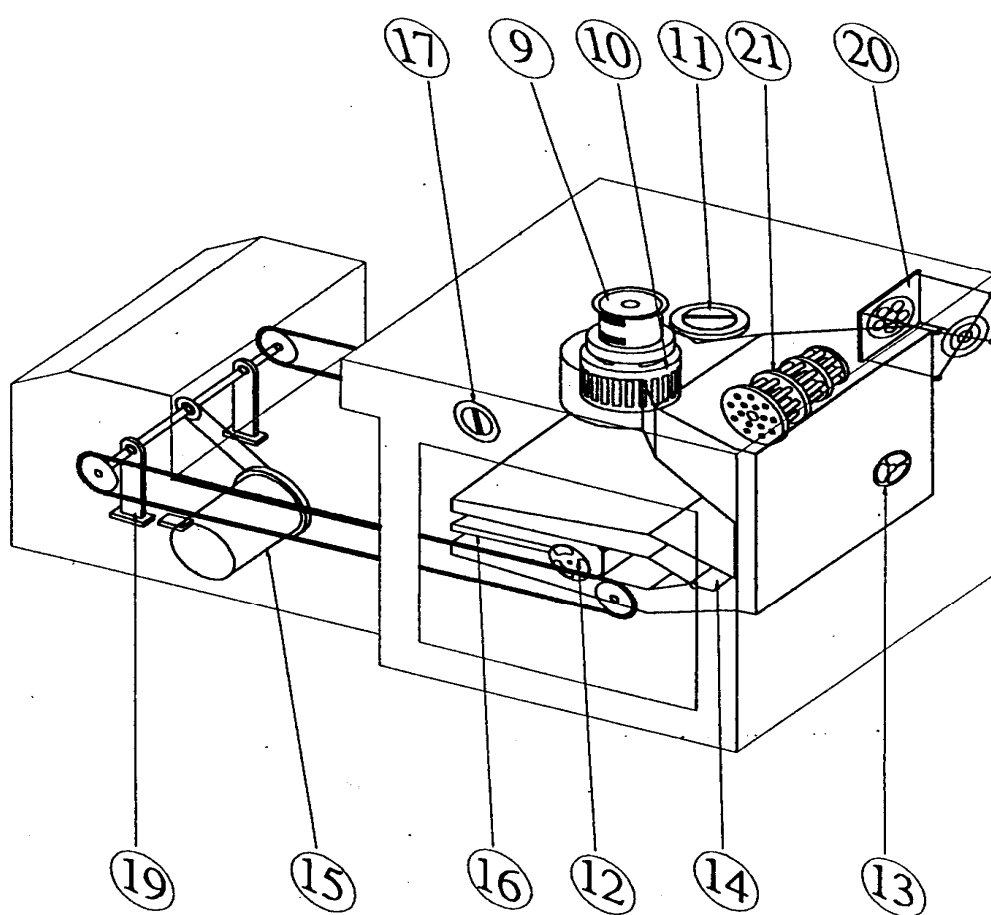
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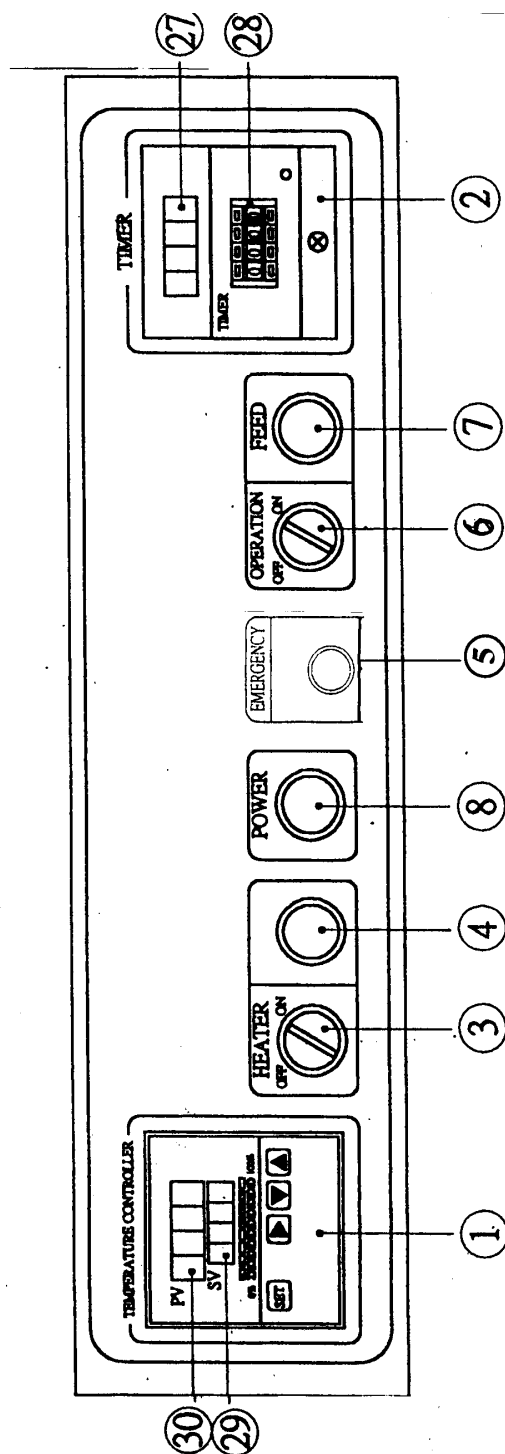
FRONT VIEW 【FIG-1】



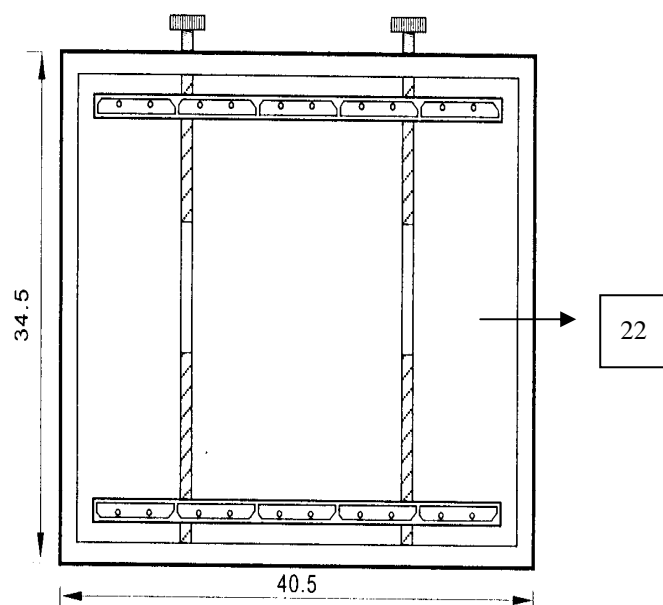
SIDE VIEW 【FIG-2】



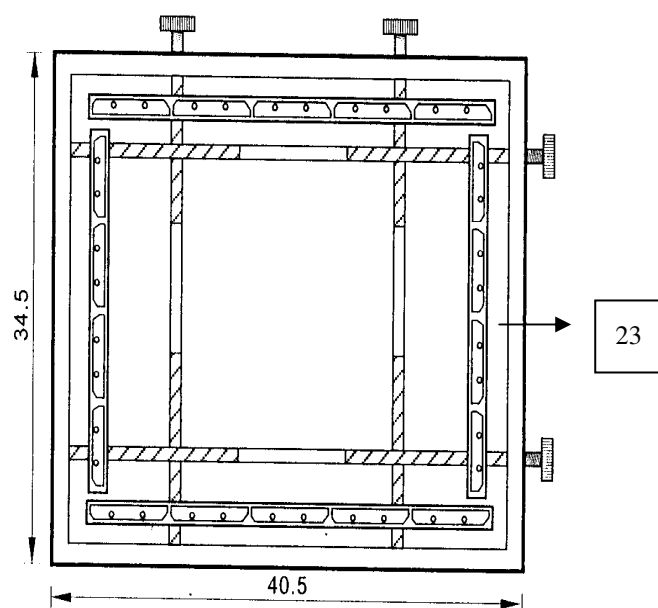
CONTROL PANEL 【FIG-3】



PIN FRAME 【FIG-4】



ONE-WAY STRETCH



2-WAY STRETCH PIN FRAME





INSTALLATION

1. Please check the machine immediately after receiving. Any damage incurred in transport should be notified at once to the forwarder or our representative or contact us directly.
2. Please check the delivery note to see if all of the parts of machine have been completely supplied as well as the accessories.
3. Make sure the machine is placed and fixed at the reserved location and keep the proper space for easy maintenance.
4. Before connection the wire to the main switch
 - A. Please check the electrical specification is the same with the data plate on the machine and the main switch is safe for use.
 - B. Please use none fuse beaker.
 - C. Check if the connection to Earth is ready.
5. Connect the wire according to wire colors WHITE for earth. BLACK 、 RED to be connected the relative specification.
6. Incorrect connection to main switch may cause damages to the control unit and such damages are not covered by warranty.

TEMP. CONTROLLER

This temp. controller has been totally tested and preset before dispatched. It is connected with on/ off switch as pos 3 of **【FIG-3】**.

SETTING :

- 1 Press **SET** button to enter temp setting mode.
- 2 Press  button you see SV digit blinking which means you can start to set temp. required.
- 3 Set SV value from right side to left direction for instance if you need 170°C. Then set value as 170.0 will do. First press  then the first digit from right will blink, you can choose desired figure by pushing  for higher,  for lower figure. Repeat same procedure to second 、 third 、 fourth digit to get required set value.
- 4 After completing the setting, press **SET** button to enter all settings to controller back to PV / SV mode.

TIMER

- 1 With digital indicator as pos 28 of **【FIG-3】** could preset up to 9999 seconds.
- 2 Normally timer is in “stop” mode. Will only activate when feed button pos 7 of **【FIG-3】** was pushed and pin-frame entered into chamber.

EMERGENCY BUTTON

For any emergency use pos 5 of **【FIG-3】** . Once pushed the pin-frame will be discharges and bell rings. Release emergency button by turning it toward the arrow direction for further operation.

PIN-FRAME

Machine provides 2 kinds of pin-frames as **【FIG-4】** .

- 1 One-way type has 2 turning wheels can adjust distance one direction (warp & weft).
- 2 Two-way type has 4 turning wheels can adjust distance of two direction (warp & weft).

OPERATION

A. Machine setting

- 1 Main power switch 17 of **【FIG-1】** to “ON” position.
- 2 Operation switch 6 of **【FIG-3】** to “ON” position.
- 3 Set required temperature pos 29 of **【FIG-3】** .
- 4 Heating switch pos 3 of **【FIG-3】** to “ON” position.
- 5 Set timer pos 28 of **【FIG-3】** in second of required.

B. Place the sample fabric properly onto the pin-frame.

C. Place the pin-frame with sample at the inlet position.

D. Push the feed button pos 7 of **【FIG-3】** the pin-frame will move into the chamber meanwhile timer start to count. When time is up the pin-frame will automatically move out and bell will ring. Process is done. Ready for the next test.

E. Repeat procedure B to D for next process.

F. Machine shut down

- 1 Open the air inlet pos 12 of **【FIG-2】** and air outlet pos 13 of **【FIG-2】** .

Normally when machine is in operation keep air inlet closed, air outlet open.

- 2 Turn heating switch pos 3 off **【FIG-3】** to "OFF" position.
- 3 It takes about 10 min to reach temp below 100°C .
- 4 Switch main power to "OFF" position.

G. Chamber cleaning

- 1 If stain appears on sample fabric the cleaning shall be executed.
- 2 Close air inlet and air outlet.
- 3 Raise temp up to 20°C higher than normal applied temp. If normal 180°C then raise to 200°C . **Warning :** Never exceed 250°C .
- 4 When temp reached then maintain it for 20 min.
- 5 Open air inlet.
- 6 Turn heating switch to "OFF" position to lower temp.
- 7 Use white fabric to test according B to D procedure to see if it is stained.
- 8 Repeat cleaning procedure until staining is gone.

ELEMENTS

ITEM	DESCRIPTION	REMARK
1	Temperature Controller	
2	Timer	0-9999sec
3	Heat ON / OFF Switch	
4	Heating Indicator Lamp	
5	Emergency Push Button	
6	Operation ON / OFF Switch	
7	Feed Push Button	
8	Power Indicator Lamp	
9	Fan Motor	(1/8 HP 220.1)
10	Impeller	(Stainless steel)
11	Heater	(Completed)
12	Intake	
13	Vent	
14	Damper	
15	Transport Motor Completed	
16	Pin Frame & Sample	
17	Main Power & Switch	
18	Limited Switch (1)	
19	Limited Switch (2)	
20	Box Fan	
21	Sensor	
22	Single Direction Pin-Frame	
23	All Direction Pin-Frame	
24	Knob	
25	Time Indicator	
26	Time Dial	
27	Temperature Controller Dial	
28	Temperature Indicator	

ELECTRICAL DIAGRAM

M3 (220V 1PH)

