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1. Product Name

PPP (Plasma)gel Maker, also called PPP autologous collagen transplantation machine

2. Application

PPP filling technology is made the plasma that extract from litigant's blood into gel, and then inject into body. During the process, our model TDD3-MC is the important equipment to made blood plasma into autologous collagen, TDD3-MC adopt advanced cooling and heat system, it can control the temperature accurately, the autologous collagen made by TDD4-MC replaced the high cost filler. With good features of no toxic and no side effect, at the same time, can extract PRP (Platelet Rich Plasma) inject into dermis, promote skin recovery, help to eliminate wrinkles, enhance the face, shrink pores , tender skin etc.

- 1. Fill all kinds of wrinkles
- 2. Sculpture body
- 3. Fill the scar
- 4. Solve the check depression
- 5. Modify the chin outline
- 6. Fill the nose

7. Improve the profile of body part

3. Features

1). Digital display, adjustable time and temperature.

2). Two rows independent holes for cooling and heating, each row

for 10 holes, its Work separately and without impact each other.

High efficiency for sample handling,

3). Adopt the advanced cooling system, make the cooling simple.

4). Microprocessor with PTD control together, good effect for temperature control.

5). Naturally outlook and metal structure.

6). Safety and reliable performance, with automatic timing alarm function.

4. Technical Parameters

1. Power : AC 220V(110V)±22V 50Hz±1Hz 2A (refer nameplate)

2. Room temperature: 10~37℃

3.Max temperature control: $90^{\circ}C \pm 0.1^{\circ}C$

4. Capacity: 10 holes (for variety capacity syringes from 1-10ml)



- 5. Dimension: 25×25×14 (cm)
- 6. Rated power: 445W
- 7. Weight: 5.26Kg

5. Structure

•••••••	
cooling holes	
Heating holes	
Timelmin. Empedance(U)	
Plasma Gei Maker TDD-4MC	
Display & Control panel	
	Power Switch

6. Operation

1). Please check the appearance of packing case after receiving, and the goods should not be happened with sharp hitting and upending during delivery. Please contact with forwarding agent and inform our company immediately if occurring above accidents.

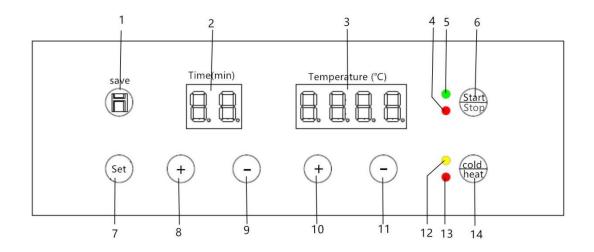
2). Unpack the carton, and fetch it out. Then put it into stable table.

3). check if the power in nameplate is the same with the power



you use.

4). Set the parameters. Control panel as follow:



1-Save 2-Time display 3-Temperature display
4-Stop indicator light 5-Start indicator light
6-Start/Stop button 7-Set button 8-Time increase button
9-Time decrease button 10-Temperature increase button
11-Temperature decrease button 12-Cooling indicator light
13-Heating indicator light

a. Set the heating time:

Press [cold/heat] button, when the left red indicator lighten, press the [set] button and adjust the time by pressing [+] or [-] that under Time window, long press for quickly increase or decrease. Then press [Save] to confirm the setting, press [set] to cancel the setting.

b. Set the heating temperature:

Press [cold/heat] button, when the left red indicator lighten, press the [set] button and adjust the time by pressing [+] or [-] under temperature window, long press for quickly increase or decrease. Then press [Save] to confirm the setting, press [set] to cancel the setting.

c. Set the cooling time:

Press [cold/heat] button, when the left yellow indicator lighten, press the [set] button and adjust the time by pressing [+] or [-] that under Time window, long press for quickly increase or decrease. Then press [Save] to confirm the setting, press [set] to cancel the setting. (When change into cooling status, time window display "FAN")

d. Heating timing:

Under heating condition, press [star], and the green indicator lighten, heating timing start when temperature reach the setting data, machine will alarm start at last 10 seconds.

e. Cooling timing:

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Under heating condition, press [star], and the green indicator lighten, heating timing start when temperature reach the setting data, machine will alarm start at last 10 seconds.

7. How to make PPP autologous

Step 1: Blood collection

Step2 : Blood separation

Step 3: PPP collection

Step 4: Heat PPP at 80 $^{\circ}$ C for 4 ~8minutes.

(Note:please pre-heat to 80 °C before put syringes into)

Step 5: Put PPP into cooling holes for 5 minutes. , the the PPP

gel make finished.

Step 6: Inject the PPP gel into the needed place

8. Trouble shooting

Please check the problem according to the following table, if still can not eliminate the trouble, please contact the buyer.

Display	Trouble	Measures
No display on	No voltage or	Check the power voltage
control board	over-current protection	or change the fuse
E-05	Temperature sensor	Change the temperature
	error or trouble in	sensor



	heating holes	
E-09	Over-temperature more	Contact with the
	than 5 ℃	manufacture or buyer

9. Notice

The machine system will store the last used parameters, if you power on the machine and don't operate the machine, it will pre-heating the last temperature you set.

Note: please operate carefully to avoid burns by high-temperature.

Please don't turn on and turn off the power frequently in short time.

Please don't use the common circuit with high power electric equipment, so as to avoid to cause interference.

This machine belongs to general laboratory equipment. Should be placed in a dry, clean environment.

The surface of this machine can be wiped by soft cloth or cotton yarn with neutral detergent or 70% alcohol solution.

If not use for long time, please power off, unplug and covered the surface with cloth.

If the machine is damaged and need to be sent back to the manufacture for repaire, in order to protect the human health and environment , its necessary to do the disinfection and



decontamination.We reserve the right to accept sterilized instrument only, and we hope you can understand.

Warranty

Respected customers,

Thank you for purchase of our company's product. To protect your legal rights and avoid your worries, we provide warranty service for one year with the main machines. If it is broken under warranty with un-artificial reason, we will supply free maintenance service. The customer needs to pay the prime cost of the product parts if the product has exceeded the warranty period. We will not supply the free maintenance if any following matter is happened:

1.Exceed of the warranty period or without the warranty card.

2. The trouble is caused by wrong installation, operation and maintenance.

3. The trouble is caused by the unauthorized uninstalling and repairing by our company.

4. The trouble is caused by using the rotor not equipped with this centrifuge.

5. The trouble is caused by war or other irresistible factors.

This centrifuge has been subjected to thorough testing and quality control before delivery. We promise to do as below:

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1. One year warranty for this centrifuge (from the date of delivery).

2. Our company after-service center will build up files in time and follow up the user's information.

3. We will offer the replacement parts freely if the machine within warranty



Quality Certificate

PPP Gel Maker TDD4-MC

Serial No:

It is certified that the machine is passed quality inspection & test .

Test Department:

Date:



Packing List

Ser.No	Description	Quantity	Remark
1	Gel maker	1Set	\checkmark
2	Quality Certificate	1pc	\checkmark
3	Operation Instruction	1pc	\checkmark
4	Packing List	1pc	

Packed by:

Date:



Warranty Card

Name & Model	PPP (plasma) gel maker TDD4-MC
Specifications	
Date of Delivery	
Address	

Service Records

Date	Contents	Signature	



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