

Moist Heat Pack

HEATING UNIT

User Manual (Rev. 3)



NGL-LJSS-2

Introduction

Before you use the moist heat pack heating unit (hereinafter referred to as the "Heating unit" or the "Unit"), please read this Manual carefully and use the unit correctly in accordance with this operating procedure.

Unit Parameters:

1. Power Supply: 200-250 V AC
2. Rated Frequency: 50Hz
3. Power: 1000W
4. Rated Fuse: 13 Amp
5. Tank Capacity: 49L
6. Approximated Filled Weight: 76 Kg
7. Net weight: 23.9 Kg
8. Shipping Gross weight: 38.4 Kg
9. Temperature Preset at: 71 - 80°C
10. Cut-out Temperature: 90°C
11. Heat Up Time to 75°C - 6 Hours
12. Cool Down Time from 75°C - 3 Hours
13. Unit Dimension : 85.5 cm (H) X 51.5 cm (L) X 38.5 cm (W)
14. Export Packing Dimension: 94.5 cm (H) X 61 cm (L) X 44.5 cm (W)
15. Casing Material: Stainless Steel 304
16. Caster Wheels: 2 lock and 2 unlock

Notice:

The temperature of the unit has been preset to the optimum temperature of 71 - 80°C best for moist heat packs. Please wrap the moist heat pack with towel or matching towel cover after it is heated.

Statement:

Due to the upgrading of the product, the contents of this Manual may be slightly different from your latest product. If you find any problem when you use the product in the future, please contact our company in time and we will serve you wholeheartedly.

In addition, due to the writer's limited abilities, there are inevitably imperfect contents in this Manual. Welcome to point them out.

1. Installation Instructions

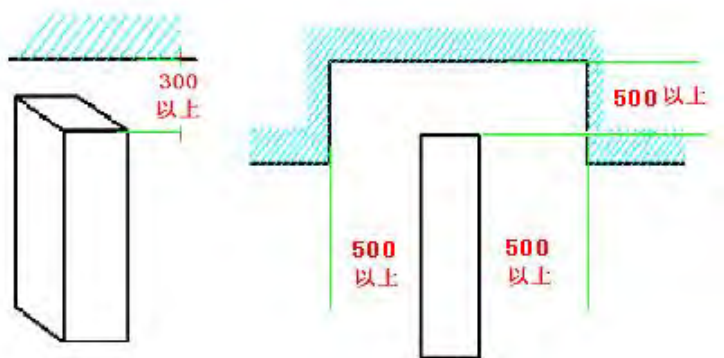
The unit should be installed in a laboratory with a good environment according to the following principle:

	Principles for the selection of installation sites
1	Well ventilated, dust-free and cool stable floor or experimental tables;
2	Avoid places with droplet and steam;
3	Avoid places where may flammable gas may flow inside, stop and leak;
4	Avoid places where high frequencies (High frequency welders) may occur;
5	Avoid places where acidic solutions are frequently used;
6	Avoid places where special sprayers (containing sulfides, etc.) are frequently used;

For the convenience and safety of maintenance and installation, you should leave the space between the indoor machine and the obstacles as far as possible. When indoor machines are installed, please be sure to ensure the following dimensions:

- 1) The distance between the top of the heating unit and obstacles on the top shall be more than 300 mm;
- 2) The distance between the side of the heating unit and the obstacles on both sides should be at least 500 mm;
- 3) The distance between the rear side of the heating unit and the obstacle should be at least 500 mm;
- 4) The distance between the front of the heating unit and the obstacle should be at least 1000 mm.

The following figure shows requirements for the installation space of the unit (unit: mm).



Refer to Point 1, more than 300mm Refer to Point 2, more than 500mm

After you open the outer package, if you find anything missing, please contact our sales service for solution. After you open the package, please lift the heating unit away from the wooden packing base and place it flat in a spacious position. Check whether the unit is damaged during transportation. After you confirm that it has no mistake, please push it flat to the installation position and ensure that it is stable. Then, please connect the power cord of the unit.

II. Detailed Operating Instructions: HOWTO USE:

1. Installation of the unit: Lift the heating unit out of the wooden packing base after you open the package; place it flat in a spacious position; check whether the unit is damaged during transportation; after you confirm that it has no mistake, please push it flat to the installation position and ensure that it is stable.

(1) Please be sure to check whether the clamp or flange bolts of the external hose are tightened. After the liquid is added, please observe whether there is water leakage at the pipe joint. If there is water leakage, please deal with the problem in time.

(2) After it is well placed, please wipe the inner and outer surfaces of the container gently with a wet cloth to remove the protective oil and keep the container clean.

2. When you use the unit, please fix it on a fixed platform and open the valve of the water inlet. Then, inject clean water into the box. In order to shorten the heating time, warm water can also be added. After adequate water is added, please close the valve and start to operate the Unit.

3. After connecting power supply, you will see the RED switch at the rear of the Unit lights up. When turning to "1" to turn it on, the Controller Module in front of the Unit will light up which means the Unit starts to operate. Since temperature has been preset to the best of moist heat pack heating condition, therefore no more setting is required. The temperature of the Unit will start to increase to match with the preset temperature ex-factory.

4. After the unit is heated and have the constant temperature set and runs steadily, please dip the hot packs into water and hang it on columns at both ends of the separation frame.

5. When the hot pack is taken out from the unit, please use insulating clamps. Do not do operations with bare hands so as to avoid being scalded.

Detailed Operating Instructions of the Temperature and Timer Controller:

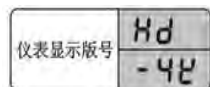
Panel Instruction:



① 功能键	(1) Functional Keys
② 减键	(2) Down
③ 增键	(3) Up
④ 输出指示	(4) Output Instructions
⑤ 上限报警指示 (选配)	(5) Upper Limit Alarm Indicator (Optional)
⑥ 测量值	(6) Measured Value
⑦ 设定值	(7) Setting Value




Operation and Usage Method:

Power On: Connect electric plug and switch the red button at the rear of the Unit to "1" to turn it on. The digital panel of the Controller will then display with the "version number", and turns to normal display after about 6 seconds.



Temperature Setting: The temperature of the heating unit has been preset to 71°C- 80°C to the best for moist heat pack, and no setting is needed when use. The Temperature and Timer Setting of this Unit have been locked to attain a more efficient operation of the Unit.

The below setting for temperature and timer are for reference only.

Click  to enter temperature setting. The lower panel will start to blink to enter standby mode. Then set the required temperature by pressing  and  buttons until the desired temperature has been set. Press the SET button again to exit the setting mode.



The updated setting will be saved automatically. Under this setting mode, if no key is pressed again in about one minute, the controller will automatically return to the normal display state. Then temperature of the Unit will start to increase until matching with the preset temperature displayed on the upper panel.

Temperature and Timer Settings: These settings of the Unit are not recommended nor required as the packs need consistent temperature to keep it at optimum condition in the Unit. The settings have therefore been locked, if these have been accidentally set please follow the below instructions to reset it:

Temperature Setting: (Unlock and Lock Mode)

1. Press the set button for 3 seconds, then press the set button again for 5 times, you will see "LCK" appears on the upper panel, press the arrow button to set from the value "2" to "0" (Set to "0" is to unlock the Temperature setting).
2. Press the set button again for 3 seconds, adjust the arrow button to the temperature of 75 degrees (recommend).
3. Press the set button again for 5 times, you will see "LCK" appears on the upper panel, then press the arrow button to set the value to 2 (Setting to "2" is to lock it up).
4. Press the set button to save the settings and exit.
5. End.

Timer Setting: (Unlock and Lock Mode)

1. Press the set button for 3 seconds to enter the setting mode.
2. Press the set button again for 5 times, you will see the "LCK" appears on the upper panel. Then set it to "0" to release the locking mode. Press the set button once to return to the normal state.
3. Press the set button again for 3 seconds, adjust the "ST" from "1" or a higher value to "0" to cancel the timer setting.
4. The Module will automatically be set after 3 seconds. This time the Timer of the Unit is not set and no audible alarm will be activated.
5. End.

III. Solutions to Common Problems:

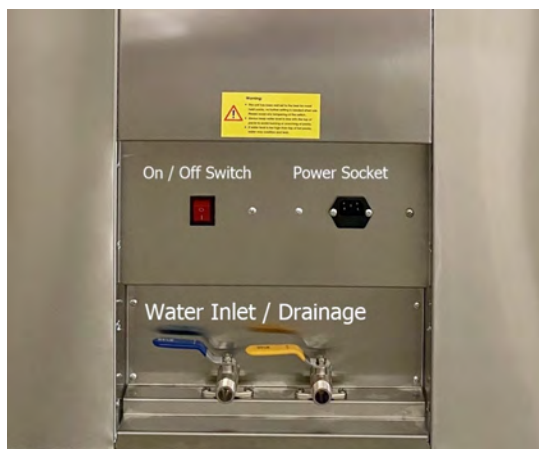
Note: To ensure your safety, please switch off the equipment and connections and also discharge any medium from the unit before checking or examining it.

Phenomenon: When you press the power switch for the first boot-up, and if nothing is displayed. The fuse in the power plug (if it has) might have been burnt. Remove the power cover and replace with a new fuse and restart the Unit again.



Attention Please:

- Please use deionized water or pure water to prevent foreign matters from blocking pipes and having scale so that the service life of the equipment can be extended. The water tank should be cleaned regularly and the circulating liquid in the tank should be replaced regularly to prevent microbial growth. If you do not use the unit, please cut off the power supply to clean the box and ensure that it is dry.
- Please do not burn yourself when you use it. Please refer to the internal temperature displayed by the controller before you open the cover and please avoid being burned.
- Do not move the box when you use it. Do not move the container when the water temperature is too high so as to prevent safety accidents.
- When you use the unit, please do not let water or oil splash on the surface of the instrument, otherwise, the instrument will be damaged.
- Do not use the instrument in places with flammable and explosive gas, corrosive gas or steam emissions, strong electromagnetic interference and strong impact vibration.



The manufacturer reserves the right of changing or upgrading the design of the Heating Unit without prior notice.

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