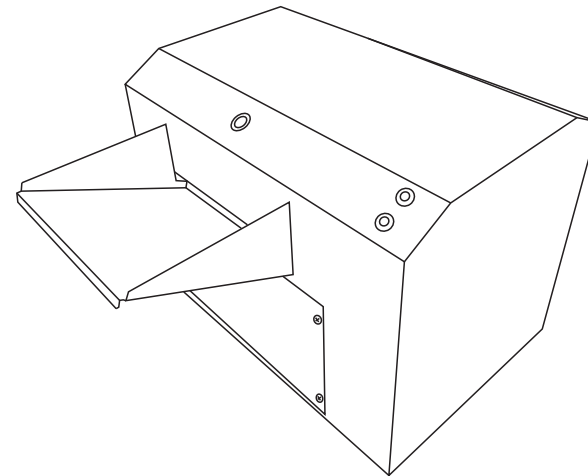


Program controlled quantitative
Sealer

USER SPECIFICATIONS



ACCESSORY PARTS

- 1. 51hole rubber pad 1
- 2. 97hole rubber pad 1
- 3. 51hole MPN table 1
- 4. 97hole MPN table 1
- 5. tray guide 1
- 6. Power line 1
- 7. Instructions 1
- 8. Certificate. 1
- 9. Insurance pipe..... 2

QUALITY ASSURANCE

Our company promises that the product will be guaranteed for one year from the date of sale.

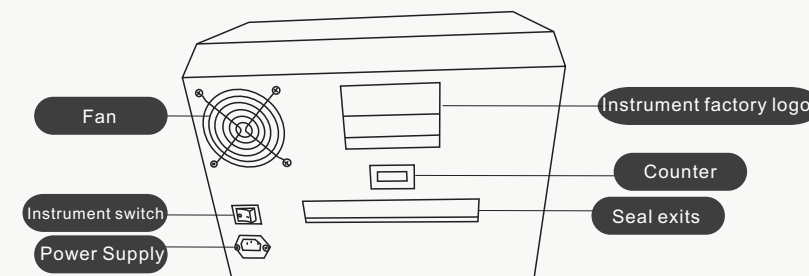
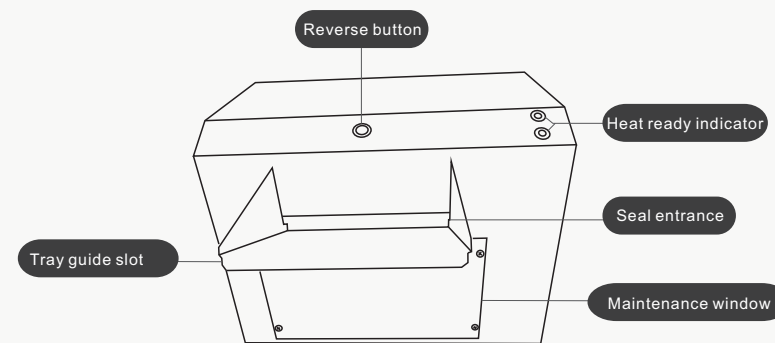
AFTER-SALES SERVICES

Once the instrument fails to work properly, it should be stopped immediately. And unplug the power supply or disconnect all connections with the power supply circuit. And contact with the manufacturer's maintenance personnel.

OVERVIEW

The program controlled quantitative sealer is the instrument for using enzyme substrate test reagent, quantitative detection plate, sterile sampling bottle. The product is used for the qualitative and quantitative detection of total coliform bacteria, fecal coliform (heat tolerant coliform) and Escherichia coli in water. The instrument is easy to operate and has high degree of automation. It is used for fast sealing of 51 holes and 97 hole detection plate, which greatly saves the operating time of the experimenters. In addition, this instrument is equipped with circuit protection device and temperature automatic control device, making your work safer and more convenient.

STRUCTURE



MAIN TECHNICAL PARAMETERS

Working conditions: Power supply voltage: 220V±10%, 50Hz

Ambient temperature: -10°C~50°C

Relative humidity: 20%-90%, no large amount of dust and corrosive gas pollution

Noise: ≤50dba

Cover temperature: ≤40°C

Preheating time: ≤14min

Weight: bare machine ≤16KG

Sealing speed: 51 holes \97 holes quantitative detection disk sealing time is less than 12 seconds

Detection range: use 51-hole quantitative detection plate detection range:

0-200MPN/100ml (water sample is not diluted);

use 97-hole quantitative detection plate detection range:

0-2419MPN/100ml (water sample is not diluted);

Reliability: No leakage or breakage after sealing

Convenience: More than 40,000 samples can be tested during the life of the instrument

METHOD OF USE

1 Open the carton and remove the instrument from the packing box. Leave the packing for future use. First check the appearance and internal damage caused by transportation and other abnormal phenomena. If abnormal discovery is found, please do not sign on the express form. Please contact with the trading company.

2 Please check accurately whether the accessories are complete except for the main engine. Other accessory parts are detailed in 08 (Accessory parts).

POINTS TO NOTE

1. Please operate the machine strictly according to the instruction manual. Otherwise, it may cause injury, damage to machine, property loss and inaccuracy of test results.
2. Do not place beaker, measuring cylinder and other glassware on the sealing machine, so as not to break the water into the sealing machine.
3. Do not push the articles of non 51 or 97 hole plate and rubber pad into the sealing machine, otherwise the instrument will be damaged.
4. The operator, once the hand, hair, sleeves, etc. are inserted into the sealing machine, press the reverse button at the front entrance of the sealing machine to avoid danger.
5. At any time, if it is necessary to reverse the instrument, exit the rubber pad and the quantitative plate from the direction of the import (for example, when the tray guide slot is not leveled and put the rubber pad into the machine), please press the reverse button on the sealing machine. However, when the rubber pad has completely entered the machine, please do not press the reverse button.
6. If there are more than one rubber pad, it can be continuously placed into the machine for sealing.
7. After the experiment, please turn off the power switch first, then unplug the power supply.
8. There is a high voltage power supply inside the machine. Please do not open the instrument shell without the company technicians, so as not to cause injury to the personnel.

7 Take the rubber pad (Diagram.9). The quantitative detection plate containing water samples and reagent is placed in the rubber pad. Notice that each hole of the quantitative plate is aligned to the corresponding hole on the rubber pad. Gently press plate paper surface, so that the quantitative detection plate can be fully adhered with the rubber pad. Note that the opening of the detection plate keeps upwards throughout the operation. Prevent the spilling of the solution during operation (Diagram.10).

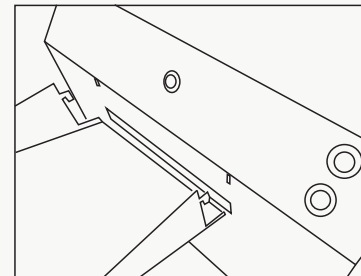
8 The quantitative plate and the rubber pad are fixed, and the opening of the quantitative plate is upward. Tilt the rubber pad into the guide slot and gently push it into the sealing machine inlet (Diagram.11). The instrument can automatically drive the rubber pad into the instrument until the instrument grabs the rubber pad then loosens the hand. (Diagram.12)

9 About 12 seconds, after the seal is finished, The quantitative plate and the quantitative rubber pad are simultaneously released from the instrument (Diagram.13). Take off the seal's quantitative plate (Diagram.14). The back of the quantitative plate (paper surface) can mark the relevant information of the water sample. For example, water samples are like drinking water, surface water, underground water and so on. Sample number, sampling time, sampling point, sample dilution times, culture start time, etc.

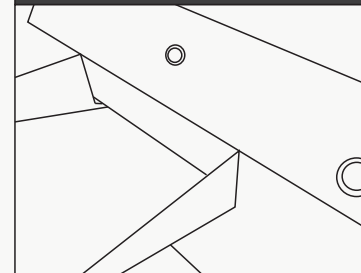
10 In the incubator, if the total coliform and Escherichia coli were detected, The temperature of the incubator is set to $36 \pm 1^\circ\text{C}$. For determination of fecal coliform (thermotolerant coliform) The incubator was set at $44.5 \pm 0.2^\circ\text{C}$ and incubate $24\text{h} \pm 2\text{h}$.

11 According to the positive results (yellow was positive for total and fecal coliform). The positive of Escherichia coli was yellow and fluorescence(Diagram.15), No color change was negative for total, fecal coliform, and no fluorescence for Escherichia coli negative. Count the number of yellow or fluorescent positive holes, check 51 or 97 hole MPN table (Diagram.16). The results was the number of coliform bacteria in 100 ml water sample. According to the dilution multiple, the results are calculated according to the following formula:

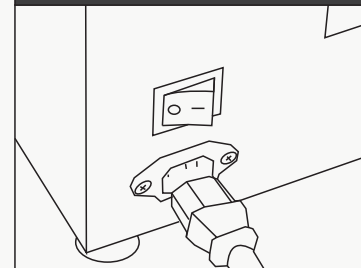
$$\text{Coliform (MPN/L)} = \text{MPN value} \times \text{dilution multiple} \times 1000\text{mL}/100\text{mL}$$



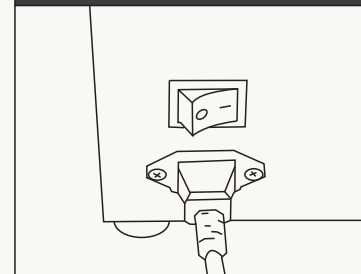
Tray guide slot installation diagram 1



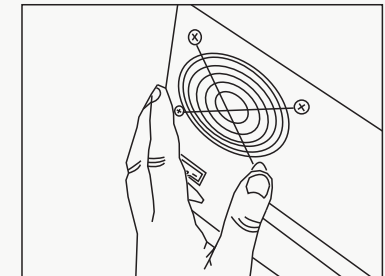
Tray guide slot installation diagram 2



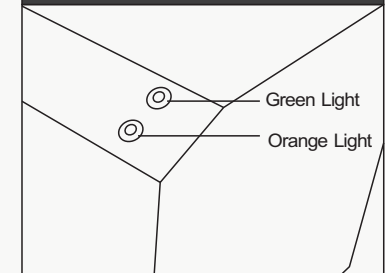
Power line installation diagram 3



Power line installation diagram 4



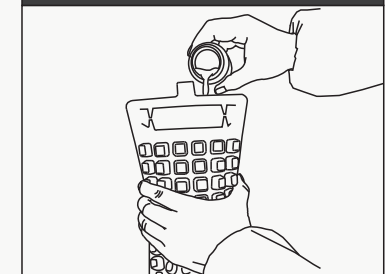
Instrument opening check diagram 5



Instrument opening check diagram 6



Inspection operation diagram 7



Inspection operation diagram 8

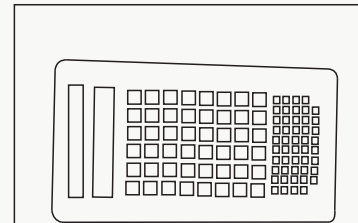
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3 Take out the tray guide slot, Insert the tray guide slot into the hole in front of the sealing machine. Confirm that the tray guide slot is installed in place and ensure that the installation is firm (Diagram.1, Diagram.2).

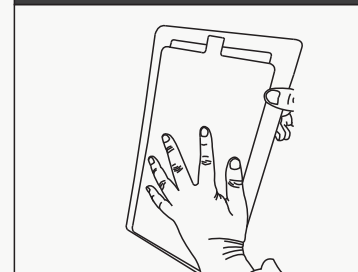
4 Confirm that the power switch is closed behind this device. And then take out the power line, Plug the power line into the instrument's power jack. Then insert the socket at the other end (Diagram.3, Diagram.4).

5 Turn on the power supply and turn on the power switch (Diagram. 4).Pay attention to checking the radiator fan start work (Diagram.5). At this point the orange indicator lights up. Until the green light is on (Diagram.6), The instrument reaches the working temperature. The preheating is completed.

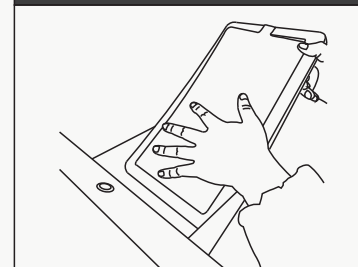
6 The enzyme substrate test reagent was added to the quantitative bottle containing 100 ml of water sample (Diagram. 7). Cover the bottle cap, gently shake and mix well. Do not turn over the shock to avoid a lot of bubbles. After fully dissolved, the solution in the quantitative bottle is poured into the quantitative detection plate (Diagram. 8). Tap the lower part of the detection plate to drain bubbles from the detection plate.



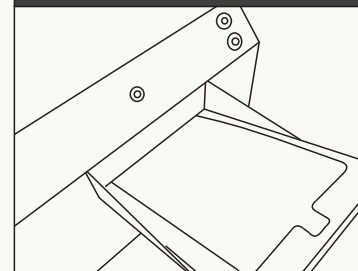
Inspection operation diagram 9



Inspection operation diagram 10

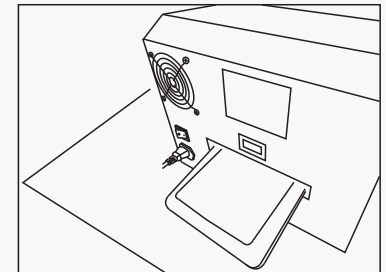


Inspection operation diagram 11

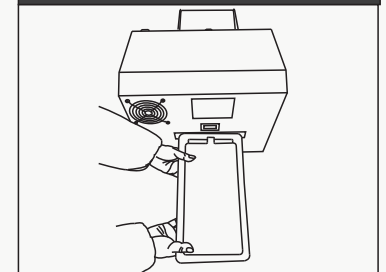


Inspection operation diagram 12

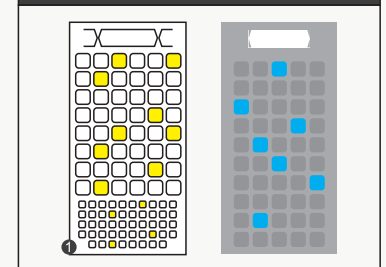
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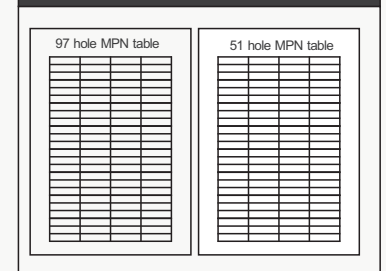
Inspection operation diagram 13



Inspection operation diagram 14



Inspection result observation diagram 15



The calculation diagram of the test result 16