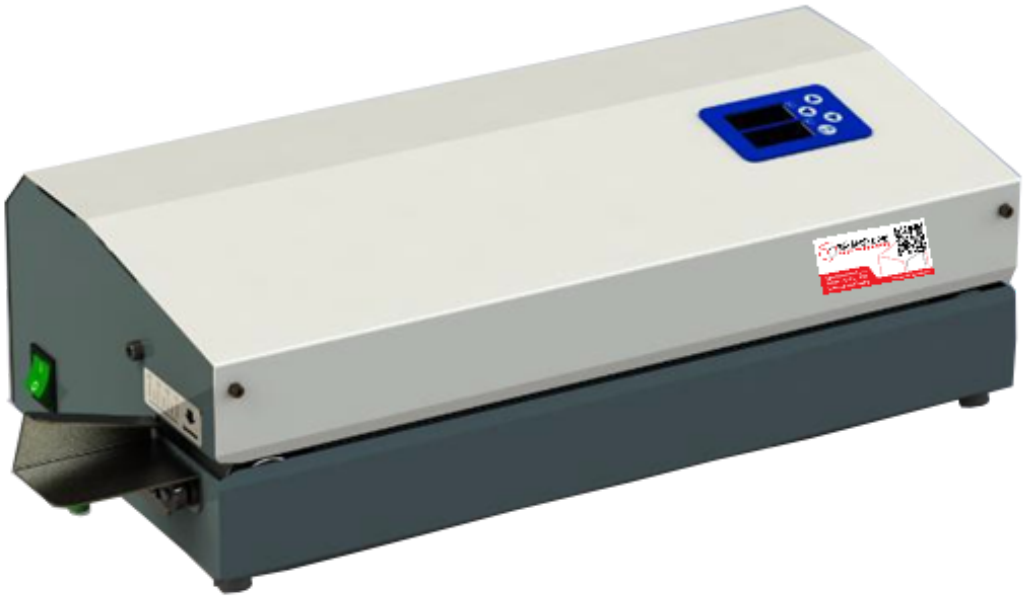
STEP UP 100-L Pharmaceutical Sealer
(Manual)



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COMPANY INTRODUCTION

"We believe packaging solutions for our customers should be simple, easy to use, ergonomic and sustainable.

We offer a wide range of packaging products and solutions, and web design and engineer production lines specifically built to your needs.

Our motto is simple: Sal-Tech Easy Packaging makes your life simpler through engineering and good design, and your job less stressful. We Keep Things Together."

Gunnar Salbæk
Owner/CEO

About Sal-Tech Easy Packaging

Sal-Tech Easy Packaging offers a wide range of solutions for simple and reliable packaging of your products.

If it is a standard or a special solution that's needed for your assignment, we have a creative input to solve your needs, securing you an up-to-date packaging application.

Sal-Tech Easy Packaging is 100% owned by Gunnar Salbæk,

CVR no.: DK18429098 Salbæk Easy Packaging v/Gunnar Bjørn Salbæk.

Our team works together on a 100% virtual platform and therefore please forward all correspondence and invoices to support@sal-tech.com.

Bank connection: Nordea Denmark.

Table of Content

I. About

Thank you for choosing series of sealing machine. To maximize its performance, please carefully read this manual and install and operate it by strictly following this manual to ensure its safety and reliability in use. We recommend placing the manual in an accessible place for better reference during the operation.

II. Applied Area

STEP UP 100-L Pharmaceutical Sealer is capable of continuous paper-plastic bag, 3D paper-plastic bag and paper-paper bag sealing. The sealing process satisfies the requirements of high-temperature steam sterilization, low-temperature ethylene oxide sterilization, hydrogen peroxide plasma sterilization and radiation sterilization. Seal quality meets corresponding international standards and *GMP* recognition.

Sealable materials:

Compliance with *EN868-5* and *YY/T 0698-5* bags and volumes;
Compliance with *EN868-4* and *YY/T0698-4* paper bags;
High density polyethylene materials (such as *Tyvek*);
Aluminum foiled materials.
Non-sealable materials:
Polyethylene film;
Soft and hard film;
Nylon membrane;
OPP film.

III. Features

See the main machine composition in Figure 1.

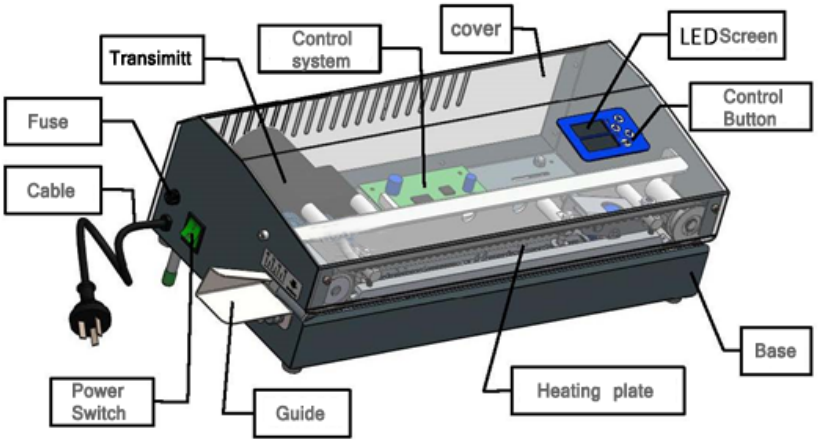


Figure 1

Main Features:

- Automatic micro-computer temperature control, easy operation, large-screen display, high reliability and continuous sealing;
- The machine complies with WS310.2-2016 Central Sterile Supply Department (CSSD) Part Ⅱ: Standard for Operating Procedures of Cleaning, Disinfection and Sterilization, GB/T19633.2-2015/ ISO 11607-2-2006, EN868-5-2009 and YY/T 0698-2009.
- It has passed the ISO9001 certification and CE certification including 2006/42/EC (Machinery Command), 2006/95/EC (Electric Command) and 2004/108/EC (EMC Directive).
- This machine is not listed in Class I, II and III medical instruments regulated by Regulation on the Supervision and Administration of Medical Devices (Order of the State Council of the People's Republic of China No. 276), so it will not be managed as a medical instrument.

IV. Technical Parameters

Seal speed: 10m/min;
Seal margin: 0-35mm adjustable;
Seal width: 12mm;
Work temperature: 60-220℃;
Temperature precision: ≤1%;
AC power:230V 50Hz
Power: 500W;
Max current: 3.2A;
Fuse: 5A×2;
Dimension: 482×242×157mm (L×W×H) (without support and guide plate);
Weight: 11kg;
Sealing orientation: from left;

Storage:
Temperature: 10-40℃;
Humidity: ≤ 90% (R.H);
Atmospheric pressure: 50-106kPa.

V. Safety

- The device is strictly tested before leaving the factory to ensure each one is both reliably qualified and safe.
- Safety instruction, nameplates and labels of the product must remain complete during installation and usage.
- Please make sure that the device is complete before use. If it has any damage, please contact the manufacturer or authorized agents. Flawed devices are strictly forbidden to continue the installation and usage.
- Before switching on it, please make sure there is no unsafe signs shown in the device. If you have any questions, please contact the manufacturer or authorized agents.
- Do not use the device with the power cord, plug or device itself damaged. If the power cord or the device has been damaged, it must be repaired by the manufacturer or an authorized agent before use.
- The device's matched power cord must be the original one provided by the manufacturer and be connected to a reliable grounded outlet with a secure stable voltage.
- As the device contains high temperature and high pressure components, its installation and operation in places with explosion hazards are forbidden.

- The device must be moved between the two places with equal temperature to prevent dew condensation, or the power source can be connected only when dew evaporates. Forced power connection will cause electric shock and damage to the device.
- Please power off or disconnect the plug when the device is idle.
- Be sure to cut off the power before cleaning! Only dry or slightly moistened soft cloth and neutral cleaning agent are permitted for cleaning.

Danger: Never allow any wet stuff to touch the device!

- No sharp or flat hard objects can be sent through the cutting and reel-feeding hole so as to avoid any harm to the device.
- It is forbidden to insert any objects into the thermovent to avoid electric shock or any damage to the device.
- If the device is found unsafe, please stop using it immediately.
- The users must reach 15 years old (ref Denmark Rules for Machine Users).

VI. Main Characteristics

- Two-line high-light LED display, touchable keyboard, temperature setting and display.
- Temperature controlled by a microcomputer, accuracy ±1%, working temperature range of 60~220℃;
- High-speed increase of temperature: only 60 seconds required from 20℃to 180℃ and only 10 seconds required to increase the normal working temperature from 120℃to 180℃. Highly efficient and energy saving;
- Safe operation: If the sealing temperature is out of setting more than ±4℃, the machine will automatically stop working, which effectively guarantees the seal quality and safety.
- Sealing speed: 10m/min; automatic sealing test using light-control technique;
- Sealing width: 12mm; Sealing indexes meet standards WS310.2-2016 and YY/T 0698.5-2009;
- Seal margin: 0~35mm adjustable;
- With adjustable fixed-force system, the machine can seal 3D pouches and other paper pouches with different thickness by automatically adjusting sealing pressure;
- Automatic failure warning and automatic detection during working;
- Advanced flat ceramic heating components feature quick increase of temperature, well-distributed heating, high-temperature resistance, long service life and high heat efficiency;

- The machine is fitted with complete components such as the cutting machine, ultra silent roller worktable, multipurpose workstation of the sealing device, and other peripheral accessories to improve its utilization rate and bring convenience to users.

VII. Installation

- Check the completeness of the packing box. If there is obvious deformation or mechanical damage, please contact our company or agents promptly to figure out the reason and responsibility.
- After the packaging box is opened, carefully remove the machine and the accessories from the box. Check the device and the accessories according to the appendix I, the packing list. Record the missing parts if necessary.

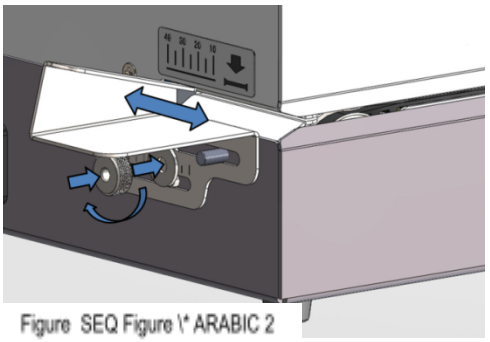


Figure SEQ Figure * ARABIC 2

- Please preserve the packing box, attaching files and other accessories properly for future use.
- At least 5cm-long room around the device is left for the flow of air during the installation. Avoid vibration, dust, corrosive or explosive gases, extreme temperature and humidity, etc.
- The machine requires a flat and stable worktable (multipurpose worktable designed by Yifeng Medical is highly recommended).
- Guide plate installation:First, screw off the left-side nut of the device anticlockwise and take down the gaskets. Second, place the guide plate and put gaskets on it with nuts tightened clockwise.
- Support Installation: Lift the machine, screw 2 supporting legs in the bag inside the 2

- M6 hole on the bottom of the machine and make a 15° angel between the machine and table for better use.
- Power connection:
- Make sure that the AC power supply should be230V, 50Hz;
- Insert one end of the power cord matching the machine into the its power interface, and plug the other end into a 3-pin power socket which has been properly grounded.

Warning: The power socket must be properly grounded ！ ！

VIII. *Installation Qualification* (*IQ*)

- According to the requirements of GB/T19633.2-2015/ISO11607-2：2006 for sealing quality, we should use test cards to perform the installation identification (IQ).
- Installation test means that the machine has to take a validation of performance before it is put into use.
- The sealing quality is related to the sealing temperature, pressure and speed. All these parameters should be adjusted in view of reels produced by different companies so as to reach certain sealing quality.
- The parameters of the machine, such as sealing temperature and pressure, can be noticeably shown on the testing area of test cards.

Note: For a better examination and record for the installation identification result, our test cards are highly recommended

According to ISO11607-2, the sealing strip has to meet the following requirements:

Continuous and complete.

Sealing width≥6mm.

No channel or unsealing area.

No perforation or torn parts.

No material layering or separation.

After the detection of low temperature and high temperature test cards, it is necessary to use the sealing strength tester to test sealing strength. The test will determine whether the sealing strength can meet the requirements before and after the sterilization process.

IX. System Operations

Refer to Figure 3 for the whole operating process.

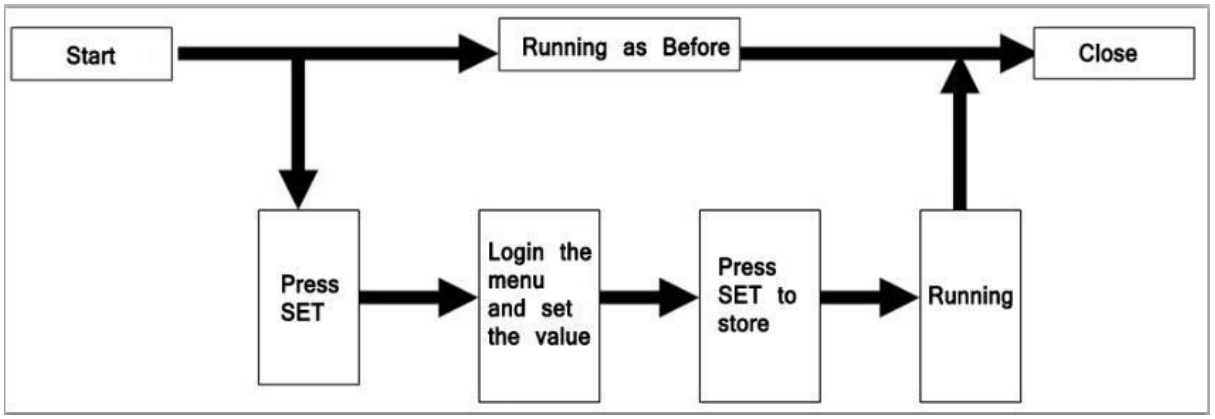


Figure 3

Buttons

The button distribution of the device operate panel is shown in Figure 4.

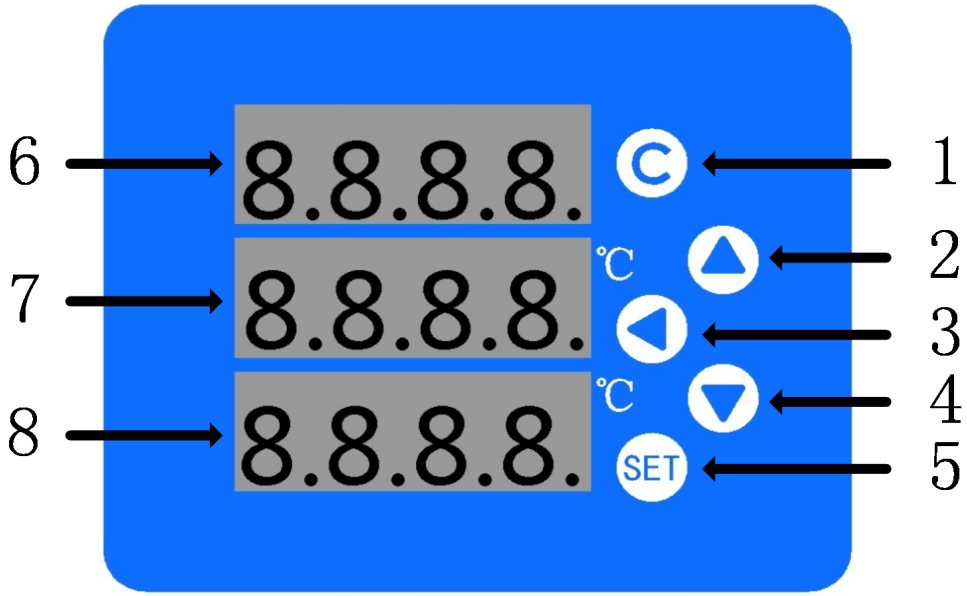


Figure 4

1-Counting 2-Plus 3-Left 4-Minus 5-Set 6-Counting Display 7-Current Temp. 8-Set Temp.

Caution: Use only your finger to operate the buttons.

Start

Plug in and turn on the switch. The screen displays *8.8.8.8. 8.8.8.8. 8.8.8.8.* with a beep. The machine starts to heat up according to the last set temperature.

Temperature setting

Press SET button. Current temperature screen displays *SET* and digit on set temperature screen starts blinking. Press plus and minus button to change the number. Press Left button to alter among digits. Press set button once again to confirm changes.

4. Reset the Counting:

Under the work mode, press Counting button and enter the counting Reset screen, the Counting display will blink and show the current counting number. Press the Set Temp. button to reset the number and show “0.0.0.0.”, press the Counting to save and quit the setting.

5. Counting ON/OFF setting:

Under work mode, press and hold Counting button, it will show the counting function is ON or OFF, please turn ON/OFF by the Set Temp. button. Hold the Counting button to save and quit. The max number is 9999.

6. Work:

When the Current temperature reaches Set Temp, the sealer is ready to work. When the pouch is fed into the machine, the transmission system will start automatically, The counting display will show numbers, if this function is OFF, it will show “----”. if there is no pouch inside within 10 seconds, the transmission system will stop automatically to save energy.

Attention: Seal temperature depends on materials. Please refer to material suppliers for correct seal temperature. Otherwise refer to the following:

EN868-5 required paper-plastic bags: 170-190℃

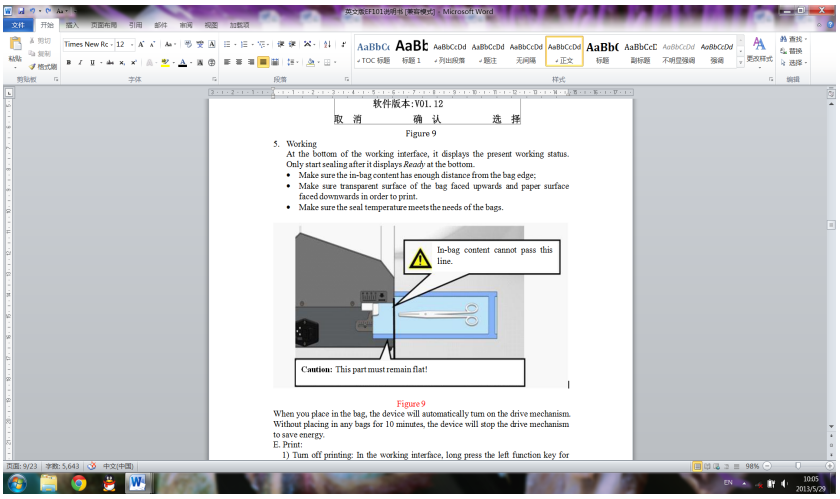
High density polyethylene material(*Tyvek*): 110-130℃

Caution: The right seal temperature has to be determined by seal test results.

Work

After reaching set temperature, feed in seal bag from the left side. The transmission mechanic is automatically activated. After 10 seconds without new fed bags, transmission stops automatically to save energy.

- Make sure the in-bag content has enough distance from the bag edge (Figure 5);
- Make sure transparent surface of the bag faced upwards and paper surface faced downwards;
- Make sure the seal temperature meets the needs of the bags.



Temperature calibration

Because the heating component is constantly under high temperature, the seal temperature might have minor deviation due to the small change of the temperature parameter. For this reason we designed the function of seal temperature calibration. Please refer to the following steps:

Press and hold the SET button, enter the submenu, the current temperature screen displays “--0”, press SET again, the screen displays “--L”, the set temperature screen is blinking, now users can set the data lock (password), press SHIFT button to move the position of blinking digit on the set temperature screen, use PLUS and MINUS button to set the blinking digit. When the digit is set to “168”, the device is unlocked. Now users can set the temperature calibration value.When the digit is set to other number, the device is locked, then users can not set the temperature calibration value.

If the current temperature is higher than real seal temperature, move the cursor to the far left, adjust “0” to “-”, temperature value to be adjusted will be shown on the far right. During operation, users can adjust the value gradually (MAX 5) based on the seal quality until it meets the requirement; If the current temperature is lower than real seal temperature, when the cursor

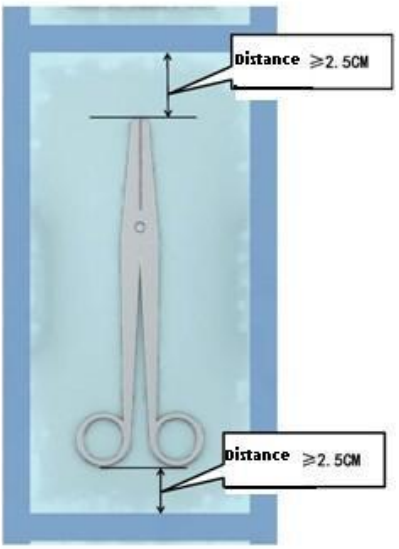
on the far left shows “0”, adjust the value on the far right gradually (MAX 5). After the adjustment, users must change “--L” to numbers other than “168” in case of misoperation. To save and quit this adjustment or calibration, press and hold SET button, the screen will return to normal work status.

Attention: This calibration must be done by authorized person, otherwise the machine may be abnormal.

Attention: Current temperature screen displays *HHH* when it exceeds 230℃.

> ⚠ **Parameters will be saved automatically when sudden shutdown or blackout occurs.**

X. Seal Operations



According to WS310.1-2016 (9.8: Packaging Material, Management Code of Central Sterile Supply Department (CSSD)) and Chapter II Sealable Materials of this manual, users should choose suitable paper-plastic or paper-paper packaging reels. In addition, users need to check the sealing strength of both sides of a reel before use.

Adjustment of the Guide Plate: Located at the left side of the machine, the guide plate can be moved within a range of 0~35mm. Counterclockwise loosen the nut until the guide plate can be moved back and forth. To move the guide plate outward will make the sealing line close to the edge of the pouch; while to move it inward will make the sealing line away from the edge of the pouch (see Figure 2). After the adjustment is completed, clockwise turn the nut until the guide plate is firmly fixed.

According to the size of the medical instrument to be packaged, select suitable sterilization reels. Put medical instruments in pouches and seal the other side with the machine. In accordance with the relevant provisions of WS310.2-2016, the distance between the sealing line and the medical instrument inside the pouch should be more than 2.5cm, which has to be considered when setting up the cutting length (see Figure 6).

When placing medical instruments into pouches, please pay attention to the following items: a. Properly put specially-shaped and sharp items in pouches and use protective sheaths for them

if it's necessary; b. Medical instruments should be placed into pouches with proper sizes to avoid over-pressure, and their volume should not exceed 75% volume of pouches to prevent any breakage during sterilization and ensure their safety in use.

After a medical instrument is put into a pouch, make the pouch be fed into the machine along the guide plate at the left side of the machine with the paper surface downward. Then the driving mechanism will start working automatically.

How to make sure the sealing edge is straight, smooth and parallel with the edge of the pouch, when no roller worktable is equipped: Hold each end of a pouch with your hands, and flatten the section of the pouch to be fed into the sealer; Prior to sealing, the opening (edge) of the pouch should be parallel with the machine; The pouch should be supported by your hand to ensure right movement direction, after the driving mechanism is switched on. With the pouch completely fed into the machine, the operator should hold the medical instrument inside the pouch until the sealing work is over.

Note: For higher sealing efficiency, please choose the ultra silent roller worktable or multipurpose sealing workstation.

To improve efficiency, preparation is needed. Make sure paper plastic pouch should be fed into the machine parallel to it.

Remove all the sealed pouches after sealing and let them cool down naturally.

Suggestion: Because the material used by paper-plastic pouch (paper-paper pouch) manufacturers are different , test cards or test pouches should be used to test the sealing effect and the dedicated tester should be used to verify the sealing strength. In addition, suitable sealing temperature should be confirmed to ensure sealing quality. Sealing temperatures differ because of different types and thickness of materials used to produce pouches.

To ensure better sealing result, please choose the pouches which are in accordance with the National standards (It is suggested that you purchase reels and high/low-temperature sealing test cards or pouches.)

XI. *Operation Qualification* (*OQ*)

According to 5.7.10 Sealing and Packaging Requirements, Part Ⅱ: Standard for Operating Procedures of Cleaning, Disinfection and Sterilization, WS310.2-2016 Central Sterile Supply Department (CSSD) and relevant regulations in GB/T19633.2-2015/ISO11607-2:2006, the accuracy of parameters and the sealing quality of the machine should be inspected before it works every day. Therefore, test cards and sealing strength testers should be used for OQ.

OQ refers to the sealing performance verification during the normal operation of the machine.

- To test whether the sealing edge has any tube-like space or opening;
- To test whether the pressure is too high or too low;
- To test whether the sealing temperature is too high or too low;
- To test whether sealing is continuous or the sealing edge has leaks;

It is suggested that users should finish the sealing test before and after daily sealing work, and the test sample should be stored for query.

To inspect and record operation qualification result and ensure the normal operation of the machine, it is recommended that our reels, sealing test cards for paper-plastic pouches or Tyvek low-temperature sealing test cards should be used to inspect the sealing result under high and low temperature.

The sealing quality will be better guaranteed, if our sealing strength tester is also used to inspect the sealing strength.

XII. Testing Method

1. **Sealing Test Card**:

Our test cards can be used to validate whether the sealing result can meet the standards and serve as proof to record the performance parameters of the machine. (see Figure 7). They can clearly show the sealing result and its defects. Therefore, sealing problems can be found out quickly and the sealing parameters can be adjusted accordingly to satisfy the sealing requirements and ensure the sealing quality. At the same time, test cards can be stored for validation or query for sealing results of the sealing machine.

Figure 7

There are two types of sealing test cards: high-temperature (180℃) paper-plastic pouch test cards and Tyvek low-temperature (120℃) sealing test cards.

2. **Sealing Strength Tester**

Our Sealing Strength Testers (see Figure 8) are specially manufactured according to YY/T

0698.5-2009 standard, Packaging Materials for Terminal Sterilized Medical Devices-Part 5: Heat and Self-sealable Pouches and Reels of Paper and Plastic Film Construction-Requirements and Test Methods, to test whether the sealing strength of heat-sealed pouches and reels can meet the requirements. The tester can be connected with a computer (an option to be equipped with our sealing machine) and relevant parameters can be stored with special software to realize the query for previous sealing results.

Figure 8

Note: This test should be taken after the sterilization of pouches.

It is suggested that users should insist on routine inspection with test cards and sealing strength testers according to the requirements of WS310.2-2016 5.7.10 and ISO 11607. By doing so, the sealing quality can be effectively guaranteed. Especially after the sealing material is changed or the machine is repaired, the use of test cards and sealing strength testers becomes more important and necessary.

If users cannot take such tests, please contact us for chargeable inspection service. We can arrange people to take an on-site test for you or you can mail the sample or the machine to us for inspection and a relevant test report.

XIII. Instructions for Using the Seal-Opening Test Card

The sealing test card is required for operation identification (QQ) in ISO 11607-2.2006, Confirmation Requirements for Forming, Seal and Assembly Process, Part 2, Obtain the evidence of whether the installed equipment runs within the expected determined limit and simultaneously form the detection pattern of the document recording process, For comprehensive detection and recording of performance parameters for sealing equipment, It can visually display the sealing effect and sealing quality of the sealing equipment, Highlight its sealing defect, Print and record together with the operation identification program provided by the sealer, Timely find sealing problems and timely adjust sealing parameters, Make it meet the

normal sealing needs, Ensure the quality of the sealing mouth, And can be archived as the later verification of the batch of sealing product sealing effect of the goods traceability.

a. Scope of Application: Sepers for paper and plastic bags

b. Test card usage time: After startup, check once before officially start work or before each lot number seal.

c. How to use the test card:

As shown in the figure above: remove the test card, check whether the test card is complete, no fold and not contaminated, and then fill the tested department, equipment number, sealing temperature, sealing speed, sealing pressure, sealing time, signature, date and other parameters, the test temperature is set to the daily temperature of sealing with sterilization bag, sealing speed according to the actual equipment situation, (sealing speed: 10m / min; pressure: 85N). After filling in, cut the paper plastic bag of 200mm specification for 40mm with the paper cutter, and then put the test card between the transparent surface and the paper plastic bag into the sealing machine for sealing test, and the black surface is in contact with the plastic surface. After sealing, observe the sealing effect for any illustrated sealing defects, and archive the test card pattern for traceability.

d. Operation identification of the sealing machine ISO-1167

The indentation shall meet the following requirements to ensure the integrity of the sealing effect:

1、 Continuous sealing width and complete seal
2、 No channel or Kaifeng
3、 No perforation or tear
4、 No material stratification or separation

e. The apearance effect of the sealing test card should be judged from the following aspects:

1、 Test the sealing line for passages or openings

2、 Test if the seal pressure is too high or too low

3、 Test whether the seal temperature is too high or too low

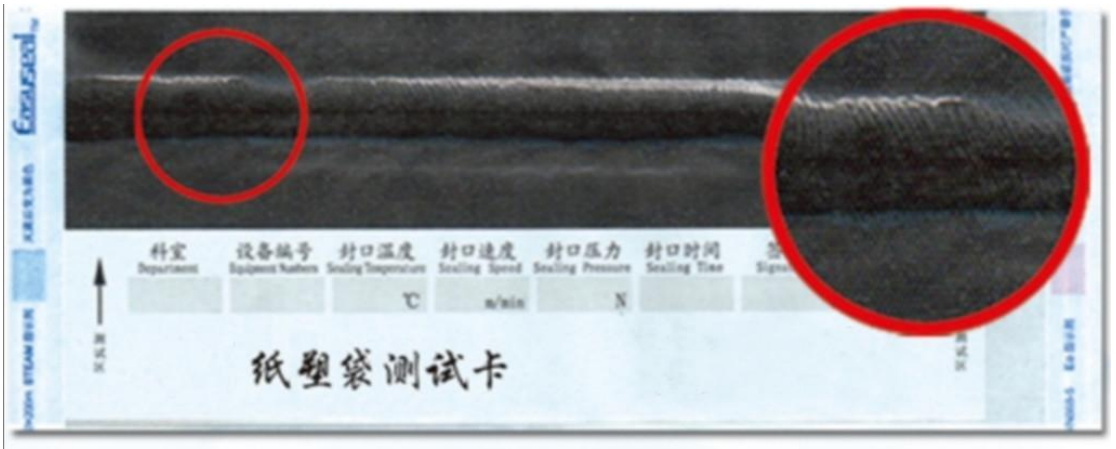
4、 Test the seal for continuity or leaks

As shown in the figure below

图①正确效果

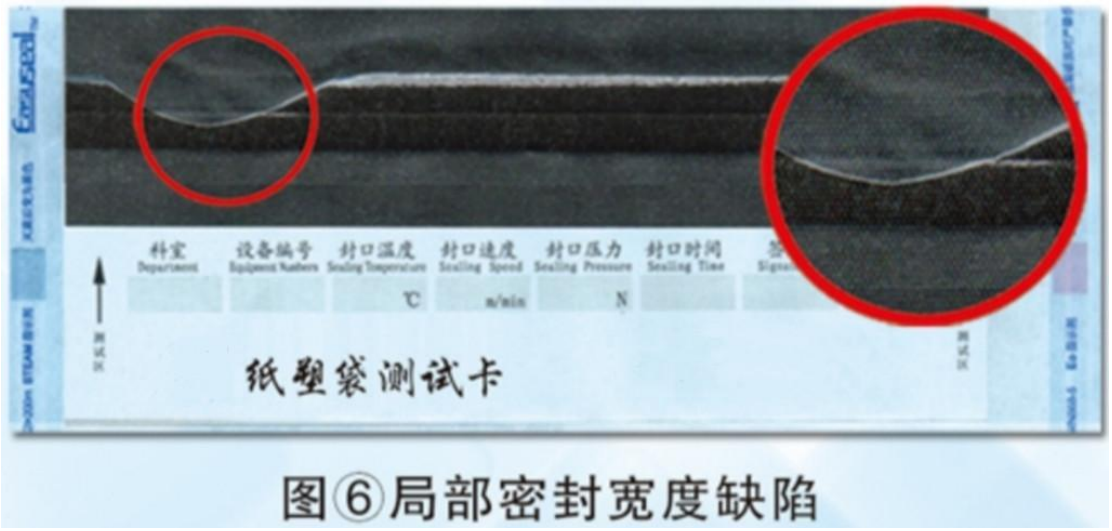
图②封口温度低

图③封合压力高



图④封合压力低

图⑤密封线有通道



图⑥局部密封宽度缺陷

XIV. Equipment Maintenance

Fuse replacement

If the machine cannot operate normally after it is switched on, the fuse should be inspected for any damage. Before replacing the fuse, turn off the machine and disconnect the power line from the machine. Then pry the fuse base off and remove it from the side of the switch base with a slotted screwdriver. Replace the fuse if it is blown and re-fix the fuse base to the original place.

If the machine still cannot be started after fixing a new fuse or the new fuse disconnects from the circuit again, an inspection should be made by a professional person according to the trouble-shooting table or you can directly contact our sales agent or our company.

Note: A spare fuse is included in the the machine accessories.

Stuck Pouch Removal

When a pouch is stuck in the machine and stops moving forward due to wrinkles or foreign matters, turn off the machine immediately and pull out the pouch slowly. Then, check whether the pouch is complete. If so, you can restart the machine but try to avoid the same accident. Fragments of pouches that fall into the machine or are stuck in the driving mechanism will affect the operation of the machine. At that time, you should ask a professional person to remove all the fragments and then restart the machine.

Replacement of Main control panel

After confirming the failure in the main control panel, turn off the power switch first, and disconnect the plug. Next, dismantle the cover of reel-feeding chamber. Then, dismantle the top

cover of the machine and verify whether the specification of the new control panel is the same as that of the old one. At last, look over the appendix and wiring diagram to replace the main control panel. Please check the connection according to the diagram in case the machine cannot work as usual because of wrong wiring.

Machine cleaning

Turn off the machine and unplug it before cleaning its outside surface;

Clean the housing and the screen with a soft cloth and a mild cleaning agent, such as soap. Abrasive materials are forbidden (such as steel wool);

Don't insert any objects into thermovents and the reel-feeding hole of cutting mechanism to avoid electric shock or any damage to the machine when cleaning;

Don't make any water drop or tiny things enter the machine through thermovents, the reel-feeding hole of the cutting mechanism, when you clean the objects near the machine. Otherwise, failure in mechanical and electronic control system of the machine may happen.

Caution: Anything with water are prohibited from touching the machine !

Troubleshoot table

Problem	Cause	Solution
Start-up failure	improper power connection power switch improperly pressed broken fuse heat plate overheat protection burned overheat protection component	power on with 230V 50Hz press switch repeatedly replace fuse reboot after cooled down to room temperature check overheat protection component in room temperature and replace it if

	source power out of order	open circuit check the source power and replace it by direct current if not standard
Motor failure	bad gear engagement bad input voltage entrance photoelectric switch fail motor fail bad motor connection mainboard components damaged	power on with 230V 50Hz check the photoelectric-mainboard connection and replace the bad switch if necessary check the motor-mainboard connection and replace the bad motor if necessary Reconnect the motor record and call manufacturer for maintenance
Display error	bad display connection mainboard components damaged	check screen-mainboard connection and replace the bad screen if necessary record and call manufacturer for maintenance
HHH on screen	sensor fail overheat protection mainboard components damaged	check the ground connection and restart restart until cooling down to room temperature record and call manufacturer for maintenance
Display error but machine running	program crash screen fail mainboard components damaged	reboot the device check screen-mainboard connection and replace the bad screen if necessary record and call manufacturer for maintenance
Buttons no response	bad button connection bad button mainboard components damaged	check the button-mainboard connection replace the membrane switch record and call manufacturer for maintenance
Sudden shutdown	bad connection bad heat plate mainboard components damaged	check the heat plate-mainboard connection replace the heat components record and call manufacturer for maintenance
Heat plate does not	bad input voltage	plug in 230V 50Hz

reach the setting temperature	heat plate fail temperature sensor fail mainboard components damaged	replace heating components replace temperature sensor record and call manufacturer for maintenance
Temperature out of control	temperature sensor fail mainboard components damaged	replace heat components record and call manufacturer for maintenance
Display out of order	program crash screen fail mainboard components damaged	reboot the device check screen-mainboard connection and replace the bad screen if necessary record and call manufacturer for maintenance
Outage	program crash heat plate overheated motor fail mainboard components damaged	reboot the device reboot in room temperature check motor-mainboard connection and replace the bad motor if necessary record and call manufacturer for maintenance
Wrinkled or melted plastic film	setting temperature too high biased current temperature inaccurate temperature control	lower the setting temperature Refer to chapter IX for temperature calibration record and call manufacturer for maintenance
Loose seal	setting temperature too low inaccurate temperature control plastic film too thick pressure wheel short of pressure liquid or smutch in seal area foreign matter in seal area smutch on press wheel	raise the setting temperature record and call manufacturer for maintenance raise the setting temperature adjust or replace the spring get a new bag remove the foreign matter

		clean up
Rugged seal	setting temperature too low inaccurate temperature control plastic film too thick pressure wheel short of pressure liquid or smutch in seal area foreign matter in seal area smutch on press wheel	raise the setting temperature record and call manufacturer for maintenance raise the setting temperature adjust or replace the spring get a new bag remove the foreign matter clean up
Lack of accessories	unable to cut paper-plastic bags low seal efficiency inconvenient bag placement unable to test seal strength unable to test seal results	choose single-deck or double-deck roll bag cutting machine choose roller table or flat table choose specific stainless steel multifunctional table choose seal strength tester choose test card and magnifier

XV. Precautions

Do not open the machine housing in order to prevent electric shock or scald. All the machine repairs and upgrades must be done by authorized people.

Please power off the device when it is in idle.

When fail happens, power off immediately; Troubleshoot before next use.

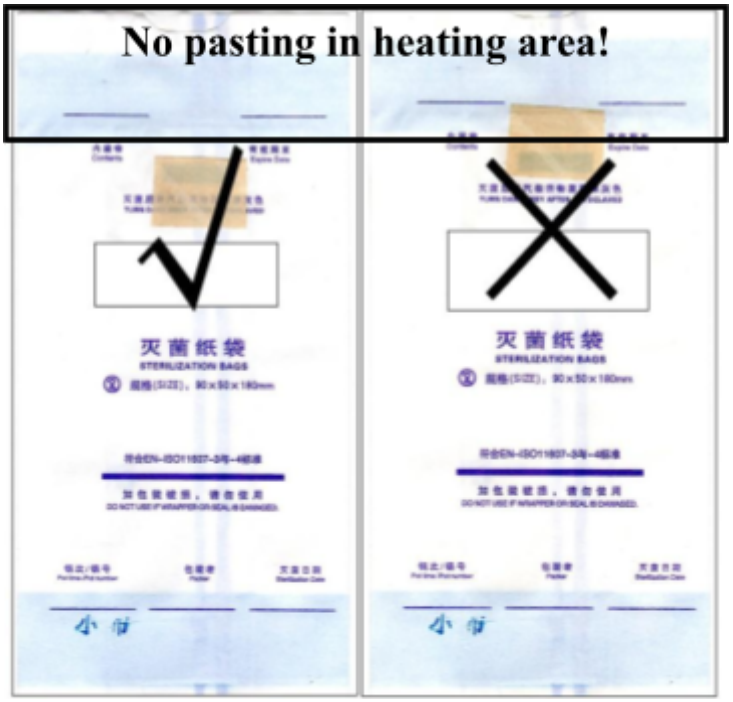
Seal operations of Tyvek bags (120℃ low temperature bag) at high temperature (higher than 150℃) are strictly prohibited.

Forced startup with fail occurring is strictly prohibited; Machine can only be used after maintenance by specialist and authorized person.

Static cause great damage to mainboard; User must ensure a good grounding.

Avoid adhesive tapes in transmission mechanism and sticking on pressure wheels.

Conclusion: All the sealing device tests, seal strength tests and sealing regulations are to insure the content highly germ-free since sterilization, as well as to insure the machine working normally.



XVI. After-sale service

Free service:

promises 1 year after-sale service, from the date of the invoice (or one month after the date of production without invoice).

offers free maintenance including renewal parts and device exchange in guarantee period (except power cable being vulnerable and color ribbon being expendable).

Contract provisions come first.

Charged service:

Charges for the service beyond the guarantee period.
In guarantee period, charges for maintenance if the cause is one of the followings:
Body parts damaged by artificial force;
Dust accumulation, machine corrosion, moldiness, biological violation and inside liquid due to bad environment;
Melted materials attached to mechanical parts due to improper use;
Use of improper seal materials not mentioned in instructions;
No reliable ground connection;
Voltage used beyond rating;
Irresistible natural disasters;
Use of unoriginal parts;
Not following this manual;
Unauthorized modification, dismantle or maintenance;
Unable to prove the device is in guarantee period or the device is a product.
Maintenance procedure:

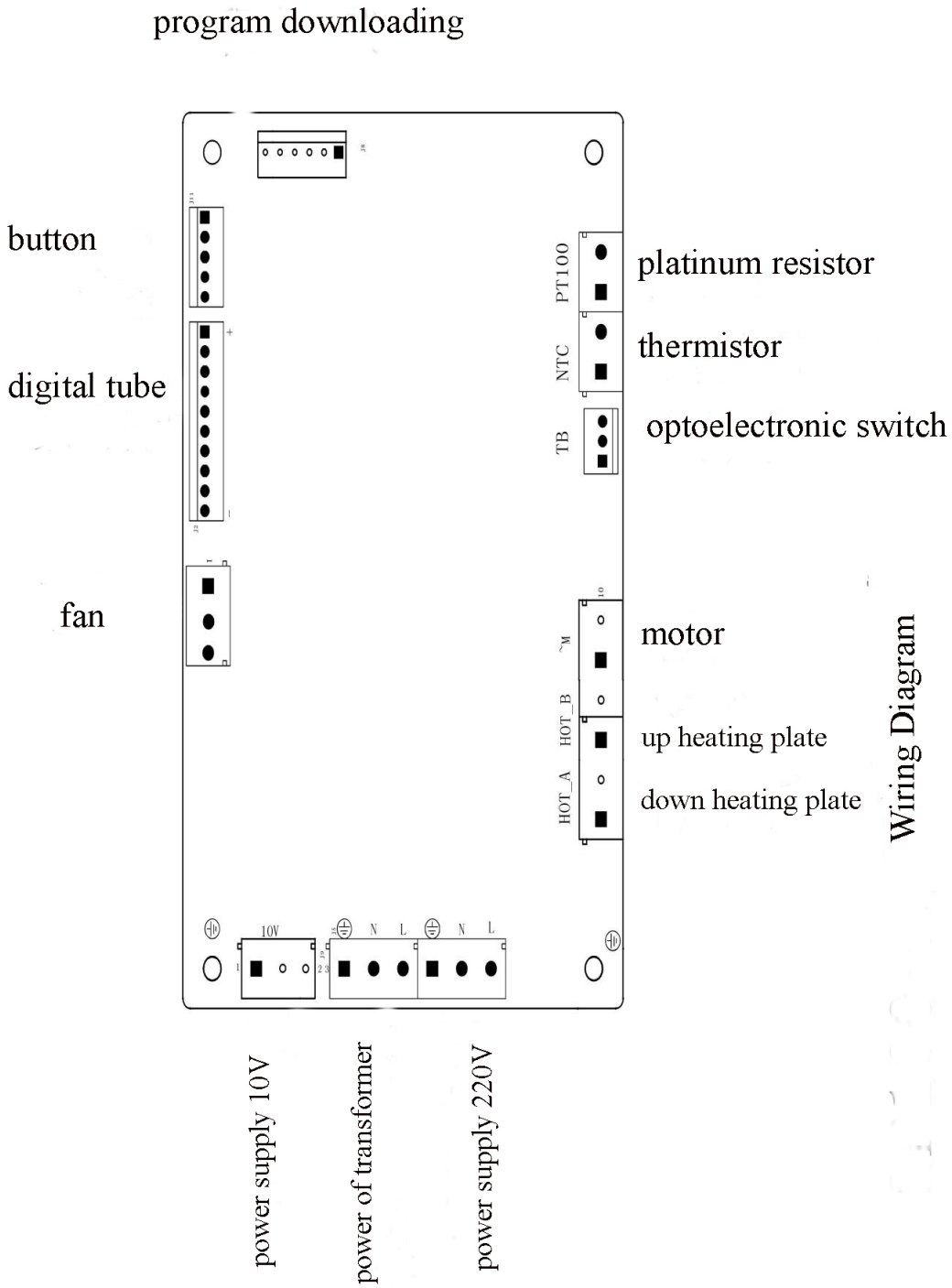
Maintenance from a licensed agent or requires following steps:

Caution: Users must provide the device number and service number to receive after-sale service.

XVII. Appendix

Enclosure 1: Pack list

Enclosure 2: Wiring diagram



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