Resealer RSAF-100 User Manual



Message from RayStar Health



Welcome, and thank you for choosing this high-quality product.

This technical manual has been provided to ensure you get the most out of your device. Please note that this manual has been translated from its original Mandarin to better serve you. While we have strived for accuracy, some minor translation inconsistencies may occur. If any part of the documentation is unclear, please do not hesitate to contact us for immediate clarification.

As the authorized sales and support agent for this product, RayStar Health is your dedicated partner throughout its lifecycle. We bridge the gap between our international suppliers and you, our valued customer. Our services are designed to provide a seamless experience, which includes:

- **Direct Fulfilment:** Managing order processing and drop-shipping to ensure you receive your product efficiently.
- **Ongoing Support:** Providing continuous technical service and support directly in your local language.
- **Expert Liaison:** Serving as your advocate and translator for any communication with the manufacturer, ensuring all questions and issues are resolved promptly and accurately.

Our role is to ensure that your experience with this product is supported by expert, localized assistance from purchase through to operation.

Should you require any assistance, please do not hesitate to contact our support team.

Sincerely,

The Team at RayStar Health

<u>www.RayStarHealth.com</u> Support@RayStarHealth.com

Safety Precautions

Please read this manual before using the product. Although this product is designed and manufactured to ensure safe use, improper use or failure to follow instructions may result in personal injury or property damage. To ensure correct usage, please read this manual carefully before operating the product. Do not discard this manual and keep it in an easily accessible location.

Safety instructions in this manual are marked with standardized symbols. For your safety, please strictly follow the instructions associated with these symbols.

| Warnings | Interpretation |
|-----------|---|
| 4 | Electric Shock Hazard Warning : Ignoring instructions marked with this symbol may result in severe injury or death. |
| | Do not ignore instructions marked with this symbol which may result in personal injury or property damage. |
| | Biohazard warning: To avoid biohazards, do not touch contaminated components with bare hands. Handle contaminated parts according to bio-safety standard procedures to prevent adverse consequences. |
| 30 ELEGY. | Pinch warning: Ignoring this warning and placing fingers/hands into moving mechanical parts may cause personal injury. |
| <u></u> | Burn hazard: Resealer utilizes high heat of more than 140°C and can cause burn on skin. Be careful and ensure the system is shut off during any maintenance or loading of foil. |

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1. Purpose and Features

- This machine is suitable for plastic test tube film heat-sealing of specifications 13×75mm and 13×100mm.
- It has the characteristics of saving storage space, convenient access, uniform sealing, neat edge cutting, and good sealing performance.
- The special test tube rack holds 100 tubes per rack, and after sealing, are cut into 100 independent tube seals.
- The original rack can be directly put into the refrigerator for storage.
- Please ensure that the correct Rack Model RSRK-100 is utilized.



2. Installation and Placement Requirements

- The fully automatic vacuum blood collection tube sealing machine should be placed in a dry and ventilated room, avoiding proximity to heat sources or direct sunlight. At least 30cm of space should be reserved on both sides and the back, and at least 30cm of space on the top.
- Select an AC power supply of 220V, 50Hz with a good grounding wire.
- Frequently check whether the grounding wire of the machine is in good contact to ensure safe electricity use.
- If any fault occurs during the trial operation, please contact us in time. Do not disassemble the machine with electricity yourself to avoid accidental electrocution.

3. Main Technical Parameters

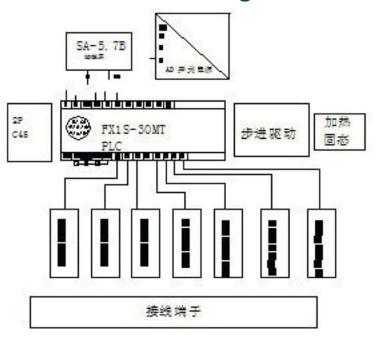
| Product | RSAF-100 | Tube Diameter | 12mm, 13mm | |
|-----------------|---|----------------------|--------------|--|
| Model | Floor Standing | Tube Length | 75mm, 100mm | |
| Depth | 85cm | Tube Material | PET | |
| Width | 60cm | Accepted Rack Type | RSRK-100 | |
| Height | 150cm | Throughput/Hr | 36,000/hr | |
| Weight | 220kg | Throughput/Rack | 10 secs | |
| Accepted Height | Identical | Voltage | AC 220V 50HZ | |
| WARNINGS | Physical Hazard / Biological Hazard / Burn Hazard | | | |

Working principle:

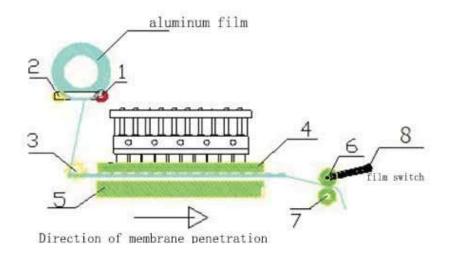
- One-key touch operation, plastic test tube film heat-sealing and closing, uniform and airtight sealing, the whole process is automatically carried out in the form of PLC programming intelligence.
- Sealing speed: 10 secs/rack. ~600 tubes/min, 100 tubes/load.
- Sealing method: The test tube rack is manually pushed into the system.
 100 test tubes are sealed at the same time and automatically cut into
 100 independent seals, and the test tube rack automatically exits the warehouse after sealing.
- Scope of application: Suitable for plastic test tubes of 13×75mm, 13×100mm.

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4. Circuit Structure Diagram

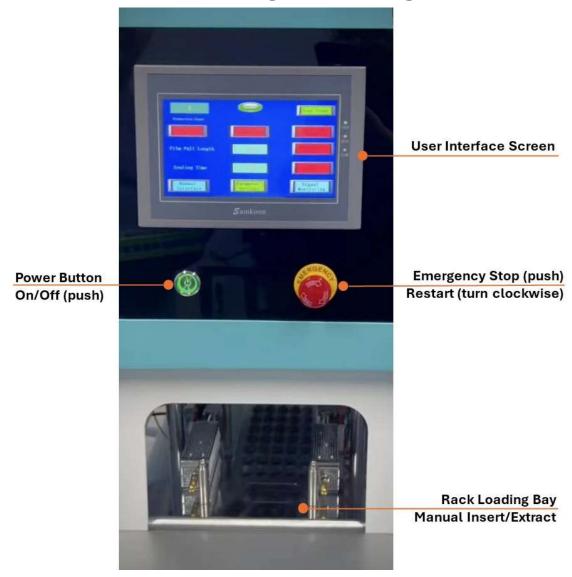


5. Installation & Replacement of Aluminum Foil



- 1. Moving axis
- 2. Fixed axis
- 3. Counting axis
- 4. Upper pressure film plate
- 5. Lower pressure membrane plate
- 6. Rubber axis
- 7. Squeeze film bearing
- 8. Handle
- Open the movable door on the left side of the machine and place the aluminum film above shafts (1) and (2) as shown in the figure.
- Thread the aluminum film between shafts ① and ②, and wind it under shaft ③ (counting shaft).
- Pass between the film pressing plates (4) and (5).
- Open the right movable door, press down the handle (8) to loosen the film pressing shaft (7), pass the film between shafts (6) and (7), return the handle (8) to its position, and the film replacement is completed. (Note: The aluminum film has a front and a back. If the aluminum film is placed upside down, it will not be able to seal.)

6. Instructions for Starting and Running



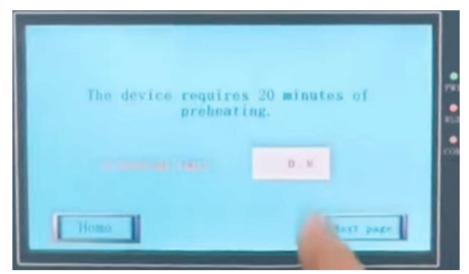
Overview image of the front of the Resealer RSAF-100.

The **RED** button is the Emergency Stop or E-Stop button. Use this in case of an emergency where the device needs to be stopped.

To restart the device after an Emergency Stop, simply turn the red knob clockwise until the monitor indicates system restart.

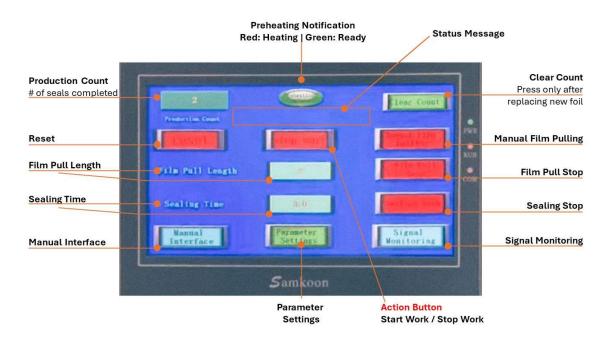
a) Connect the power plug, press the 'POWER' button to turn on the power of the working area, and wait for the machine to preheat automatically. Each time the instrument is powered on, it will require approximately 20 minutes before the device is heated to the predetermined temperature of 140°C.



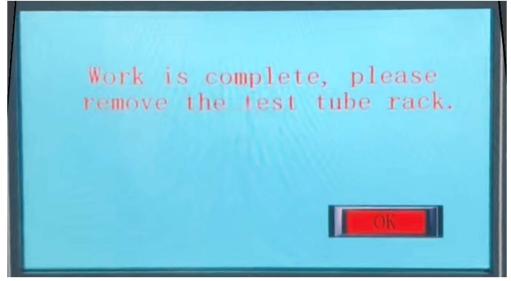


b) After preheating is completed, click the "OK" button on the text display to enter the operation interface.

See image below – dark blue background.

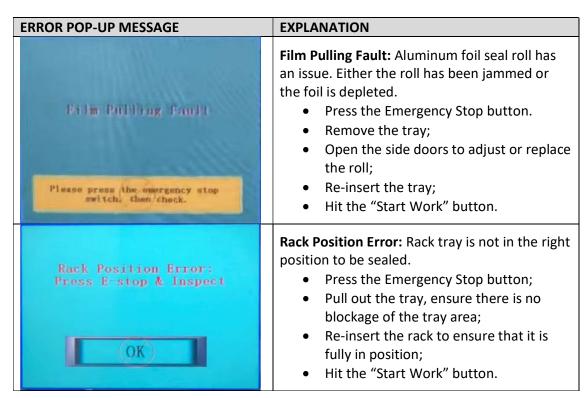


- c) Put the test tube rack correctly, and make sure that the test tube rack is placed flat and pushed into the working tray area.
- d) After confirmation, click the 'Start Work' button to start automatic film sealing. The re-sealing time is about 5 seconds.
- e) The display shows that the work is completed, the film sealing is finished, and the test tube rack can be taken out.



f) If you need to stop the work immediately during the film sealing process, please press the 'Stop Work' button.





7. Instructions for Setting the Temperature

PV: Measured value, displays the current actual temperature SV: Set value, the temperature can be set according to the situation

SET: Set temperature mode

- In the normal display state of SV/PV, press the 'SET' key once to make the SV display blink.
- Press the key to find the digit of the desired set temperature, then press the key to set the desired temperature value.
- After setting, press the 'SET' key again to return to the normal display state of SV/PV.



Factory-set temperature: 130-140°C Can be adjusted according to user requirements.

8. Safety Precautions

- It is strictly forbidden to cover the top of the plastic test tube film heat-sealing machine with debris or put hands on the top. The machine generates high temperature during operation, which is not a fault. Please avoid scalding.
- When the heat-sealing part is working, it is strictly forbidden to put hands into it to avoid scalding or cutting.
- Frequently check whether the grounding wire of the machine is in good contact to ensure safe electricity use.

If any fault occurs during the operation of the machine, please contact us. Do not disassemble the machine with electricity by yourself to accidental electrocution.

9. Daily Maintenance

- Before starting work, check whether the working tray is contaminated. If so, clean the dirt on the working tray with 95% alcohol to avoid premature aging and corrosion.
- Frequently check whether there is dirt on the sealing ring to ensure the sealing quality.
- Frequently check whether the grounding wire of the machine is in good contact to ensure safe electricity use.
- In a low-temperature environment, if the sealing is not firm, the sealing temperature and sealing time should be increased. The sealing temperature should be adjusted from low to high to ensure more uniform heat-sealing temperature and better sealing effect.
- Remove and dispose of the used punched-out foil. This is accessible by the door at the bottom right corner of the instrument.

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10. Common Faults and Troubleshooting Methods

| Fault | Cause | Troubleshooting Method | |
|---|--|--|--|
| | Temperature too low. | Properly adjust heat-sealing temperature and sealing time. | |
| Loose seal | Aging of sealing spring | Replace the spring. | |
| | Mismatch between film and test-tube materials. | Replace the test tubes suitable for this machine. | |
| Test tubes being lifted while being sealed | a) Inaccurate placement of test tube rack b) Missing Aluminum foil or gaps in the foil. Test tubes sticking to the heating head | a) Press the "STOP" key. b) Take out long tweezers from the toolbox and clamp down the carried-up test tubes one by one c) Rotate the STOP key clockwise along the arrow direction, the machine will reset automatically, and press the start key again to resume work | |
| Uneven film | Aging of the mandrel spring | Replace the spring | |
| edge cutting | Dull toothed cutter | Repair the toothed cutter edge or replace it | |
| | Burned temperature switch | Replace the switch | |
| Temperature control | Burned electric heating tube | Replace the electric heating tube | |
| failure | Malfunctioning temperature controller | Repair or replace the temperature controller | |
| Inaccurate film length | Displacement or failure of the counting switch | Adjust the position of the counting switch | |
| | Excessively fast motor speed | Adjust the motor | |

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11. Packing List of Electrical Components

| Name | Model | Unit | Quantity |
|--------------------|-----------------|-------|----------|
| Re-sealing machine | Sealing machine | Set | 1 |
| Online User Manual | RSAF-100 Online | Piece | 1 |

Maintenance Department

E-mail: support@raystarhealth.com

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