

NITRASEAL

Thermal sealer

Operating Instructions

English



General information

Dear customer,


We thank you for purchasing your NITRASEAL Thermal sealer from the Sirona company.

The technical documentation supplied is also part of the product. You should always keep this documentation within reach.


These **Operating Instructions** describe your Thermal sealer with maximum possible equipment.

Prior to start-up, you must read all Operating Instructions to familiarize yourself with the Thermal sealer.


To prevent any personal injury or material damage, pay special attention to any notes printed in bold type or marked in one of the ways indicated below:

 **NOTICE**

Additional information, explanation or supplement

 **CAUTION**

The information provided under this keyword directly concerns the functioning of the product and/or warns against possible operating errors.

 **WARNING**

This warning symbol warns against possible hazards for the product or the user.

In case you get stuck despite having thoroughly studied the Operating Instructions, please contact your dental depot.

Your Hygiene Team



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1 Warning and safety information

Intended use

Even when it is not strictly necessary, the instrument wrapping indicates a special care paid to the hygiene and sterilisation and it is especially effective for a proper infection safety.

Wrapping the instruments means to preserve their sterile condition also during the period following the sterilisation and until their use on the patient.

A properly sealed envelope makes up a protection barrier that prevents contamination from the external environment.

For this to be true, it is necessary to use envelopes that have been properly sealed.

The NITRASEAL Thermal Sealer guarantees the best efficiency and reliability for the sealing system, avoiding the risk of overheating and burning.

Inexperienced staff can easily use this equipment with a quick training.

General recommendations

In order to maintain the instruments for a long time and avoid problems it is recommended to read the following instruction carefully.

1. Wrap the instruments one by one.
2. If more instruments must be wrapped together make sure to place instruments of same material (on the contrary, dark spots could appear at the contact point due to electrolysis).
3. It is recommended to use good quality paper and propylene material. The paper surface (more porous) must allow the vapour exit. The NITRASEAL envelopes has been widely tested in order to give the best results both for quality and durability.
4. For the sterilisation of wrapped instruments, it is necessary to use longer sterilisation times. The vapour must actually filter within the envelopes and this requires longer times.
5. Most autoclaves normally require a time of 12 minutes at a temperature of 134 °C and 30 minutes at 121 °C.
6. The envelopes should be placed inside the autoclave with the paper surface up. This allows the vapour exit easier during the drying phase.
7. Do not overload the sterilisation chamber! Leave a space for steam circulation.
8. In case of sterilisation of wrapped hand pieces and turbines, try to arrange the envelopes so that the head of the hand piece is turned towards the upper

surface of the chamber. This will allow the lubricant in excess to filter out protecting the life of the instruments.

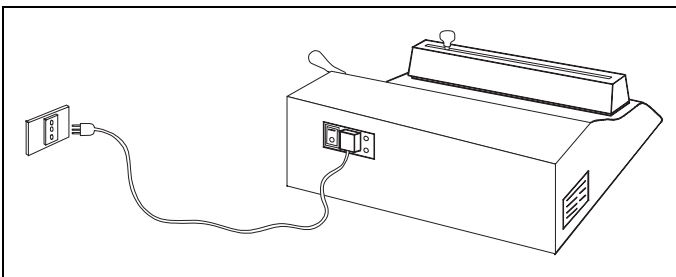
9. If the autoclave does not have an efficient drying system, the envelopes could remain damp. In this case, it is recommended not to use the wrapping technique, since there is a risk of damaging the instruments. Consult your supplier to work out this problem.

Safety information

Before using Your NITRASEAL Thermal Sealer, read these safety instructions carefully. Non-compliance with these standards could cause incidents or damage to the appliance.

- Do not introduce fingers in the sealing area when the machine is on.
- Do not introduce fingers under the protection cover of the sealing area when the pressure lever is lowered.
- Do not insert your fingers in the sliding surface of the cutter.
- Keep the area around the sealer clean and dry.
- Never disassemble the NITRASEAL thermal sealer when it is powered, since the high internal voltage could be dangerous.
- In case of impossibility for disconnecting the power, turn to OFF the breaker of the electrical switchboard and place a sign Work in Progress on the breaker if this is far and not visible by the person that is carrying out the maintenance.
- Clean the appliance with a soft damp cloth after unplugging the power supply cable. Do not use solvents on the product label.
- Check that the machine is electrically grounded in compliance with the standard of the country of installation.
- Do not remove the back label and check that the sealer is supplied with proper voltage value.

Electrical connection



Check that the power data indicated on the label on the rear side of the sealer corresponds to the values available in the place of installation.

The equipment must be connected through the mains cable to a socket provided with a ground connection in compliance with the standard of the country of installation.

CAUTION

Do not bend the cable and do not place any object on it.

2 Technical data

Net weight	10 kg
Power supply	230 V/50 Hz
Power	200 W
Fuse	5 x 20 4A T
CE mark	

3 Familiarisation

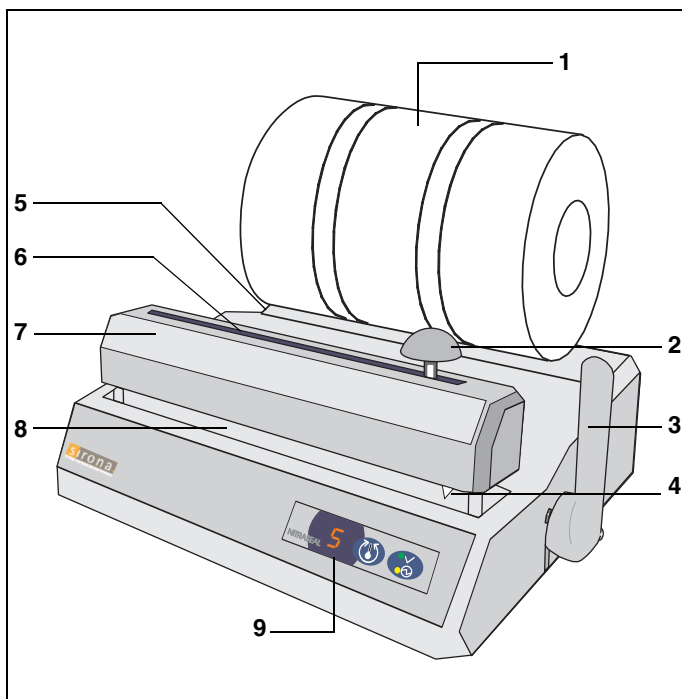
3.1 Devices used in the NITRASEAL Thermal Sealer Model provided with digital adjustment

Main features

- 12 mm sealing, standard-compliant
- Automatic control heating resistance
- Return of the blade after cutting
- Automatic sealing start by pulling down the lever, and with acoustic and visual indication (flashing of the yellow Led)
- Automatic sealing stop, with acoustic and visual indication

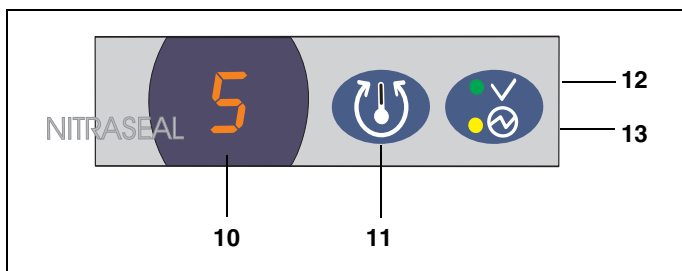
Overview NITRASEAL

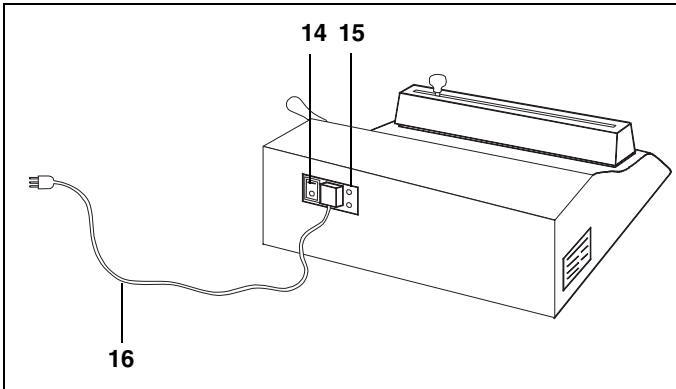
- | | |
|---|-------------------------|
| 1 | Rolls |
| 2 | Cutter knob |
| 3 | Sealing lever |
| 4 | Retractable cutter |
| 5 | Roll holder |
| 6 | Soldering movable block |
| 7 | Cutter sliding guide |
| 8 | Heating resistance |
| 9 | Digital control panel |



Digital control panel

- | | |
|----|--|
| 10 | Temperature display |
| 11 | Key for soldering temperature adjustment |
| 12 | Mains on green LED |
| 13 | Soldering yellow LED |

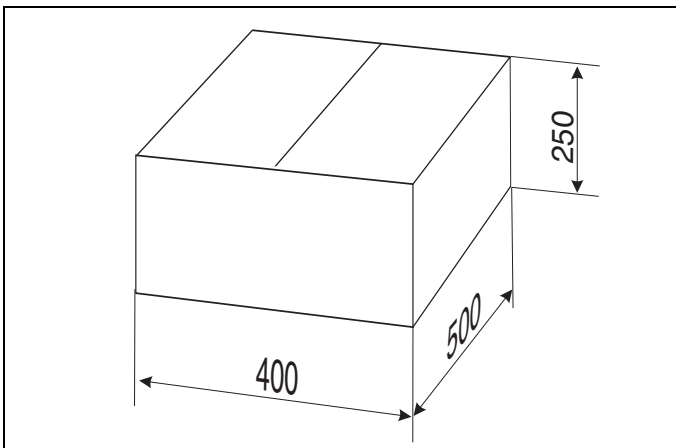




Back NITRASEAL

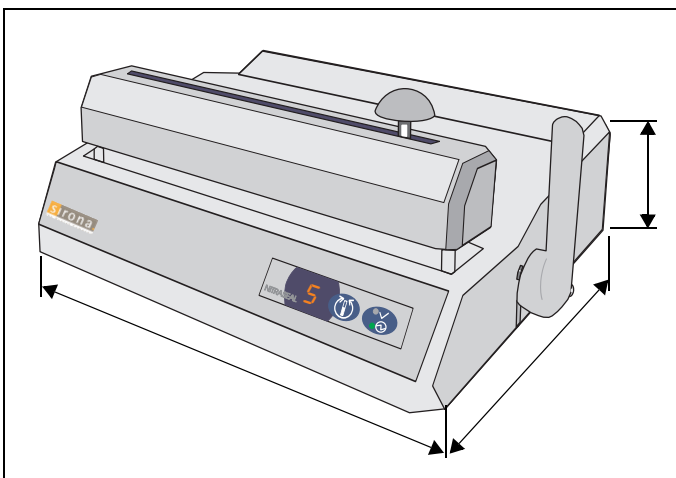
- 14 ON/OFF switch
- 15 Fuse holder
- 16 Power cable

3.2 Dimensions



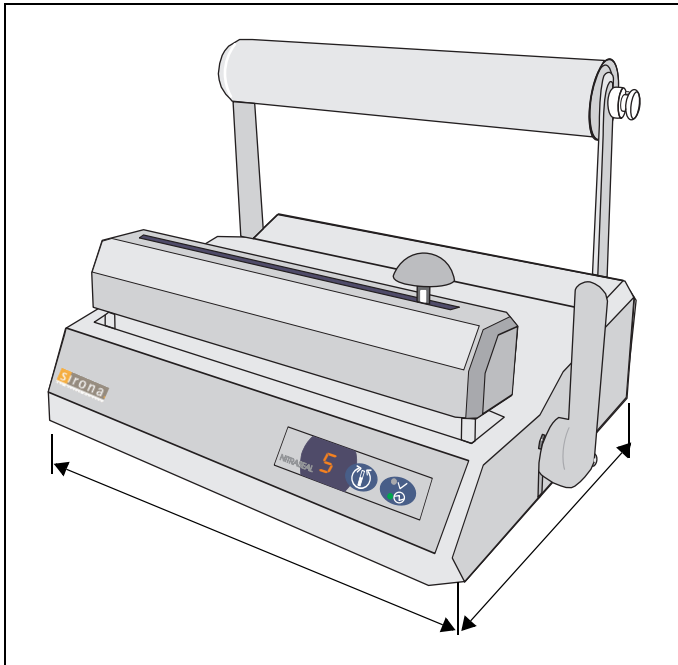
Package dimensions and weight

- Width 400 mm
- Depth 500 mm
- Height 250 mm
- Gross weight 10,7 kg



External dimensions

- Width 435 mm
- Depth 310 mm
- Height 160 mm (ohne Rolle)



**Dimensions of the model complete with
roll-holder and roll**

Width	435 mm
Depth	310 mm
Height with roll- holder and roll	330 ÷ 430 mm

4 Installation

4.1 Preliminary information

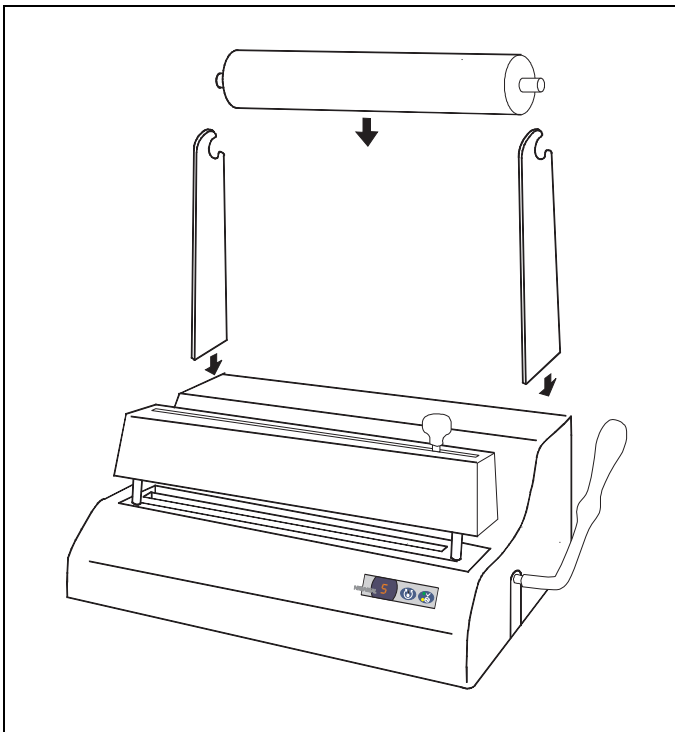
The NITRASEAL thermal sealer has been tested at the factory.

On receiving the sealer control that the packing is whole and keep it in case it should be shipped.

Open the packing and control that the delivery corresponds exactly to the technical specifications and that no apparent damage is present.

In case of damage or missing parts inform the forwarder, Sirona Dental Systems GmbH and its area agent immediately.

4.2 To install the equipment follow these Instructions



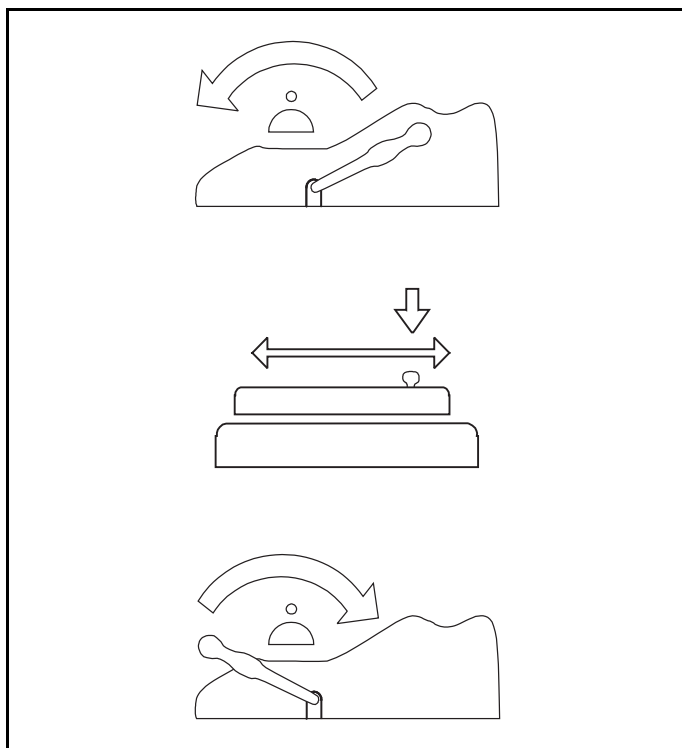
1. Place the sealer on a flat surface and with enough room around to be ergonomically operative.
2. Do not install the sealer next to sinks or the like, to avoid contact with water and a consequent short-circuit of the electrical part.
3. Do not place the appliance near heat sources.
4. Install the machine in a room with normal air circulation.
5. Check that the power supply cable is not bent and is free up to the plug.
6. In case of model provided with roll-holder, insert the supports of the roll-holder into their slots, then fit in the roll on the supports.
7. Insert the power plug, and the sealer is ready.

i NOTICE

The first sealing operations could produce a slight smoke and an unpleasant smell. This fact, due to substances used on assembling the machine, is temporary and will disappear after a few sealing operations.

5 Operation

1. Connect the power supply cable of the NITRASEAL Thermal Sealer to a mains socket after having checked the electrical requirements reported on the label.
2. Turn on the equipment by the power switch placed on the back side; the green and the yellow light indicators will turn on; after a few seconds the yellow indicator will switch off and only the green one will stay on to signal that the appliance is ready.
3. Place a sterilisation roll on the special stand. In case of model with a roll-holder, place the rolls in the rod and put it on the supports.
4. Set the potentiometer to a middle position. For the adjustment see the paragraph ADJUSTMENTS.
5. Insert the envelope under the roll behind the heating element and push it until it goes beyond the heating element and appears on the front side.



⚠ CAUTION

The envelope must have the transparent (polypropylene) side up.

6. Advance the envelope for all the length of the instrument to be enveloped.
7. To seal the envelope grasp the lever and pull it forwards and down. In this way the sealing element is lowered and presses the envelope against the heating element.
8. On complete run of the lever the green indication will start to flash to signal that the sealing is in progress (this phase lasts 9 and 4 seconds depending on the machine is cold and hot respectively).
9. When sealing is over the yellow light switches on and an acoustic message is played.
10. Cut the envelope before releasing the lever. To do this push the knob placed over the sealing element and move it firmly along the sliding track of the cutter both rightwards and leftwards.
11. Return the lever to rest position to lift the sealing element and free the envelope just cut.

 CAUTION

the yellow indication will stay on for about 3 or 4 seconds at the end of the sealing. This pause is necessary to avoid overheating; during this time it is not possible to carry out another sealing.

- 12.** In order to seal the opposite side of the envelope and so block the instrument within its protective cover, the envelope must now be turned and inserted under the sealing element from the front; then carry out a new sealing.

 CAUTION


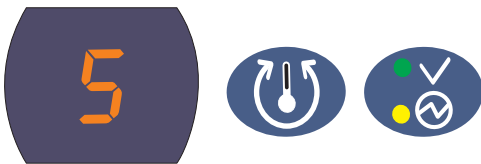
In order to avoid the sealing operations along the outer margins of the heating element, place the sterilisation roll on its special stand, so that the envelope may slide along the middle part of the heating element.

6 Adjustments

The NITRASEAL Thermal Sealer does not usually require any adjustment.

Because of variety of envelopes and bags on the market, the equipment is provided with a device for the temperature adjustment.

Digital Adjustments

	<p>For the models equipped with digital potentiometer, the temperature adjustment of the sealing operation is carried out by pushing the centre key in the control front panel.</p>
	<p>For models with seven-segments display, the temperature value corresponds to a number from 1 to 8, where (1) corresponds a temperature of 160 °C and (8) a temperature of 180 °C.</p>
<p>The normal setting value is 5</p>	

English

7 Troubleshooting

Problem	Solution
The power green light stays off.	Check the electrical plug Check the fuses Call the service
The protection canvas on the resistor is burnished or burnt	Call the service for the replacement
The paper is not clearly cut	Replace the cutter or call the service
The Sealer seals but the yellow light stays off	Call the service for the LED replacement
The heating element smokes or sends out a bad smell	If the problem persists after the first few sealing operations, call the service
The envelope sealing is not satisfactory	Increase the temperature by turning the adjustment key
The envelope sealing is burnished (or burnt)	Decrease the temperature by turning the adjustment key

The sealer is provided with a device for temperature control and a safety thermal fuse.

In case of mains voltage surge or improper use, the fuse will burn or wear off so that it has to be replaced.

If the fuse is burnt, call the service for a replacement or send the appliance directly to the nearest service centre.

We mark that the function of the fuse is for protecting the thermal sealer from possible worse and more expensive damage and that the fuse is a specific element required by the safety standards.

i NOTICE

Use only and exclusively original spare parts and apply to an authorised technical service centre

Sirona Dental Systems GmbH is not responsible for any faults or damage caused by appliances tampered with by non authorised personnel or in case of fault of parts that are not original.

8 Alarms

NITRASEAL Thermal Sealer is equipped with a signaling system that uses acoustic and visual indications to alert the operator and simplify the service activity.

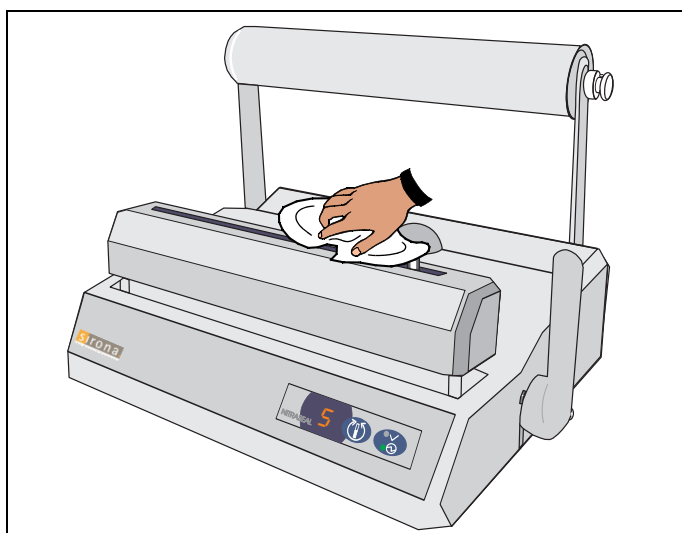
In case of alarm both the yellow and green indicators will flash.

Table of Alarms

Alarm code	Cause
1 flash	Break of the probe
2 flashes	Short circuit of the probe
3 flashes after 10 seconds from START	The resistance does not heat up
4 flashes	Fault in the double safety circuit (it appears at the start of the cycle)

In case of alarms call the Service.

9 Maintenance



The appliance does not require any ordinary maintenance.

To wash the outside of the appliance, use a damp cloth after making sure that the power supply cable has been unplugged.

For an extra maintenance call the Service.

We reserve the right to make any alterations which may be required due to technical improvements.

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