

# Success<sup>®</sup> Cartridge Furnace **OPERATION MANUAL**



For Assistance, Call DENTSPLY Prosthetics  
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Technical: ext. 54212  
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# DENTSPLY Trubyte Success Cartridge Furnace Operation Manual

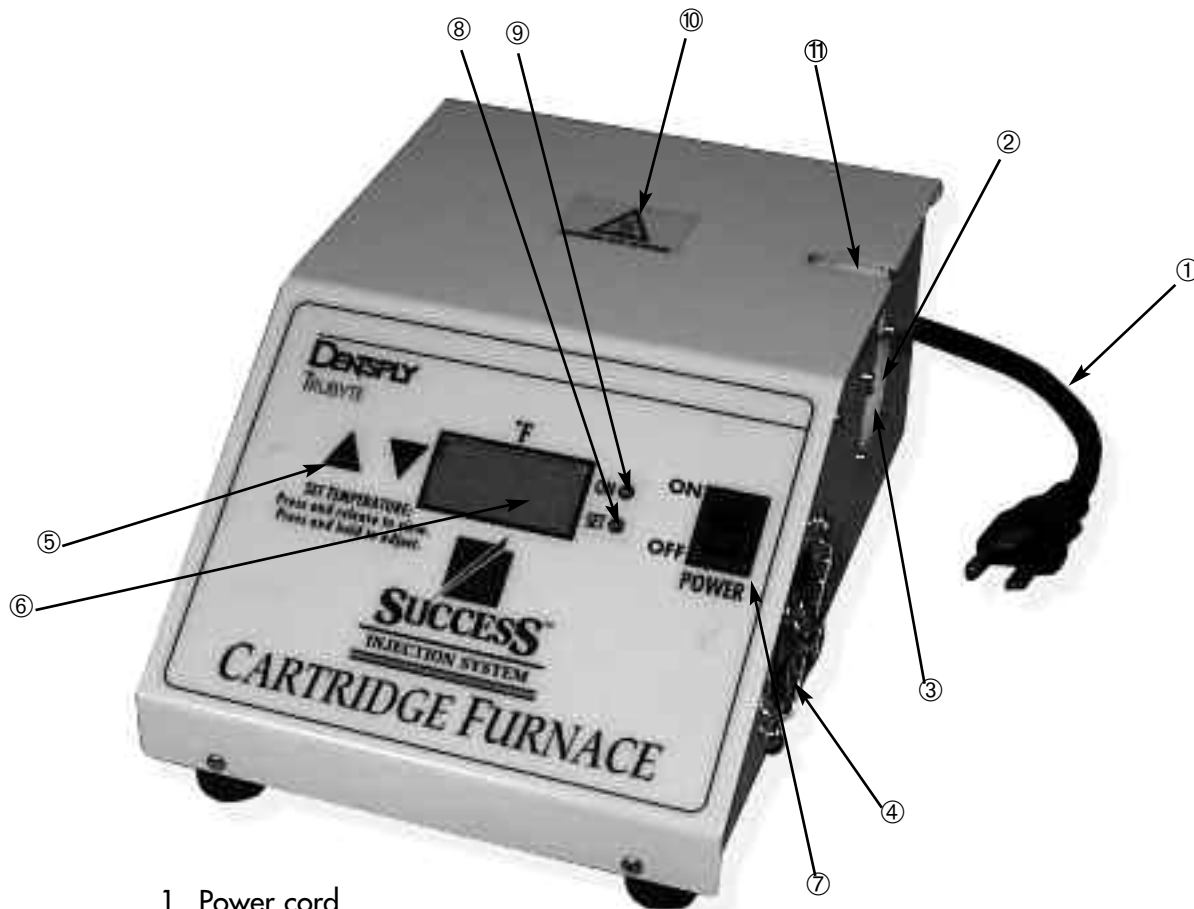
## 1.0 Area of Application

The Success Cartridge Furnace has been designed and is exclusively intended for processing Lucitone® FRS® Flexible Dental and Thermoflex Acetal Resins. DENTSPLY will not be liable for any damage resulting from any other use not within specifications and design limits. Use within such specifications includes

all notes, instructions, and information contained in these operating instructions as well as information contained in separate directions for use (DFU) provided with Lucitone FRS Flexible Dental and Thermoflex Acetal Resins.

## 2.0 Features and Specifications

### 2.1 External Features



1. Power cord
2. Cartridge bay
3. Hot area - do not touch
4. Cooling fan
5. Temperature adjustment
6. Digital temperature display

7. On/off switch
8. Set indicator light
9. On indicator light
10. Hot area - do not touch
11. Cartridge sleeve handle slot

## 2.2 Internal Features

The following are some of the more important features of your new Success Cartridge Furnace that will guarantee excellent performance.

- Isolated low voltage power supply
- Solid state circuitry
- 300 Watt Heater Band
- Dual micro-controllers to provide fail safe control
- Cartridge Bay temperature control range: 400°F to 575°F
- Fused transformer
- Internal ambient temperature monitor
- Impedance protected cooling fan
- External chassis temperature monitor
- LED Error Message Display

Error Message	Potential Problem	Action
ER1	Start-up (PC board) failure	Return to DENTSPLY
ER2	Chassis temp. sensor error	Return to DENTSPLY
ER3	Chassis temp. >157°F	Return to DENTSPLY
ER4	Thermocouple Failure	Return to DENTSPLY
ER5	Thermocouple >700°F	Return to DENTSPLY
ER6	Memory Failure	Return to DENTSPLY
ER7	Internal ambient temp. >130°F	Return to DENTSPLY
ER8	Internal temp. sensor error	Return to DENTSPLY
ER9	Warm thermocouple <350°F	Return to DENTSPLY
None	Board communication error	Return to DENTSPLY

## 2.3 Specifications

- Voltage: 100-120VAC
- Frequency: 60Hz
- Rated Input Current: 4 AMPS
- Weight (unpacked): 10 lbs.
- Length: 8.9in Width: 6.2in Height: 4.2in

## 3.0 Safety

### FOR PROFESSIONAL USE ONLY.

Please read these operating instructions carefully before installing or operating this equipment

- Use indoors only.
- Never operate the unit in close proximity to combustible materials or place any materials on top of the unit.
- Do not operate furnace without reading the Lucitone FRS Flexible Dctnal or Thermoflex Acetal Resins Directions for Use (DFU).
- The unit must be electrically grounded to a three wire electrical outlet or receptacle. The electrical service provided must be a dedicated line of the proper size according to local electrical codes.
- Unit must be placed in a position that allows the power cord to be easily disconnected from the wall or inlet socket.
- Do not attempt to service the unit until you have read and understand this operation manual.
- Turn off the power switch and disconnect the line cord before attempting to service the unit.
- Do not use solvents or liquid cleaners on the control panel.

- Do not cover the top of the unit or obstruct the fan in any other way.
- Do not submerge the unit into any liquid.
- Heat resistant gloves (rated to at least 525°F) must be used when inserting and removing cartridges from the furnace.
- If the unit is not operated in the manner as specified in this manual, the protection provided by the unit may be impaired.
- Pollution degree: 2



**CAUTION: RISK OF DANGER! BURN HAZARD IS PRESENT WHEN HANDLING CARTRIDGE OR CARTRIDGE SLEEVE. USE HEAT RESISTANT GLOVES WHEN HANDLING THESE ITEMS!**

### SYMBOL TABLE

	- Alternating current
	- On (Supply)
	- Off (Supply)
	- Caution, Hot Surface
	- Protective Conductor
	- Caution, Risk of Danger

## 4.0 Start Up

### 4.1 Environmental Conditions

- The Success Cartridge Furnace is designed for indoor use only at or below an altitude of 2000 meters. It should be operated at an ambient temperature range of 41 to 104 degrees Fahrenheit.
- The unit should be used at a maximum relative humidity of 80% for ambient temperatures up to 88 degrees Fahrenheit, decreasing linearly to 50% relative humidity at 104 degrees Fahrenheit.
- Mains supply voltage fluctuations should not exceed +/- 10% of the nominal range according to category II for transient overvoltages. Pollution Degree 2: Normally only non-conductive pollut-

ion occurs. Occasionally, however, a temporary conductivity caused by condensation must be expected.

### 4.2 Unpacking

**IMPORTANT:** Prior to unpacking, if the packaging or the furnace appears to be damaged, please contact DENTSPLY Prosthetics before continuing.

- Carefully remove the furnace from the box.
- Save packaging and carton in case you need to move or ship the furnace.

- After unpacking the furnace, verify its condition and notify shipper and supplier of any damage.

### 4.3 Set Up

- Place the furnace in a well-ventilated area at a distance of at least 6 inches from any other surfaces on all sides of the unit. Make sure never to obstruct the cooling fan as this may result in damage to the electrical components of the furnace.
- Normal operating position of the furnace is level on its four rubber feet with the digital temperature display facing the operator. The power cord should run underneath the unit and exit from the rear.
- Connect the power cord to a grounded receptacle. The normal power disconnect for the unit is the power cord. The plug should be accessible for this disconnect.

## 5.0 Operation Procedures

- Turn on the furnace and check set point by depressing the left set arrow. The set point will be displayed on the LED. The set point should be 575°F. If it is not set to 575°F, depress and hold the left set arrow until the LED reads 575.
- Allow the furnace to fully heat for at least 15 minutes. The cartridge sleeve, sold separately, should be inserted into the furnace during the initial heat cycle and always replaced to the furnace cartridge bay when not in use.
- When the furnace has reached full temperature, it is then ready for use. Insert a Lucitone FRS cartridge, nozzle first, into the cartridge bay and set to the proper insertion depth as described in the Lucitone FRS Directions For Use (DFU). Follow Lucitone FRS Flexible Dental Resin DFU for heating and injecting procedures.
- If using the furnace for processing Thermoflex Acetal Resin consult the Thermoflex DFU for proper furnace set points and processing instructions.

## 6.0 Maintenance

- No unusual maintenance of the Success Cartridge Furnace is required other than to keep it free of excessive dust and debris.
- No internal maintenance of the Success Cartridge Furnace is necessary, however, periodic cleaning of the cartridge bay will prolong the operating efficiency of the unit. Never attempt to touch the cartridge bay area when the Success Cartridge Furnace is plugged in or hot. If necessary, use medium grit sandpaper to gently remove any debris that may have built-up in the cartridge bay.
- Inspect the cooling fan at least monthly or after 100 hours of continuous use. Make sure the fan is free from obstruction. Never attempt to clean the fan while the Success Cartridge Furnace is plugged in. Do not use solvents or sprays to clean the fan. If smooth operation of the cooling fan is obstructed, clean with a soft bristle brush and a vacuum cleaner.

## 7.0 Warranty Information

The Success Cartridge Furnace is designed for dental use only and this warranty is not applicable for other uses. The Success Cartridge Furnace is warranted against defective material and workmanship for a period of 12 months from the date of purchase. Parts will be repaired or replaced at DENTSPLY's discretion.

- Warranty registration card must be completed and returned to DENTSPLY within two weeks of the date of installation. Mail to: Customer Service, DENTSPLY Trubyte, P.O. Box 872, York, PA 17405-9973.
- Any servicing of the Success Cartridge Furnace must be performed by DENTSPLY.
- The Success Cartridge Furnace must not be subject to abuse, improper installation or application.
- Damage due to improper return packaging will not be covered under warranty. Save the original package for moving and shipping the Success Cartridge Furnace.

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. DENTSPLY neither assumes, nor authorizes any person to assume for it, any other liability in connection with the sale and use of the Success Cartridge Furnace.

DAMAGES ARE LIMITED STRICTLY TO REPLACEMENT OF THE SUCCESS CARTRIDGE FURNACE. DENTSPLY EXPRESSLY DISCLAIMS LIABILITY FOR INCIDENTAL AND CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE SUCCESS CARTRIDGE FURNACE.

Claims covered by this warranty will be honored when presented through your DENTSPLY Prosthetics Dealer within one month from the discovery of the defect. For more information, call 1-800-243-1942, extension 54319 or 54581.



Prosthetics

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