

# 3D SUBLIMATION OVEN USER MANUAL





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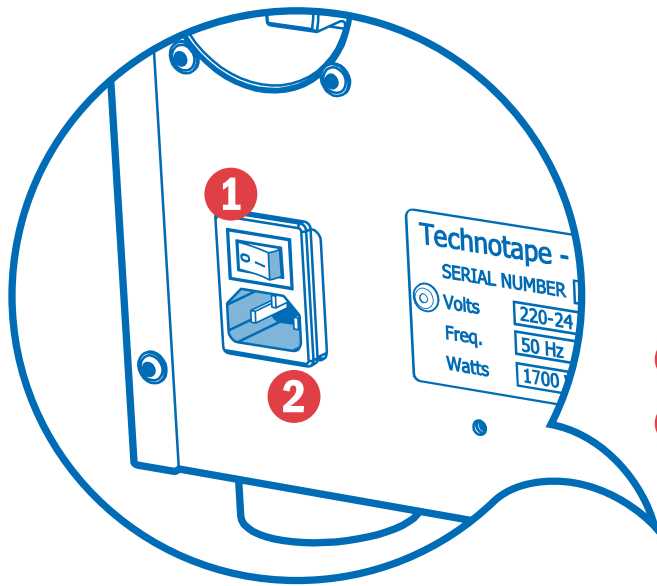
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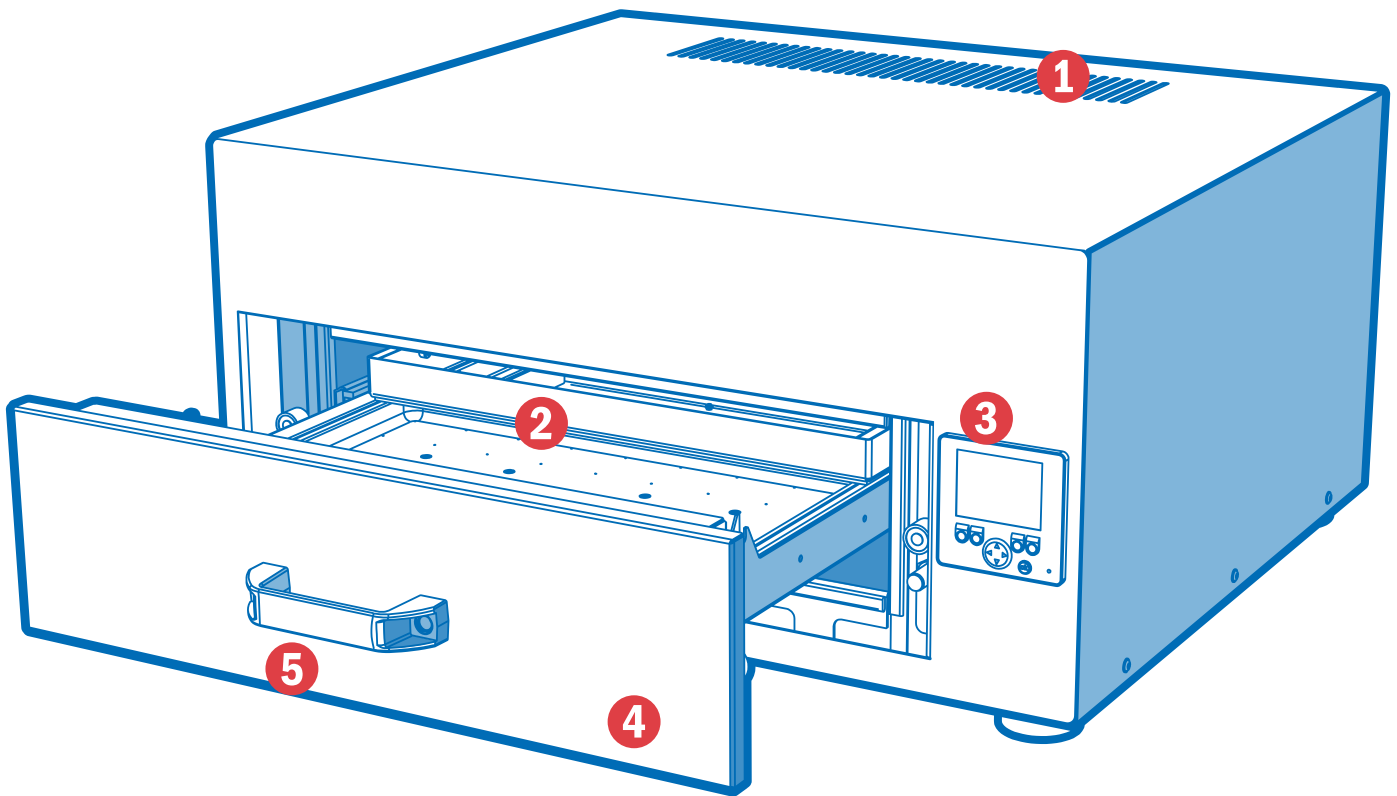
## **10 EC-CONFORMANCE DECLARATION**

# 3D SUBLIMATION OVEN

## 1.1 PRODUCT OVERVIEW



- 1 Main power switch
- 2 Power cable connector



- 1 Ventilation grill
- 2 Baseplate and product jigs
- 3 Main control display
- 4 Drawer
- 5 Drawer handle

### OVEN SPECIFICATIONS

Dimensions	55,6 x 67,5 x 33,5 cm
Weight	48 kg
Operating Voltage	230 VAC
Rated Power	1700 W
Fuse	15A
Max. Temperature	180 °C
Temperature Range	0 - 180 °C
Max. Bar	-1 Bar

## 1.2 PRODUCT SAFETY FEATURES

The oven is equipped with different safety features to ensure 3D Sublimation Oven operational safety.

### Main Fuse 15A

The 15A Fuse is located on the printplate inside the oven. The fuse protects the oven from electric malfunctions and damages in case of a short circuit. If necessary, the fuse can be replaced.

### Thermal fuse

The thermal fuse is located inside the oven. The fuse protects the oven from overheating. In case of overheating, the electricity to the oven will automatically cut off to ensure no firehazard can occur. If necessary, the fuse can be replaced.

### Automated drawer

The oven drawer will open automatically at the end of the product sublimation process. It's advised not to open the drawer manually during the sublimation process. It will stop the sublimation process immediately, resulting in unsuccessfully sublimating your product.



## MAINTENANCE TIP!

For optimal use, keep the drawer rails lubricated with PTFE spray or other Teflon based, heat resistant lubricants.

## 1.3 SAFETY PRECAUTIONS AT THE WORKPLACE

**Before operating the oven, be mindfull of proper workplace safety and placement of the oven.**

### Testing the oven

After correct installation and setup of the oven, it is important to ensure that the oven works properly. Testing can only be done by the operator or other authorized personnel and is mandatory to guarantee correct and safe usage of the oven.

If any irregularities regarding functionality or safety are found during testing like: visible damage and safety defects. All irregularities have to be documented and reported to Technotape International in written form within 7 days. Until clarification and approval from Technotape International the oven can't be used or operated.

**“ALL USERS NEED TO BE ACQUAINTED WITH THE COMPLETE OPERATIONS MANUAL.”**

### Information and Education

The employer has to make arrangements to educate operating personnel about the functions and the range of applications of the 3D Sublimation Oven. In particular all users need to be acquainted with the complete operations manual and be explicitly informed of the dangers of working with the oven. All safety and operational details have to be explained in a coherent and understandable manner.

### Safety Distance and Ventilation

The oven has to be installed in a place which provides enough space on both sides to put the material on. The space in front of the oven has to be wide enough to let nothing disturb the user at work. Using the oven with certain materials may create a strong smell. That's why the user should evaluate the need for a ventilation system at the workplace.

## SAFETY INSTRUCTIONS

- The oven should be used by trained personnel only. The user needs to be familiar with the contents of this manual.
- Only one person is allowed to work with the oven at a time.
- The power cable has to be unplugged from the outlet before maintenance or cleaning.
- The oven has to be connected to an outlet with ground-fault protection ELCB (Earth Leakage Circuit Breaker). Do not connect the oven to any other outlet.

# INSTALLATION

## 2.1 FIRST TIME USE

### Important Precautions and Recommendations

After having unpacked the Technotape 3D oven, check to ensure that it is not damaged. In case of doubt, do not use it and consult your supplier or a professionally qualified technician.

Do not attempt to modify the technical characteristics of the appliance as this may become dangerous to use. Do not carry out cleaning or maintenance operations on the appliance without having it disconnected from the electric power supply. After use, ensure that the power switch is in the off position. During and after use of the appliance, certain parts will become very hot. Do not touch hot parts. Care should be taken to avoid touching heating elements inside the oven.

## 2.2 INSTALLATION

### CAUTION

- This oven must be installed in accordance with these installation instructions.
- This appliance is to be installed and maintained by authorized personnel only.
- This oven shall only be operated by trained personnel.
- Incorrect installation, for which the manufacturer accepts no responsibility, may cause personal injury or damage.
- Always disconnected the oven from the main power supply before carrying out any maintenance operations or repairs.

### PRODUCT HANDLING

- Do not attempt to modify the technical characteristics of the appliance. If done so, user safety is no longer guaranteed.
- Do not carry out maintenance or cleaning operations on the appliance without having disconnected the electric power supply.
- After use, ensure that the main power switch is in the off position.
- During and after use of the appliance, certain parts of the oven will remain very hot. Care should be taken to avoid touching heating elements inside the oven.

### Instructions

- 1 The oven must be connected to the power supply. Check whether the voltage corresponds to the value given in the rating plate. And check whether the electrical cable sections can withstand the load specified on the plate. The plug must be connected to an earthed socket in compliance with safety standards.
- 2 Switch the oven on with the main switch. No further assembly is required.
- 3 Please continue to chapter 3 “Working with the oven”.



### FIRE RISK!

Do not store flammable material in the oven. Always use oven gloves when removing products from the oven whilst hot. The manufacturer declines all liability for injury to persons or damage to property caused by incorrect or improper use of the appliance.

# WORKING WITH THE OVEN

## 3.1 QUALITY AND SUPPORT

Technotape can only offer support for the 3D Sublimation Oven when it's used in combination with a Virtuoso SG800 Printer, Xtreme Sublimation Foils and Sublimation Products supplied by Technotape. Other combinations can be possible, but are not tested and therefore not supported.

## SETTING PARAMETERS

- After switching on the oven, make sure that the drawer is open to adjust the settings.
- Settings for pre-heating the foil, temperature and time can be changed by using the display.
- The oven is made for 3D Sublimation purposes only.

## 3.2 SELECTION AND SETTINGS

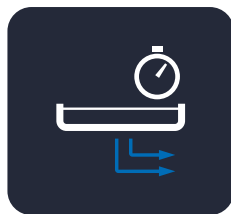
Button lay-out



TEMPERATURE SETTING



PREHEATING TIME FOR THE FOIL



VACUUM TIME SETTING

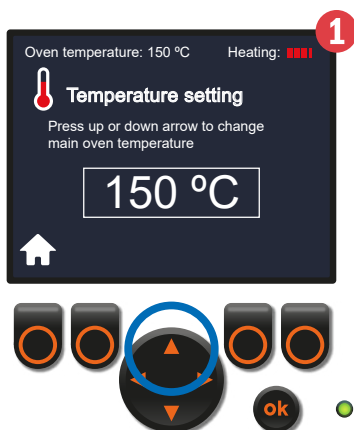


HOME ICON (RETURN)



- 1 Adaptive selection buttons
- 2 Central console button

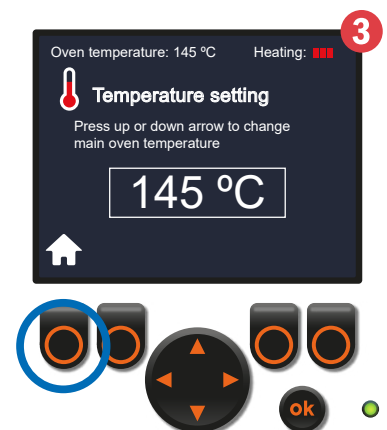
Temperature settings



Press the temperature setting button marked with the Temperature setting icon. To increase the oven temperature, press the UP arrow on the central console button as shown in figure 1.



To decrease the oven temperature, press the DOWN arrow on the central console button as shown in figure 2.



To confirm the correct oven temperature, press the button marked with the HOME icon as shown in figure 3.

## Vacuum settings



Press the Vacuum time setting button marked with the Vacuum time icon. To increase the Vacuum time, press the UP arrow on the central console button as shown in figure 1.

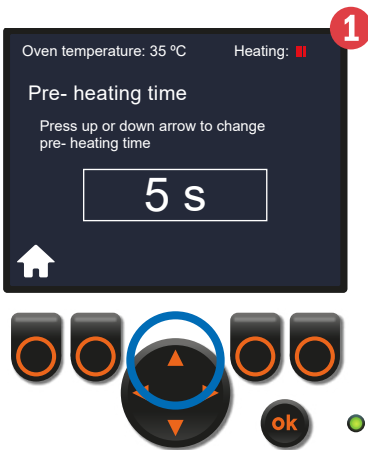


To decrease the Vacuum time, press the DOWN arrow on the central console button as shown in figure 2.

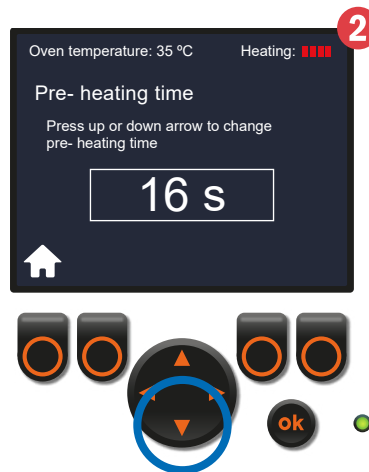


To confirm the correct Vacuum time, press the button marked with the HOME icon as shown in figure 3.

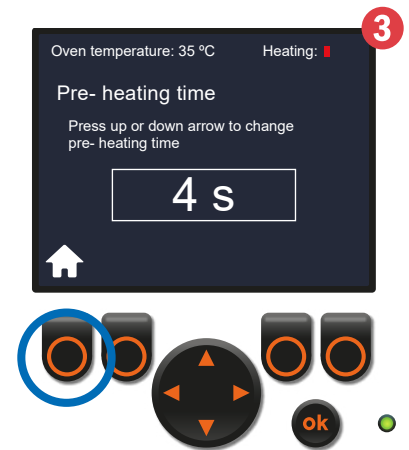
## Preheating settings



Press the Preheating setting button marked with the Pre- heating icon. To increase the Pre- heating time, press the UP arrow on the central console button as shown in figure 1.



To decrease the Preheating time, press the DOWN arrow on the central console button as shown in figure 2.



To confirm the correct Preheating time, press the button marked with the HOME icon as shown in figure 3.



### 3.3 RECOMMENDED SETTINGS

The following standards are recommended for the Technotape 3D Sublimation Phone Cases.

**NOTE:** These standards apply for usage stated under Quality Guarantee and Service (see 3.1)

**Temperature:** 150 °C

**Vacuum time:** 5:30 minutes

**Preheating time:** 8 seconds

### PRODUCTION TIP!

The settings of various products can be found on our website.

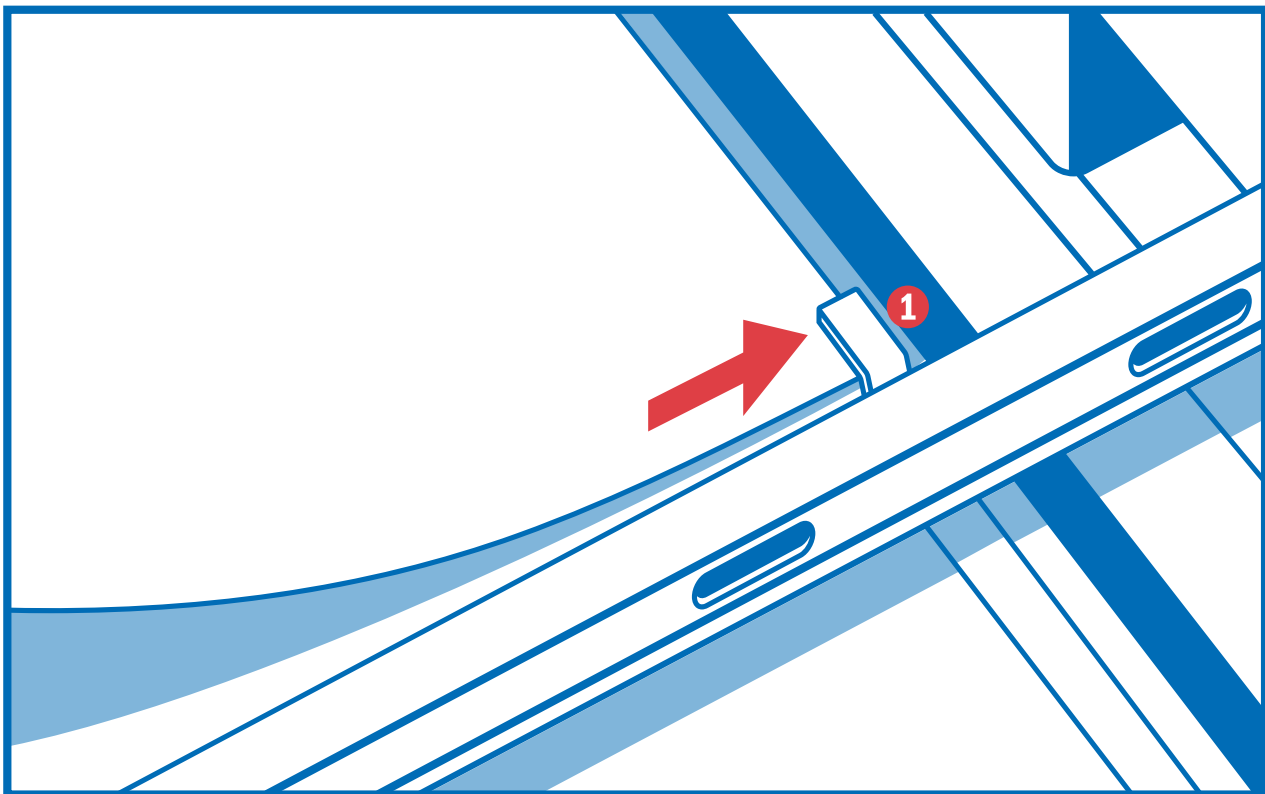
### 3.4 PLACING THE JIGS

Install the jig pin in the baseplate. fasten by hand and place the production jig(s) accordingly.

**NOTE:** After exchanging a production jig make sure the new jig is thoroughly preheated. The ideal preheated temperature for jigs is at least 90° C.

#### Placement

Open the drawer to place the unprinted sublimation products on the production jigs. Then place the printed 3D foil and make sure that the foil is placed correctly. The foil must be placed under the lips. As shown in image 1.



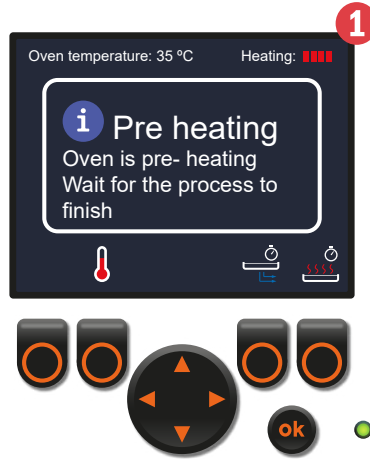
## 3.5 GETTING STARTED

### Preheating

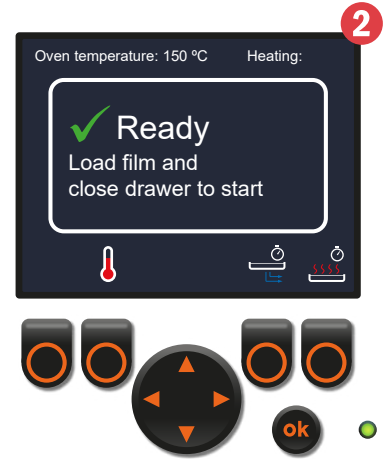
Close the oven drawer to start preheating.

### IMPORTANT!

The Sublimation Oven needs approximately 30 minutes to preheat before the first production run.

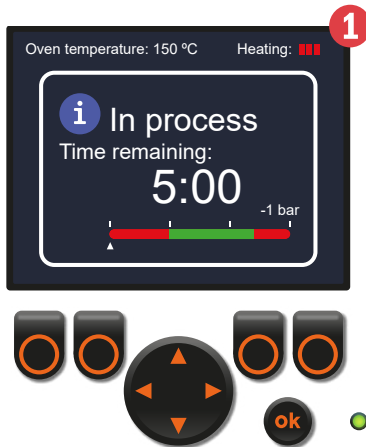


When closed, the preheating process will start automatically. As shown in figure 1.



After the preheating process the display will show: READY. As shown in figure 2.

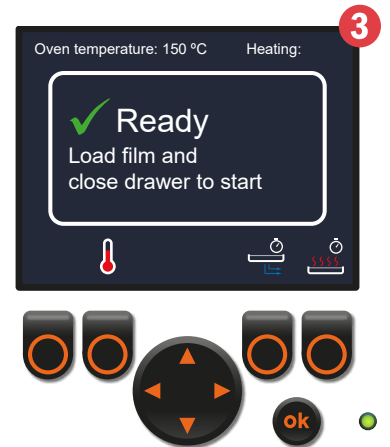
### Preheating



Close the drawer and the preheating time process will start. the clock will start counting down until the process is finished. As show in figure 1.



After the foil preheating time is finished, the process timer will start automatically. As shown in figure 2.



When the process is finished the drawer will open automatically, remove the film and the finished products from the production jigs. The display will return to READY and you can start a new production cycle. As shown in figure 3.

### CONSISTENT VACUUM

The vacuum is measured in the oven by a transmitter. The measured value is displayed by the vacuum colorscale. Make sure the vacuum remains in the green range. It's important for the sublimation process that there is enough vacuum.

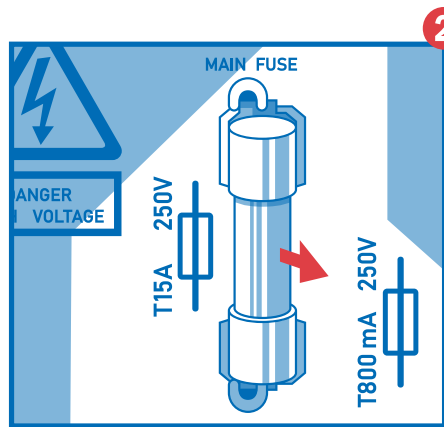
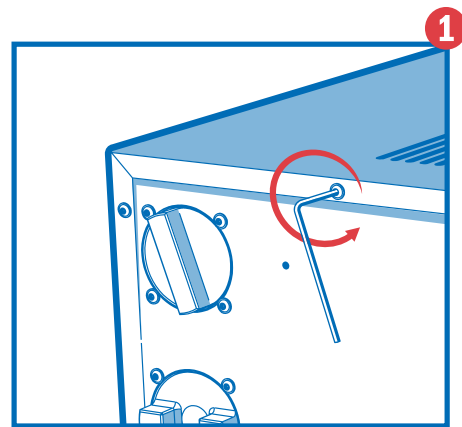
# MAINTENANCE

## 4.1 REPLACING THE FUSE

Switch off the oven and take the power cable out of the wall outlet. The oven has to be cooled down before maintenance.

### Replacing the main fuse

If the oven does not work and the main switch is on, check the main fuse. The main fuse 15A is placed on the motherboard, which is placed under the hood on the right side of the oven. To change the main fuse: switch off the oven and pull the powerplug out of the wall outlet. The oven has to be cooled down before maintenance.



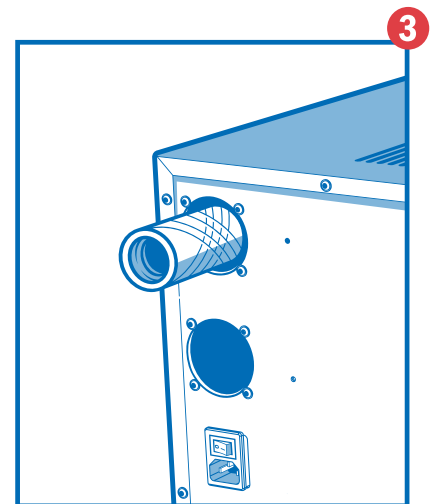
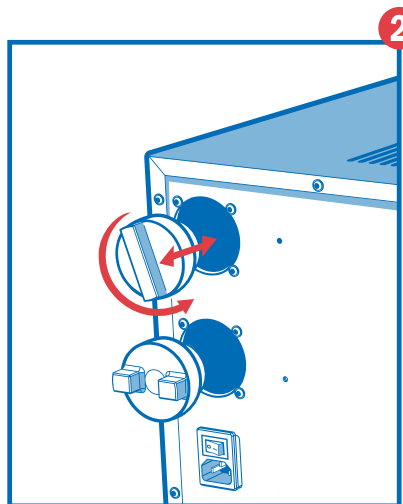
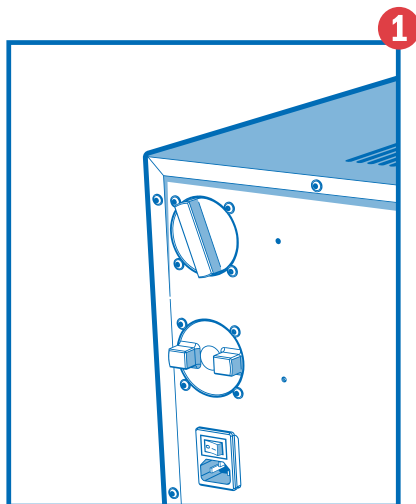
Remove the metal cover from the oven to take out the broken fuse. As shown in image 1.

The main fuse is located on the left and marked with MAIN FUSE. Remove the old fuse, and replace it with a new fuse. Put the metal cover back on. And put the plug back in and switch on the oven to check the fuse. The oven should be back in working order. As shown in image 2.

## 4.2 REPLACING THE FILTERS

The filters are placed inside the oven.

On the back of the oven are two housings that hold the filters. The filter houses can be opened by hand.



Both filter housing endcaps are located at the back of the oven. As shown in figure 1.

Place your hands within the grooves of the housing endcaps and turn counter-clockwise. As shown in figure 2.

Unscrew both endcaps, and take out both filters. Make sure you replace both filters at the same time. With new filters placed, re-tighten both endcaps by turning clockwise. As shown in figure 3.

**ORDERING FILTERS**  
New filters can be ordered at the technotape website.  
[WWW.TECHNOTAPE.COM](http://WWW.TECHNOTAPE.COM)  
article number: 3DT.SUB.AIR.FT1

# EC-CONFORMANCE-DECLARATION

## AFTER EC-GUIDELINE FOR MACHINES 2006/46 EC

**Techn-O-Parts B.V.**  
**Tolweg 7**  
**3741 LM Baarn**  
**The Netherlands**

Hereby declares that the following machine:  
3D Sublimation Oven with Serial Number 3 D V O 3 N

Is compliant with the specifications of the following EC directives:  
Machinery (2006/46)  
Low Voltage (2006/95)  
EMC (2004/108)

Used norms and technical specifications:  
EN 292-1 EN 292-2 safety of machines  
EN 60204-1 electrical equipment of machines

Baarn .....

**Bonne Klein Woolthuis**  
**Managing Director**



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