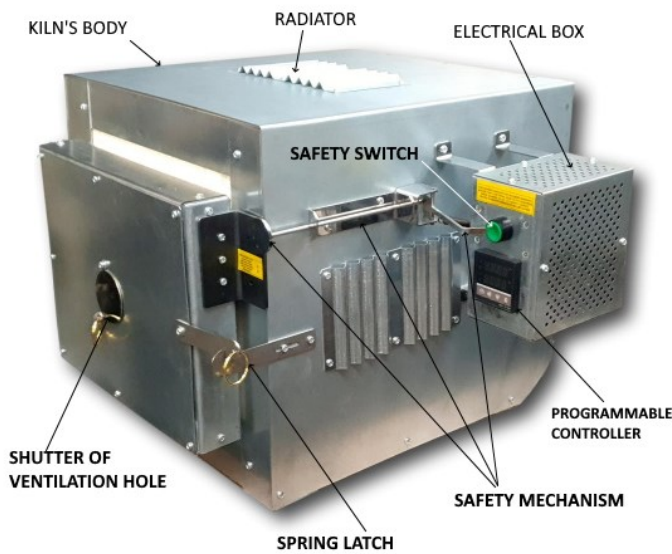


R-1100P PROGRAMMABLE ELECTRIC MUFFLE KILN USER MANUAL

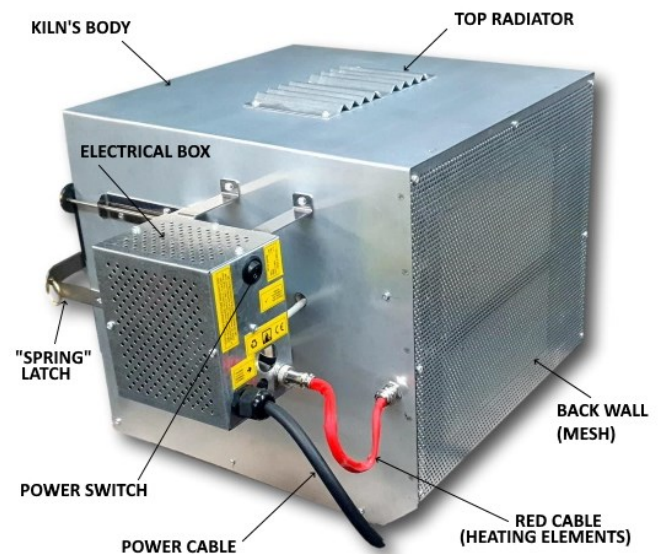
PRODUCT INTRODUCTION:

THIS R-1100P (2,012°F) ELECTRIC MUFFLE KILN WITH A PROGRAMMABLE TEMPERATURE CONTROLLER AND 11.5 CUBIC LITRE CHAMBER IS SPECIFICALLY DESIGNED TO WORK WITH MANY TYPES OF MATERIALS, INCLUDING: GLASS, WAXES, METALS, CLAYS, ENAMELS, STONES AND OTHER MATERIALS WITH FIRING TEMPERATURES OF UP TO 1,100°C/2,012°F. FOR YOUR SAFETY THIS KILN HAS A SAFETY MECHANISM THAT WILL DISCONNECT ITS POWER SUPPLY FROM BOTH THE RIGHT AND LEFT HEATING ELEMENTS IF THE DOOR IS OPEN OR HAS NOT BEEN PROPERLY CLOSED. IT ALSO HAS ONE HOLE WITH A STAINLESS STEEL SHUTTER ON THE DOOR FOR VENTILATION, A DIGITAL OVER/UNDER-TEMPERATURE SAFETY SYSTEM FOR MAINTAINING A SINGLE TEMPERATURE DURING THE ENTIRE SOAKING PROCESS AND AN INTERNAL SMOOTHING CIRCUIT TO CORRECTLY READ AND STABILISE ELECTRICITY FLUCTUATIONS, WHICH IS ESSENTIAL FOR MOST FIRING PROCESSES.

Pic. 1 FRONT VIEW:

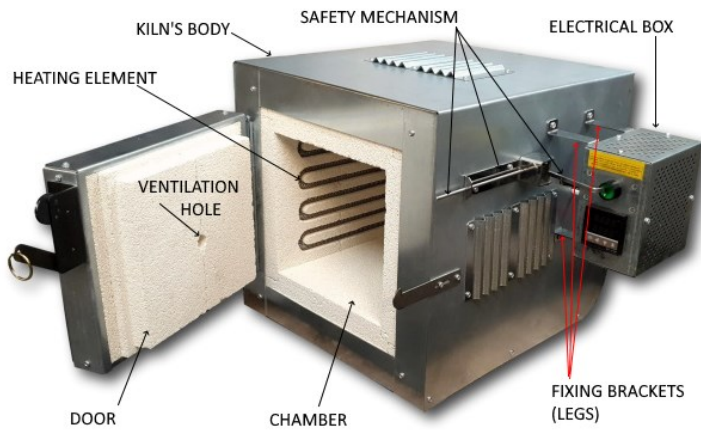


Pic. 2 BACK VIEW:

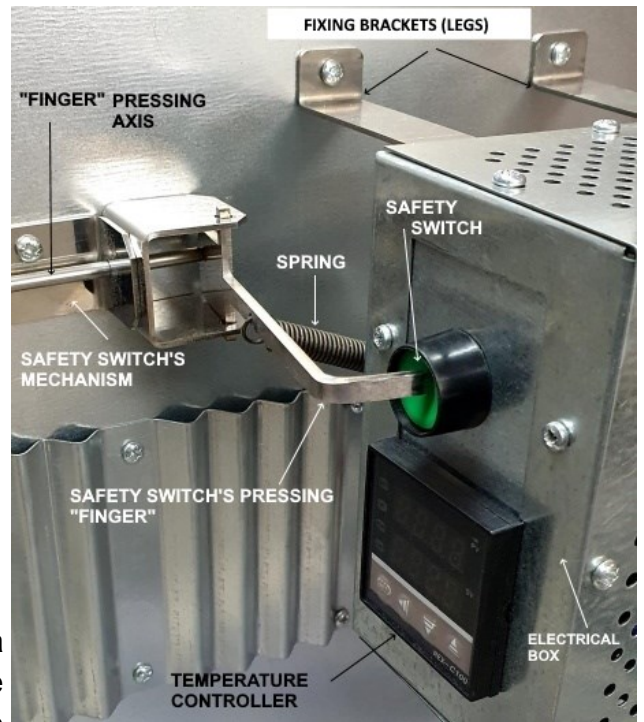


TECHNICAL SPECIFICATION:

MODEL:	R-1100P	CALIBRATION:	YES
INPUT ON REQUEST:	115 or 230 V +/-10%	SOAKING PROCESS ACCURACY:	+/- 1°C
POWER:	2,700 WATT	SAFETY MECHANISM:	Yes
MAXIMUM HEATING TEMPERATURE:	1,100°C / 2,012°F	CHAMBER MATERIAL:	MUFFLE
ESTIMATED HEATING TIME TO 1,100°C:	90 MINUTES	VENTILATION SYSTEM:	DOOR HOLE
CONTROLLER TYPE:	PROGRAMMABLE, TWO-LINES	CHAMBER DIMENSIONS MM (INCH):	200 (w) x 200 (h) x 290 (d) (8" x 8" x 11.5")
CONTINUOUS WORKING TIME AT 1,000°C+:	2 HOURS	KILN DIMENSIONS MM (INCH):	360 (w) x 360 (h) x 450 (d) (14" x 14" x 18")
CONTINUOUS WORKING TIME BELOW 1,000°C:	8 HOURS	WEIGHT:	30 KG



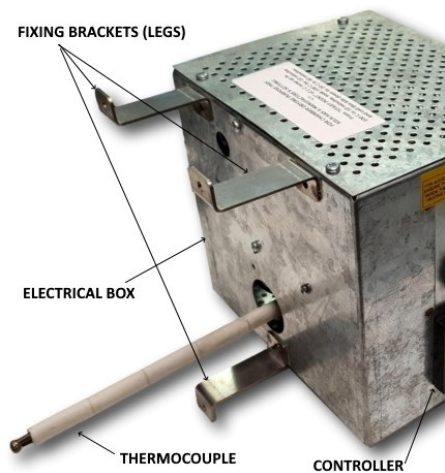
Pic. 3



Pic. 4

PREPARATION:

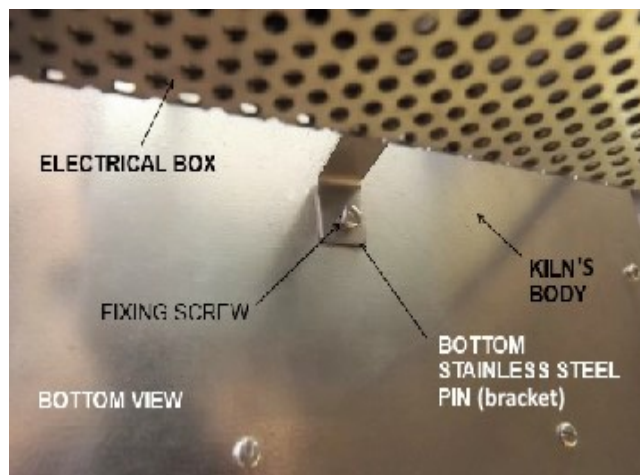
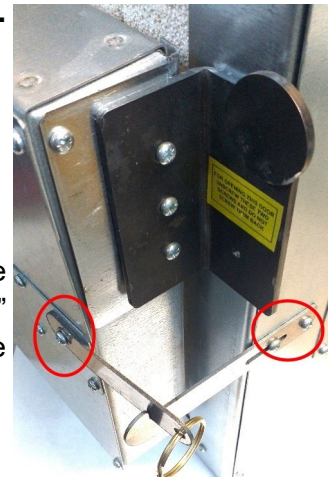
- Remove the kiln from its original box.
- Put the kiln on a heat-resistant worktop such as a metal stand, stone, bricks or ceramic tiles. Please note that the worktop should be very stable and be able to hold 40-50 kg of weight, for your safety.
- Open the kiln's door and carefully take out all the accessories and packing materials from the chamber.
- Now start to assemble the kiln by attaching the electrical box (**Pic. 3**) to the kiln's body. To do this, take the electrical box (**Pic. 5**) with 3 welded stainless-steel brackets (legs) and screw them to the body of your kiln as shown in **Pic. 7**.



Pic. 5:

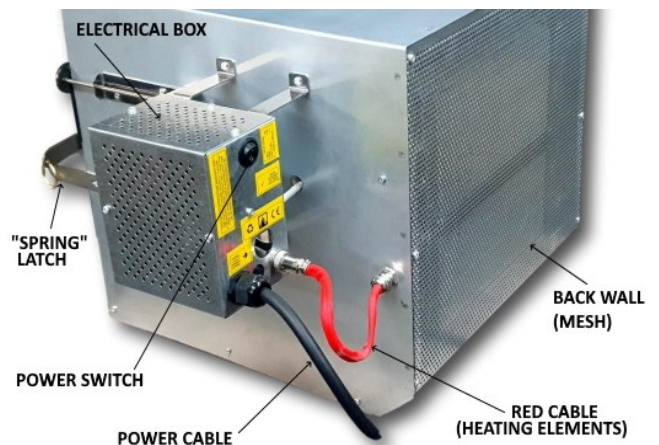
Pic. 6:

If your door does not yet have another type of latch installed, please find the "spring" latch in the pack and attach both parts to the kiln's door/body as shown on **Pic. 6**.



Pic.7

Pic. 8

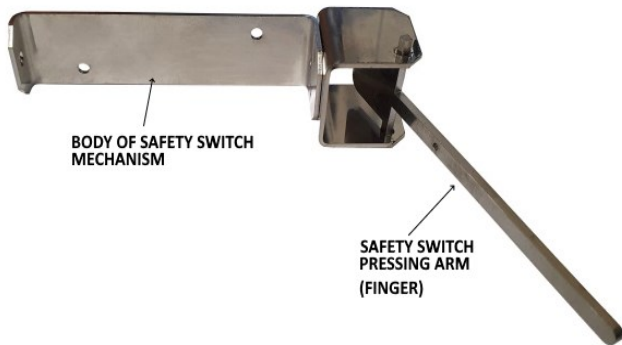


Now you can connect the electrical box to the kiln's heating elements using the special red cable (**Pic. 8**) and then attach the safety-switch mechanism (see next page).

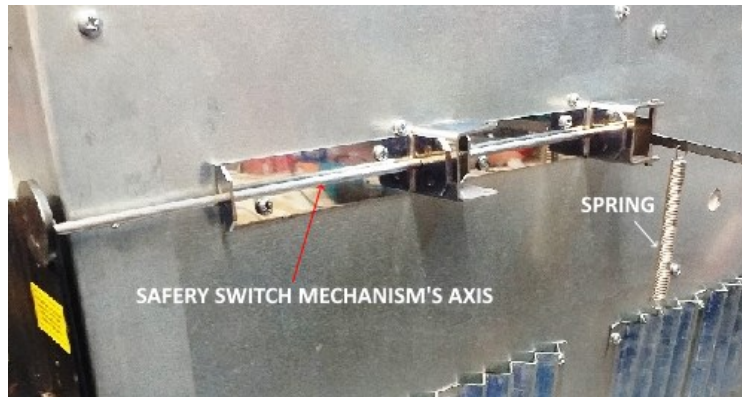
The safety-switch mechanism is important for your safety; it will disconnect all the heating elements inside the kiln's chamber if your kiln's door is open or has not been properly closed. This reduces the risk of electric shocks following any accidental contact with the heating element(s) by metal tongs, tweezers, other accessories or firing object(s). To attach the safety-switch mechanism:

- ◆ Take the ready-to-use mechanism (**Pic. 9**) and stainless steel axis from its pack and attach it to the kiln using two small screws (supplied) as shown in **Pics. 10, 11 and 12**.

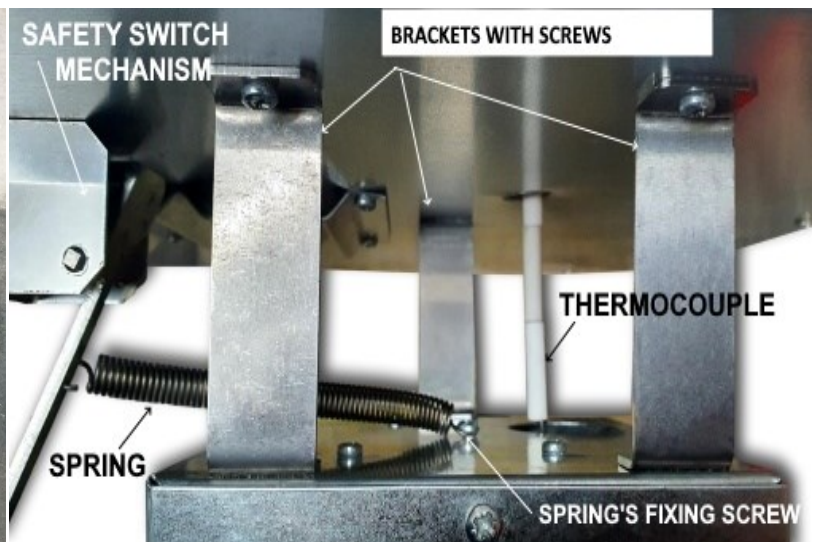
Pic. 9



Pic. 10

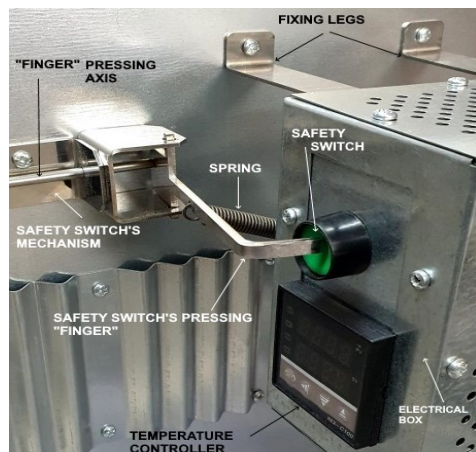


Pic. 11



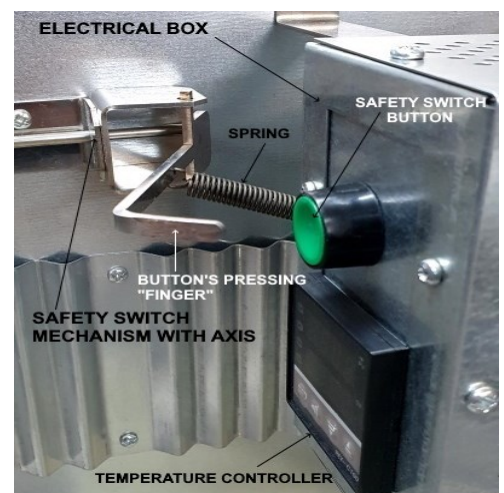
Pic. 12

- ◆ Now connect a tension spring (supplied) between the safety-switch mechanism's "FINGER" (**Pic. 12**) and the special fixing screw on the side of the electrical box facing the kiln (marked with a yellow label) or to the bottom stainless-steel bracket/leg.
- ◆ **IMPORTANT!** After assembling, please ensure that the "FINGER" (**Pic. 9**) firmly PRESSES on the SAFETY SWITCH when the door is OPEN (**Pic. 13**) and completely RELEASES the SAFETY SWITCH when the door is CLOSED (**Pic. 14**).

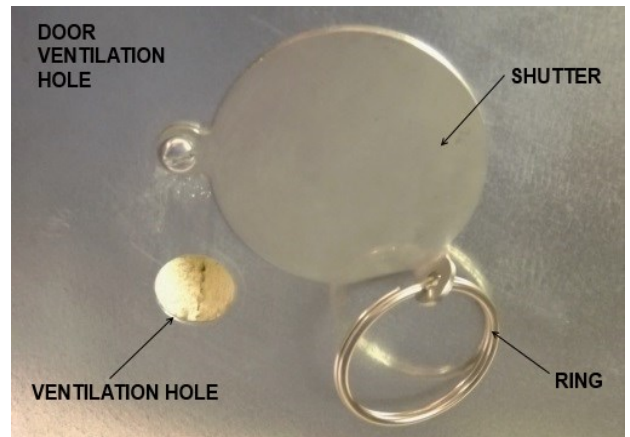


Pic. 13

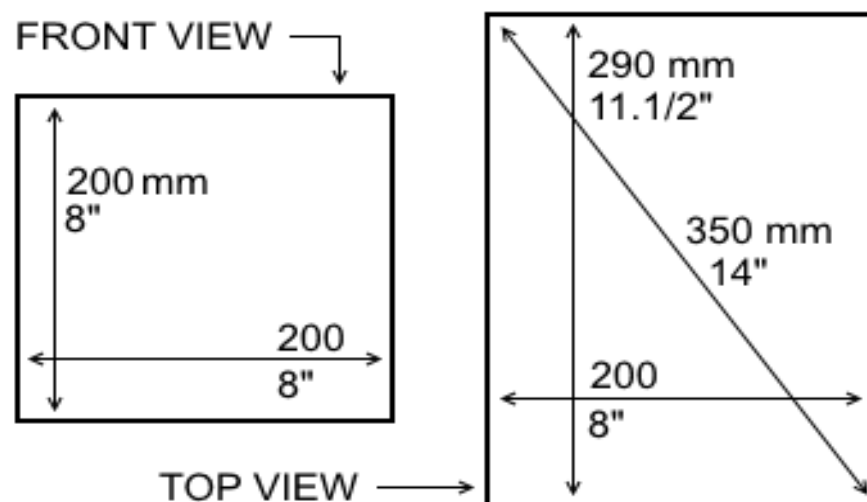
Pic. 14



- ◆ No matter which type of door lock has been installed on your kiln: you can easily open or close the door as shown in **Pic. 15**:

**Pic. 16:**

- ◆ Now your kiln is assembled. Close the shutter on the door (**Pic. 16**) to avoid heat leaking out from inside the chamber. Connect the mains cable to a power supply to start your work.
- ◆ When using the kiln for the first time, it must be heated up to approximately 100°C (factory setting) to allow any water to evaporate from the chamber. Please do not be alarmed if light smoke and/or a smell appears (when using the kiln for the FIRST time). This is normal for new kilns as any water, grease or oils burn out from the heating element(s), shelves, chamber and from inside the kiln. It should not happen again after the first time it is heated. If your kiln is used less than once a month then please repeat this process each time you use it.
- ◆ Please also note that the temperature shown on the controller is the temperature around the thermocouple(s) inside the kiln's chamber. You may have to wait up to two hours for the inside of your kiln to heat up fully and reach the same temperature everywhere inside the chamber.
- ◆ USEABLE CHAMBER DIMENSIONS: Pic. 19 shows a FRONT AND TOP VIEW of the kiln's chamber (inner).

Pic. 19

TEMPERATURE CONTROLLER FOR R-500P MODEL (HOW TO PROGRAM):

The programmable temperature controller (XMTG-7000) has already been set up for chamber drying by the manufacturer (if you have not requested a different setting). If you want to re-program this controller, please refer to the controller's user manual or contact us for FREE help on Skype. Below are some useful tips for using this controller:



1. *“SET” – setting/confirmation button (used for setting all of the controller’s parameters).*
2. *“Arrow Left” or “A/M” – segment selector (to choose from four segments).*
3. *“Arrow Down” – decrease (used to set the required temperature).*
4. *“Arrow Up” – increase (used to set the required temperature).*

Example program: Increase from room temperature up to 450°C within 99

Example instructions:

1. Open your kiln’s door to trigger the safety-switch mechanism, which will disconnect the power supply from the heating elements and prevent the kiln from heating up while you program the temperature controller. Alternatively, simply press button 4 for 3 seconds until you see “STOP” on the bottom display line. Now you can start programming your controller.
 2. Each of the following steps consists of first setting the temperature and then setting the time period in which the NEXT temperature should be reached. There are 32 available input slots each consisting of a pair of temperature and time inputs, i.e. there are a total of 32 temperature inputs alternating with 32 time inputs. To start programming, short-press the ‘SET’ button.
 3. After you have pressed the ‘SET’ button, you have to set the kiln’s starting temperature (“C1” on the top display’s line). In this case, input the desired temperature (usually 1°C), i.e. “0001”, into the BOTTOM line using buttons 2, 3 and 4. Now press ‘SET’ to confirm this initial temperature (“Starting point”) and to proceed to the next input (“Γ1”). This input is the required TIME to reach the NEXT required temperature. For this example, insert “0099” (99 minutes) into the BOTTOM display, and then press ‘SET’ again to set this input and to proceed to the next step.
 4. The next step begins by setting the second required temperature (“C2”). To set this, insert “0450” (450°C) into the bottom display. Next, press ‘SET’ again to proceed to the next input (“Γ2”), where you will set the required time to the NEXT temperature. In this case, this is our soaking time of 4 minutes - “0004”. Press ‘SET’ again to confirm this time and to proceed to the next step.
 5. The next step begins by setting the third required temperature (“C3”), in this case the required soaking temperature. Enter “0450” (450°C) into the bottom display again. Next press ‘SET’ once more to proceed to the next time input (“Γ3”), which in this case will be 145 minutes. Input “0145” into the bottom display, then press ‘SET’ again.
 6. For the next step, set the fourth and final required temperature (“C4”) – “0020” (20°C as a room t.).
 7. To indicate the end of the program, press the ‘SET’ button again, insert “0000” into the bottom display and press the ‘SET’ button once more. Your program will automatically finish when it reaches this last input.
- A. When you have finished programming the controller, simply leave it for about 30 seconds for the new setting to be remembered and for your new program to start.
- B. Close the kiln door to disconnect the safety-switch mechanism, allowing your kiln to start heating up. Alternatively, if you pressed button 4 in step 1 above, now press button 3 for 3 seconds until the word “RUN” appears on the bottom display’s line.
- C. Important: you’ll have about 20 seconds to change EACH temperature/time setting. Please do not worry if you take too much time and the controller resets and starts displaying the current temperature inside the chamber again. Simply restart the programming process by short-pressing the ‘SET’ button again. If you are a beginner and are having difficulty programming your controller, please feel free to contact the manufacturer or agent/shop for free help with this matter anytime during the warranty period.

SAFETY INSTRUCTIONS and USEFUL TIPS FOR BEGINNERS:

- ⇒ Please make sure that any item(s) you place inside the chamber are not touching the heating element(s) even when the door is closed.
- ⇒ It is always best to conduct some tests on a small quantity of your firing material before you fire your item(s).
- ⇒ Using this kiln at temperatures higher than 1,100°C may cause a problem with the heating element(s) and/or with the kiln's metal body that is NOT covered by the warranty.
- ⇒ This kiln MUST be positioned on a level surface that will not be damaged by heat. A masonry or concrete floor is recommended, but other protective materials like refractory bricks or ceramic tiles/sheet may be used. For a small additional charge this kiln can also be supplied with a set of two shelves and a metal stand to be placed on a heat-sensitive worktop.
- ⇒ Always make sure that the door is closed properly for the heating elements to be turned on and in order for the highest possible temperatures to be reached inside the chamber.
- ⇒ Always use heat-resistant gloves and long metal tweezers to remove or place item(s) from/into the kiln.
- ⇒ This kiln should be kept away from all inflammable materials and other nearby heating devices.
- ⇒ When opening the door at temperatures higher than 200°C (392°F), always maintain as much distance as possible between you and the hot chamber. Please also wear dark glasses to avoid problems with your eyes.
- ⇒ Because of the high temperatures that this kiln can reach, you should never leave it unattended when it is in use.
- ⇒ Never touch the kiln's metal body and shutter on the door without gloves on as these can burn your hands.
- ⇒ KEEP OUT OF REACH OF CHILDREN.
- ⇒ Disconnect the kiln from its power supply when not in use.

WARNING: This is an electrical, often extremely hot piece of equipment: always follow any applicable health and safety rules and regulations for electrical equipment and hot work in your country.

MADE IN THE UK

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