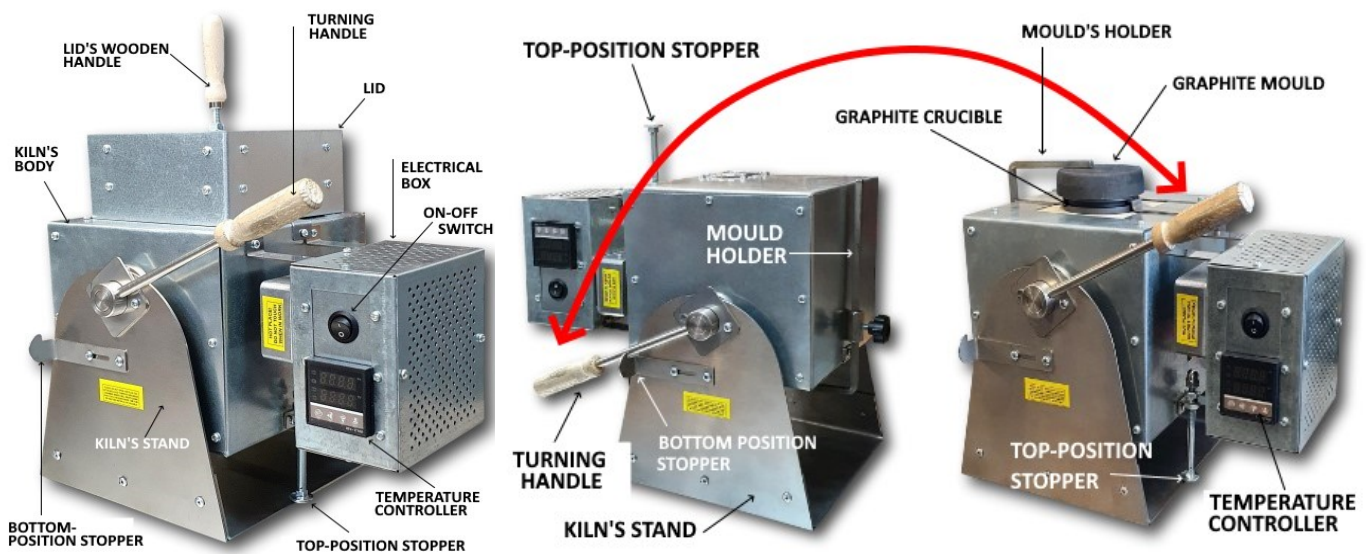


USER MANUAL FOR “SAFECAST-24/7” UPSIDE-DOWN METAL MELTING KILN WITH PRE-HEAT MOULD OPTION

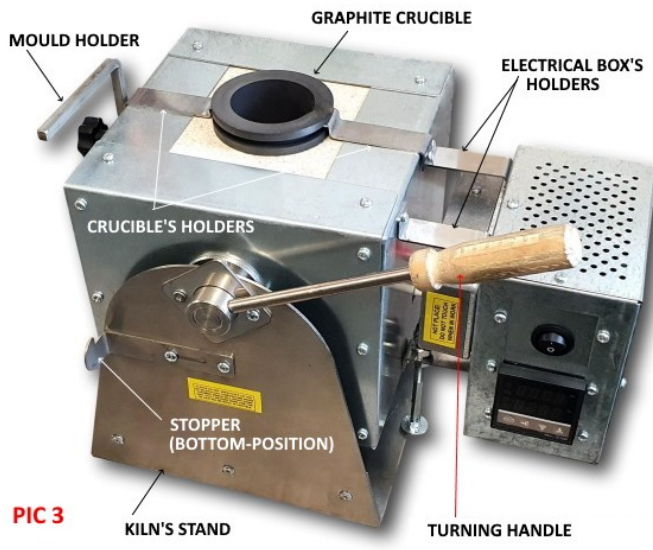
INTRODUCTION:

THIS IS A HI-TECH MODEL, “SAFECAST-24/7” UPSIDE-DOWN GOLD/SILVER MELTING KILN THAT CAN WORK CONTINUOUSLY 24/7 THAT IS FULLY SUITABLE FOR BOTH: BEGINNERS AND PROFESSIONALS AND THAT DOES NOT REQUIRE PROFESSIONAL KNOWLEDGE OR ADDITIONAL HEATING EQUIPMENT FOR GRAPHITE MOULDS. THIS KILN REDUCES THE RISK OF HEAT SHOCKS, FIRE ON YOUR WORKTOP WHEN POURING MOULDS, MOULDS CRACKING DUE TO HEAT SHOCK AND DAMAGE TO THE HEATING ELEMENT. IT ALSO MEANS THAT YOU’LL NOT NEEDED ADDITIONAL EQUIPMENT FOR PRE-HEATING MOULDS BEFORE POURING THE METAL IN AND IT ALSO HELPS YOU SAVE ELECTRICITY, LENGTHENING YOUR CRUCIBLE AND MOULDS’ LIFESPANS, SAVE TIME ON MULTIPLE CASTING PROCESSES AND HAVE MORE ROOM ON YOUR WORKTOP. IN ADDITION:

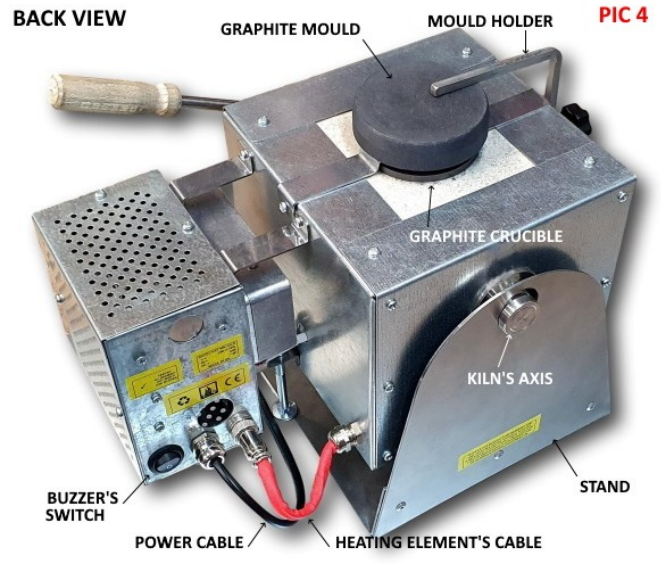
1. THIS KILN WILL ONLY STAY AT THE PRE-SET TEMPERATURE FOR ABOUT 15 MINUTES AND WILL THEN AUTOMATICALLY COOL DOWN FOR 5-7 MINUTES, BEFORE AUTOMATICALLY HEATING UP AGAIN TO THE PRE-SET TEMPERATURE AND SO ON. THIS IS TO AVOID DAMAGING THE HEATING ELEMENT. THIS PROCESS WILL: 1. SAVES ELECTRICITY (COMPARED TO FIRING YOUR KILN AT TOP TEMPERATURES FOR HOURS), 2. MAKES GRAPHITE CRUCIBLES AND MOULDS LAST LONGER (ABOUT 15 USES INSTEAD OF ABOUT 5-7), 3. ALLOWS YOU TO USE THIS KILN 24/7 WITHOUT STOPPING (COMMERCIAL GRADE), AND 4. ALLOWS YOU TO DO SEVERAL CASTINGS WITHOUT RE-HEATING EACH TIME FROM ROOM TEMPERATURE.
2. THIS KILN WILL AUTOMATICALLY NOTIFY YOU WITH ITS BUZZER EACH TIME THE PRE-SET TEMPERATURE IS REACHED, ALLOWING YOU TO KNOW WHEN THE METAL IN YOUR KILN IS READY FOR CASTING. THIS WILL HELP YOU TO START THE CASTING PROCESS AT THE CORRECT TIME - ABOUT 15 MINUTES BEFORE YOUR KILN STARTS COOLING DOWN AS INDICATED ABOVE.
3. YOU CAN REMOVE THE CRUCIBLE FROM THIS KILN AND USE IT IN THE TRADITIONAL WAY. SIMPLY USE THE METAL TONGS TO UNSCREW BOTH THE CRUCIBLE’S HOLDERS ON THE TOP OF THE KILN (PIC. 3).



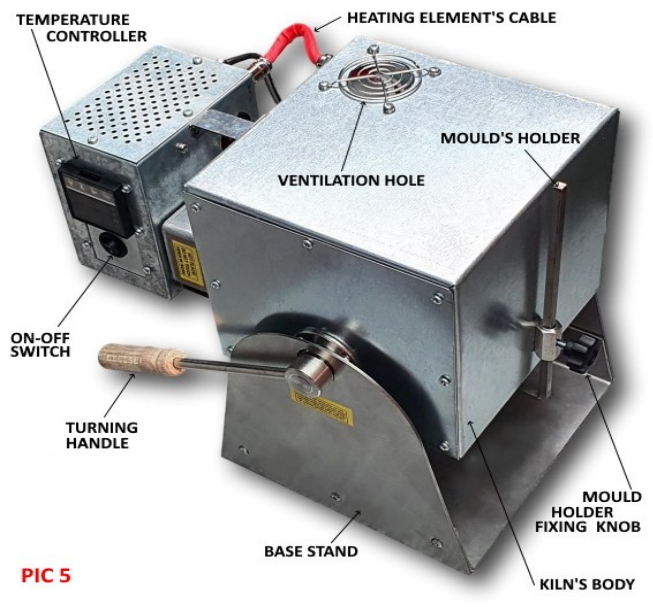
MAKER:	Technical Supermarket	GRADE:	COMMERCIAL
MODEL:	SAFECAST-24/7	G. CRUCIBLE VOLUME:	3 KG/100 OZ PURE GOLD
INPUT (SINGLE PHASE):	110-240 VAC	G.CRUCIBLE SIZE (INT.):	D = 50 MM x H = 85 MM
POWER (WATT):	700	ESTIMATED HEATING TIME:	90 MINUTES
SAFE CAST CONCEPT:	UPSIDE-DOWN	OVERHEATING SECURE SYSTEM:	YES
TOP TEMPERATURE:	1,150°C / 2,102°F	DIGITAL TEMPERATURE CONTROLLER:	YES
CONTINUOUSLY WORKING TIME:	24/7	KILN WEIGHT:	6 KG
ALARM:	BUZZER, 96 dB	WARRANTY:	1 YEAR



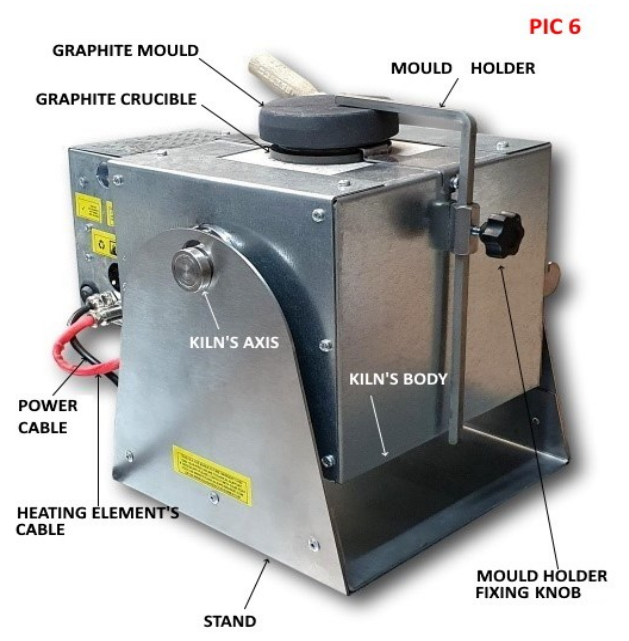
PIC 3



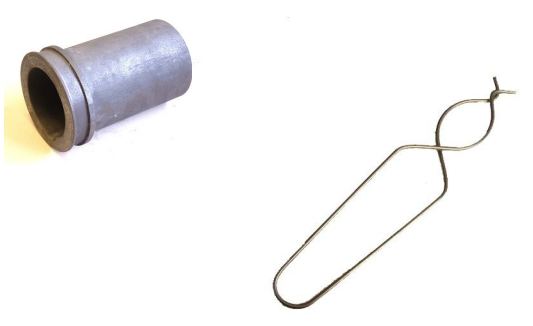
PIC 4



PIC 5



PIC 6



PIC. 7: 3-KG CRUCIBLE AND TONGS



PIC. 8: SAMPLES OF SAFECAST MOULDS

HOW TO USE:

1. Remove your kiln from its box. It is usually already fully assembled - simply screw in the wooden turning handle (Pics. 3 & 5).
2. Screw in the lid's wooden handle (supplied) onto the lid's axis (see first picture on page 1). The graphite crucible should already be fixed in its hole.
3. Take the supplied 33-oz pure Gold graphite mould and paint it using the graphite protector paint (if you choose to use this).
4. Cut the metal to be melted into small pieces.
5. Put these pieces into the graphite crucible (usually fill to 2/3 or less of the crucible). Add about one teaspoon of Borax to the crucible (if required). NOTE: Long-life CERAMIC crucibles available separately).
6. Properly cover the graphite crucible using the lid with the wooden handle (see first picture on page 1).
7. Turn your kiln on using the power switch on the FRONT panel and turn the buzzer on using the toggle switch on the BACK panel.
8. Using the instructions on the next page, pre-set the temperature controller to your required temperature (about 1,120°C for melting gold or just below 1,000°C for melting silver).
9. Wait until you hear a BUZZ (depending on the required temperature this may take between 40 and 90 minutes).
10. When the buzzer sounds you have 12-20 minutes (depending on temperature around your kiln) to go back to your kiln, open its lid and finish your casting.
11. Clean or stir the metal inside the crucible, if necessary, before casting.
12. If your crucible is fixed in hole and you want to use the "Upside-Down" option please cover the graphite crucible using the prepared 33-OZ PG graphite mould. To fix this to the top of the crucible use the mould holder - tighten in the correct position using the mould holder fixing knob (Pics. 5 & 6).
13. Wait for a couple of minutes to allow your metal to be re-heated inside the crucible and under the mould (this reduces the risk of it cracking later on in the pouring process).
14. Using the wooden turning handle on the front of your kiln turn your kiln upside-down until the handle is resting on the bottom-position stopper (see second picture on page 1). Turn the kiln smoothly to allow all the metal to evenly pour from the crucible to the mould.
15. Wait 1 minutes to allow the metal in the mould to cool down.
16. With the mould upside-down position, insert metal tongs into the mould's tong slot (Pic. 7) and hold the mould with one hand.
17. Unscrew the mould holder fixing knob (Pics. 5 & 6) with your other hand until the mould holder is released.
18. Take the mould out and leave it somewhere to cool down properly, then turn your kiln back to the upright position

Simple: no heat shocks, no over-heating, no cracked moulds, injuries and/or fire, and no high electricity bills.

USEFUL TIPS FOR BEGINNERS:

- After hearing the buzzer and returning to your kiln you can turn the buzzer off using the switch on the back side of the electrical box. Do not forget to switch it back on before you start the next casting process or you may miss the time when the top temperature is reached again. Remember - to help your crucible, mould and heating element last longer your kiln will only hold the top temperature for average 15 minutes then automatically disconnect for few minutes, dropping the temperature inside the crucible by few hundred Celsius. In addition, each time you lift the lid the temperature in the kiln decreases further and therefore takes longer to heat back up again. The lid should be lifted as little as possible to conserve time and energy.
- To avoid physical damages to your kiln's chamber and heating element due to a cracked crucible, which could accidentally release molten metal inside your kiln, carefully check your crucible first before each heating process. This problem is NOT under warranty and you will save money on postal charges and repairs.
- If you use Graphite Protector Paint please replace the kiln's GRAPHITE crucible after each 10 gold melting processes and 15 off silver melting processes. The crucible will last longer if you also use graphite protector paint (on the outside of the crucible and inside the moulds) before EACH heating process.
- To replace the crucible please first unscrew the left or right crucible's holder (Pic. 3). After inserting the new crucible in its hole, insert the ends of the holders into the corresponding slots on the new crucible and fix the crucible in place by screwing the holder back again.

TEMPERATURE CONTROLLER:

The temperature controller has already been set up to reach a highest possible temperature of 1,120°C (2,048°F) by the manufacturer. If you want to re-set this controller for a different temperature please follow this short set of instructions or check the controller's user manual. To start, short-click once on the "SET" button. The bottom line of the controller (which shows you the target-temperature) will start flashing.



Controller information:

1. "SET" - setting/confirmation button (used for setting all of the controller's parameters).
2. "Left Arrow" - segment selector (to choose from four segments).
3. "Down Arrow" - decrease (used to set the required temperature).
4. "Up Arrow" - increase (used to set the required temperature).

Useful tips:

This controller's 4-digit bottom line allows you to quickly change the required temperature. When you click on the "SET" button the bottom line will start flashing. Use the "LEFT ARROW" button first to choose the required digit to change. Then use the "UP" and "DOWN" arrows to change the temperature.

You'll have about 20-25 seconds to change each parameter. Please do not worry if you take too much time and the controller resets and starts displaying the current temperature inside the chamber. Simply restart the programming process by clicking on the "SET" button again. If you are a beginner and are having difficulty resetting the temperature controller, please feel free to contact the manufacturer or agent/shop for FREE help with this matter anytime during the warranty period.

You can also find detailed information about the controller's settings in the controller's user manual, but we do not recommend changing the manufacturer's setting yourself (except for the temperature) as this can cause the factory settings (calibration) to be lost and may result in you needing to fully reset and/or re-calibrate the controller in the future, which is NOT COVERED BY THE WARRANTY.

When you have finished re-programming this controller, short-press the "SET" button for the new setting to be remembered and your job to start.

Your controller will remember the last temperature and will always try to reach this temperature in future until it is changed again.

HEALTH & SAFETY INSTRUCTIONS:

- ⇒ Make sure that your kiln is disconnected from the power supply when replacing the crucible.
- ⇒ It is always best to conduct some tests on a small quantity of your melting metal before you start working with larger quantities.
- ⇒ Using this kiln continuously at temperatures higher than 1,120°C without turning On the 24/7 system may cause a problem with the heating element and/or with the kiln's metal body that is NOT covered by the warranty.
- ⇒ This kiln's metal stand does not get hot, but it is still best practice to place it on a level surface that will not be damaged by heat. Simple tiles or a sheet of metal is recommended, but other fire-resistant materials may also be used.
- ⇒ Always make sure that the lid properly covers the crucible in order to reach the highest possible temperatures inside the chamber. Although the crucible lid has a wooden handle, it is recommended that you use gloves with it for your own safety.
- ⇒ Always use heat-resistant gloves and long enough metal tongs to remove or insert the crucible if you prefer to use the kiln more traditionally.
- ⇒ This kiln should be kept away from all inflammable materials and other heating devices.
- ⇒ When opening the lid at temperatures higher than 200°C (392°F) always maintain as much distance as possible between you and the hot crucible. 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 turning handle 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.
- ⇒ The manufacturer reserves all rights to make changes to this kiln that improve furnace performance without notification.

DANGER: 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