

TECHNICAL SPECIFICATIONS:

MODEL	R9D-1000-17
VOLTAGE / AMPERAGE	115V; 220V; 240V
POWER	1500 Watt
MAXIMUM HEATING T °C	900 °C
RANGE OF Temperatures (°C)	0 °C – 900 °C
DIGITAL CONTROLLER	Yes
SOLID STATE RELAY	Yes (25A)
ALARM	Can be connected on request.
WEIGHT	6.5 Kg
THERMOCOUPLE TYPE	K
OVERAL CRUCIBLE DIMENSIONS (MM)	110(D) x 250(H)
INTENAL CRUCIBLE DIMENSIONS(MM)	70(D) x 225 (H)
FURNACE OVERAL DIMENSIONS (MM):	200 (W) x 200 (D) x 450 (H)
AVERAGE HEATING TIME (900 C) with empty crucible	30 minutes
INCLUDED:	One crucible / One heavy tongs
MAXIMUM VOLUME OF CRUCIBLE (MOLTEN ALUMINIUM):	3.3 Kg

HEALTH AND SAFETY INSTRUCTIONS:

- Always make sure that the lid of kiln is closed properly in order to speed up the heating process and to reach the required temperature inside the chamber.
- Always use heat resistant gloves when using this furnace. Never working using only bare hands.
- KEEP OUT OF REACH OF CHILDREN.
- NEVER LEAVE UNATTENDED.
- Never heat it up more then 900 °C.
- ALWAYS place on a heat resistant surface. A masonry or concrete floor is recommended, but other protective material like metal or ceramic worktop may be used.
- NEVER use this crucible more than 50 times, due to a structure of graphite it will cause cracks to the crucible and a sudden leak of the molten metal inside the furnace! Spare standard graphite crucibles and graphite protective paint are available at any time from your trader.
- DANGER: This is an electrical appliance — always follow all health and safety rules and regulations in your country for heating equipment.

PLEASE NOTE:

This kiln is an electrical appliance. DO NOT try to open or repair it yourself as you may get injured or damage the equipment.

R9D - 1000 **ALUMINIUM ELECTRIC MELTING KILN INSTRUCTION MANUAL**



KILN INTRODUCTION:

The is an electrical melting kiln with a graphite crucible for 2.3 kg of aluminium. It has a digital temperature controller that will allow you to pre-set any required temperature between a room temperature and 900°C for melting different type of metals such as lead, aluminium, tin, pewter, zamac etc. This kiln will reach and hold any pre-settled temperature as long as you need until you will change it manually again or switch your kiln off. The empty furnace reaches the temperature of 900°C in approximately 30 minutes. Please remember that the heating time depending of the quantity and type of metal in the crucible: more metal (larger pieces) means more heating time.

TYPES AND QUANTITY OF METAL YOU CAN MELT IN THE FURNACE

METAL TYPE:	METAL DENSITY (G/SM3):	QUANTITY IN 865,9 cm3 crucible (Molten/Gram):	MELTING TEMPERATURES (C/F):
WIHTE METAL	8.84	7,654.00	202 °C / 395.6°F
TIN	7.28	6,303.00	231.9°C / 449.4°F
LEAD	11.34	9,820.00	327.3°C / 621.1°F
ZINC	7.14	6,182.00	419°C / 786.2°F
ALUMINIUM	2.70	2,338.00	660.1°C / 1220.2°F

IMPORTANT:

For first time use please heat up the furnace for approximately 3-5 minutes to allow water to evaporate from the chamber and from inside of the furnace. Otherwise there is a risk of causing small cracks to the chamber. Let the furnace cool down in full before you start work. If the furnace is to be used for less than once per month repeat the process each time the furnace is used.

The furnace's digital temperature controller is originally settled by manufacturer to default temperature of 900°C. If, for some reason, you wish to change this temperature setting please follow the temperature setting instruction on next page.

PREPAIRING FOR WORK:

Remove the kiln from its original packaging. Put the kiln on a heat resistant surface such as masonry, metal, concrete or ceramic tiles.

Open the lid and place the metal pieces that you would like to melt into the crucible. Please remember that melting process is depending of quantity and size of the metal pieces in a crucible: more metal and larger pieces take more time to be melted.

Close the lid and connect this kiln to a power source. The kiln will begin to work.

Please do not open the lid too often. Each time you open lid the temperature inside graphite crucible drop and you will require more time for re-heat it.

If you do not use a graphite protector paint, never heat the crucible continuously longer than 90 minutes. Due to the structure of a graphite it may cause cracks to the crucible and a sudden leak of the molten metal inside the furnace. A standard aluminium melting process lasts only about 30 minutes.

Spare standard graphite crucibles and a graphite protection liquid/paint are available at any time from your agent or /and on manufacturer's website.

When the metal has melted open the lid using heat protective gloves and pour the molten metal out into a mould.

Never take hot graphite crucible by hand when lifting it up from its hole. For this purpose use only stainless steel tongs that are supplied with the kiln.

The graphite crucible can be replaced when necessary (usually each 50 processes) regardless of heating time and using temperatures.

For avoiding a heat-shock and cracks of your mould please

HOW TO PRE-SET REQUIRE TEMPERATURES:



NOTE: To avoid problems with heating element this digital temperature controller is pre-settled by the manufacturer to a highest temperature of 1120°C. You can set a higher temperature manually - for example to see on the screen 1300 C (2372 F), but however, the controller will still heat your kiln up only to 1120 C or less - depending of your setting.

Temperature can be

displayed only in degrees Celsius (°C).

1. "SET" (Setting/Confirmation) button.
2. Segment's selector (to choose one from four segments).
3. Value decrement / preceding parameter (Use to setup a required temperature).
4. Value increment / next parameter (Use to setup a required temperature).

HOW TO PRE-SET A REQUIRED TEMPERATURE:

This is very simple process on this controller that is already fully pre-settled and calibrated for you.

1. Please connect your kiln to a power supply and switch it 'On'.
2. Press button '1' to see "flashing" digits on bottom line.
3. Than, using buttons "4", "5" or "6" insert a required temperature.
4. Than press "SET" button again to remember the new setting or just leave the controller for 20-30 seconds to remember new setting automatically.

NOTE: You can find more information about available controller's settings and functions on its instruction manual that supplied on request, but we cannot recommend you to change the manufacture's setting yourself as it can cause the loss of factory settings and may require re-setting and/or re-calibration in future.