

BUUBO GF1100ND3

BUUBO Metal Melting Furnace GF1100ND3 User Manual

Model: GF1100ND3

1. INTRODUCTION

This manual provides essential instructions for the safe and efficient operation, maintenance, and troubleshooting of your BUUBO Metal Melting Furnace GF1100ND3. Please read this manual thoroughly before using the product and retain it for future reference.

2. SAFETY INSTRUCTIONS

WARNING: Failure to follow these safety instructions may result in serious injury or property damage.

- Always wear appropriate personal protective equipment (PPE), including heat-resistant gloves, eye protection, and protective clothing, when operating the furnace.
- Operate the furnace in a well-ventilated area to prevent the accumulation of fumes.
- Ensure the furnace is placed on a stable, non-combustible surface.
- Do not touch hot surfaces. The furnace reaches extremely high temperatures.
- Never leave the furnace unattended during operation.
- Do not overload the crucible.
- Keep flammable materials away from the furnace.
- Disconnect power before cleaning or maintenance.
- Do not use the furnace for melting materials other than those specified (gold, silver, copper, aluminum, and other metals with melting points below 1100°C / 2102°F).
- Keep children and pets away from the operating area.



Image: The BUUBO Metal Melting Furnace GF1100ND3, shown with its main components including the furnace unit, crucible tongs, protective gloves, and power cable. This image provides a general overview of the product and its included accessories.

3. PACKAGE CONTENTS

Verify that all items are present and undamaged upon unpacking.

- 1 x Melting Furnace Unit
- 1 x 1 KG Graphite Crucible (if included in your specific package)
- 1 x 3 KG Graphite Crucible
- 1 x Graphite Ingot Die (if included in your specific package)
- 1 x Crucible Tong
- 1 x Protective Gloves
- 1 x Power Cable
- 1 x Product Manual (this document)

RICH ACCESSORIES

Ensure your security



**1 KG & 3 KG
Grooved Graphite Crucible**



Protective Gloves



Power Cable



Crucible Tongs



Graphite Ingot Die

Image: A visual representation of the accessories included with the BUUBO Metal Melting Furnace. This includes the 1 KG and 3 KG graphite crucibles, protective gloves, power cable, crucible tongs, and a graphite ingot die.

4. PRODUCT OVERVIEW

The BUUBO Metal Melting Furnace GF1100ND3 is designed for melting precious metals such as gold, silver, copper, and aluminum. It features precise digital temperature control and efficient heating capabilities.

Key Features:

- **Professional Melting Furnace:** Equipped with a durable quartz lid and inner tank, and a quartz chamber with cooling holes for heat dissipation.
- **High-Purity Graphite Crucible:** Designed for rapid heating and resistance to heat, acids, and alkalis.

- **Digital Temperature Control:** Features a PID module and digital control system for accurate temperature monitoring and display via a K-type thermocouple.
- **Fast & Efficient Heating:** Utilizes high-temperature alloy heating wire to reach a maximum temperature of 1150°C (2102°F) quickly, melting metals in approximately 45 minutes.

HIGH-QUALITY FULL GRAPHITE CRUCIBLE

High mechanical strength, low permeability



Grooved Graphite Crucible
Good Thermal Conductivity



Premium Quartz
Good Thermal Insulation



Image: The electric melting furnace in operation, illustrating its capability to melt various precious metals such as gold, silver, copper, and aluminum. This highlights the primary function of the device.

5. SETUP

1. **Unpacking:** Carefully remove all components from the packaging. Inspect for any shipping damage.
2. **Placement:** Place the furnace on a stable, level, heat-resistant, and non-combustible surface. Ensure adequate clearance around the unit for ventilation.
3. **Crucible Installation:** Place the desired graphite crucible into the furnace chamber. Ensure it sits

properly at the bottom.

4. **Power Connection:** Connect the power cable to the furnace and then to a grounded electrical outlet. Ensure the power switch is in the "OFF" position before connecting.

PID TECHNOLOGY

Providing you precise and convenient metal melting

- ✓ **PID Temperature Control**
- ✓ **Monitor the Actual Temperature**



LED Display with Touchpad
Easy to Read and Control



Image: A close-up view of the high-quality graphite crucible and the premium quartz lid. This illustrates the components used for containing and insulating the molten metal during the melting process.

6. OPERATING INSTRUCTIONS

1. **Prepare Material:** Place the metal to be melted into the graphite crucible. Do not fill the crucible more than 80% of its capacity.
2. **Close Lid:** Carefully close the furnace lid.
3. **Power On:** Flip the main power switch to the "ON" position. The LED display will illuminate.
4. **Set Temperature:**
 - The display shows the current temperature and the set temperature.
 - Use the "U" (Up) and "D" (Down) buttons to adjust the target melting temperature. The maximum

temperature is 1150°C (2102°F).

- Press the "P" (Program) button to confirm the set temperature.

5. **Start Heating:** The furnace will begin heating automatically to the set temperature. The display will show the current temperature rising.

6. **Monitor Melting:** Once the target temperature is reached, the furnace will maintain it. Monitor the melting process. Melting typically takes about 45 minutes for metals with a melting point below 1100°C.

7. **Pouring Molten Metal:**

- Once the metal is fully molten, turn off the furnace by flipping the main power switch to "OFF".
- Wearing protective gloves, carefully use the crucible tongs to lift the crucible out of the furnace.
- Slowly and steadily pour the molten metal into a pre-heated ingot mold or desired casting form.

8. **Cool Down:** Place the empty crucible back into the furnace or on a heat-resistant surface to cool. Allow the furnace to cool completely before handling or storing.

HIGH HEATING RATE

Spend time crafting, not waiting

Rapid Heating-Up
Max. Heating Temp 1150°C/2102 °F

CAUTION
HOT SURFACE DO NOT TOUCH

High Efficiency & High Safety Coefficient

Smelt Quickly

VEVOR

Image: The LED display and touchpad control panel of the furnace. This panel allows users to set and monitor the precise temperature during the melting process, utilizing PID technology for accuracy.

7. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your melting furnace.

- **Cleaning:** Ensure the furnace is completely cool and unplugged before cleaning. Use a soft, dry cloth to wipe down the exterior. Do not use abrasive cleaners or solvents.
- **Crucible Care:** Graphite crucibles are consumables. Inspect them for cracks or damage before each use. Replace damaged crucibles immediately. Avoid dropping or impacting crucibles.
- **Storage:** Store the furnace in a dry, dust-free environment when not in use.
- **Inspection:** Periodically check the power cable for any signs of damage. If damaged, discontinue use and contact customer support.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Furnace does not power on.	No power supply; Power cable loose; Main switch off.	Check power outlet; Ensure power cable is securely connected; Flip main switch to "ON".
Furnace not heating.	Incorrect temperature setting; Heating element failure.	Verify set temperature; Contact customer support if heating element is suspected.
Temperature display error.	K-type thermocouple issue.	Ensure thermocouple is properly seated; Contact customer support.
Metal not melting within expected time.	Material melting point too high; Crucible overloaded; Insufficient heating time.	Confirm material is suitable for furnace; Reduce material quantity; Allow more time or increase temperature if safe.

9. SPECIFICATIONS

Model	GF1100ND3
Crucible Capacity	1 KG (2.2 lbs) / 3 KG (6.6 lbs)
Max. Heating Temperature	1150 °C / 2102 °F
Power Input	1750 W
Temperature Accuracy	±1°C
1 KG Crucible Internal Dimensions (Dia. x H)	3.8 x 11.5 cm (1.5" x 4.53")

1 KG Crucible External Dimensions (Dia. x H)	6.5 x 12.5 cm (2.56" x 4.92")
3 KG Crucible Internal Dimensions (Dia. x H)	5 x 16 cm (1.97" x 6.3")
3 KG Crucible External Dimensions (Dia. x H)	7.5 x 17 cm (2.95" x 6.7")
Item Dimensions	38 x 24 x 21 cm (14.96" x 9.45" x 8.27")
Item Weight	7.1 kg (15.65 lbs)