

## Simatec IH 025

# Simatec IH 025 Portable Bearing Induction Heater

## Instruction Manual

### 1. INTRODUCTION

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The Simatec IH 025 Volcano is a portable induction heater designed for efficient and controlled heating of various ferritic metal components, primarily bearings. Its patented technology allows for high heating performance within a lightweight and compact structure. This manual provides essential information for the safe and effective operation, setup, and maintenance of your IH 025 heater.

The IH 025 is suitable for heating roller bearings with an inner diameter as small as 20 mm (0.79 in) up to an outer diameter of 160 mm (6.30 in) and a weight of up to 10 kg (22 lbs). Beyond bearings, it can also heat other circular ferritic metal components such as gear wheels, pulleys, bushings, flanges, bearing rings, pinions, and shrink rings.

### 2. SAFETY INSTRUCTIONS

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Always adhere to the following safety guidelines to prevent injury or damage to the device:

- Read this manual completely before operating the device.
- Ensure the power supply voltage matches the specifications of the heater (110–120 V or 240 V).
- Always wear appropriate personal protective equipment, including heat-resistant gloves and eye protection, when handling heated components.
- Do not touch the heating surface or heated components directly with bare hands.
- Keep the work area clean and free of flammable materials.
- Do not operate the heater in wet or damp conditions.
- Ensure adequate ventilation in the operating area.
- Keep children and unauthorized personnel away from the device during operation.
- Disconnect the power cord from the outlet before cleaning or servicing the unit.
- Do not modify the device in any way. Use only original Simatec accessories and spare parts.

### 3. WHAT'S IN THE BOX

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Upon unpacking, verify that all components are present and undamaged:

- 1 x Simatec IH 025 Portable Bearing Induction Heater
- 1 x Temperature Probe
- 1 x Pair of Protective Gloves
- 1 x Carrying Case
- 1 x Instruction Manual (this document)

### 4. SETUP

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Follow these steps to set up your IH 025 heater:

1. **Unpack the Device:** Carefully remove the IH 025 heater and all accessories from the carrying case.
2. **Placement:** Place the heater on a stable, level, and non-flammable surface. Ensure there is sufficient space around the device for ventilation and safe operation.
3. **Power Connection:** Connect the power cord to the appropriate electrical outlet. Ensure the outlet matches the voltage requirements of your specific IH 025 model (110-120V or 240V).
4. **Temperature Probe Connection:** Connect the temperature probe cable to the designated port on the heater.



*Figure 1: Simatec IH 025 Portable Bearing Induction Heater ready for operation.*

This image shows the Simatec IH 025 induction heater from an elevated angle. The device is light gray with a black base. On the left side, there is a control panel with a red digital display showing "888" and several buttons. On the right side, a cone-shaped heating surface is visible, with a large bearing placed on it. A black coiled cable extends from the control panel to a temperature probe inserted into the inner ring of the bearing. The overall setup demonstrates the heater in use with a bearing.

### 5. OPERATING INSTRUCTIONS

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The IH 025 Volcano is designed for ease of use. Follow these steps to heat your components:

1. **Prepare the Workpiece:** Ensure the component to be heated (e.g., bearing) is clean and dry.

2. **Place the Workpiece:** Carefully place the workpiece onto the cone-shaped heating surface of the IH 025. Ensure it sits securely and centrally.
3. **Insert Temperature Probe:** Insert the tip of the temperature probe into the inner ring of the workpiece. For optimal temperature control, ensure good contact between the probe and the workpiece.
4. **Set Target Temperature:** Use the control panel to set the desired heating temperature. Refer to the specific requirements of your component for the correct temperature.
5. **Start Heating:** Press the start button on the control panel to begin the induction heating process. The display will show the current temperature of the workpiece.
6. **Monitor Heating:** The device will automatically stop heating once the target temperature is reached. Monitor the display during the process.
7. **Remove Heated Workpiece:** Once heating is complete, and wearing the provided protective gloves, carefully remove the heated workpiece from the cone. Use appropriate tools if necessary.
8. **Cool Down:** Allow the heater to cool down before storing or moving it.

## 6. MAINTENANCE

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Proper maintenance ensures the longevity and optimal performance of your IH 025 heater:

- **Cleaning:** After each use, ensure the device has cooled down and is disconnected from the power supply. Wipe the heating surface and exterior with a clean, dry cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the heater in its original carrying case in a dry, dust-free environment when not in use.
- **Inspection:** Periodically inspect the power cord, temperature probe, and the device for any signs of damage or wear. If any damage is found, do not operate the device and contact Simatec support.

## 7. TROUBLESHOOTING

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If you encounter issues with your IH 025 heater, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Device does not power on.	No power supply; loose power cord; faulty outlet.	Check power cord connection; try a different outlet; ensure power switch is on.
Workpiece not heating.	Workpiece not ferritic; incorrect placement; temperature probe not connected or faulty.	Ensure workpiece is ferritic metal; reposition workpiece; check temperature probe connection.
Temperature reading is inaccurate.	Poor contact of temperature probe; faulty probe.	Ensure probe has good contact with workpiece; replace probe if necessary.
Error code displayed.	Internal fault; overheating; sensor issue.	Refer to the specific error code in a more detailed service manual (if available) or contact Simatec support. Power cycle the device.

If the problem persists after attempting these solutions, please contact Simatec customer support for further assistance.

## 8. SPECIFICATIONS

Feature	Detail
Model Number	IH 025
Workpiece Weight Capacity	Up to 10 kg (22 lb)
Minimum Inner Diameter (Workpiece)	20 mm (0.79 in)
Maximum Outer Diameter (Workpiece)	160 mm (6.30 in)
Device Weight	Approximately 3.5 kg (7.7 lbs)
Available Voltages	110–120 V and 240 V
Package Dimensions	20 x 16 x 6 inches

## 9. WARRANTY AND SUPPORT

Simatec products are manufactured to high-quality standards. For information regarding warranty coverage, please refer to the warranty card included with your product or visit the official Simatec website.

For technical support, spare parts, or service inquiries, please contact Simatec customer service. Have your product model number (IH 025) and serial number ready when contacting support.

*Contact information (example - please refer to official Simatec channels for current details):*

**Simatec Inc.**

Website: [www.simatec.com](http://www.simatec.com)

Email: [support@simatec.com](mailto:support@simatec.com)

Phone: (Your regional support number)