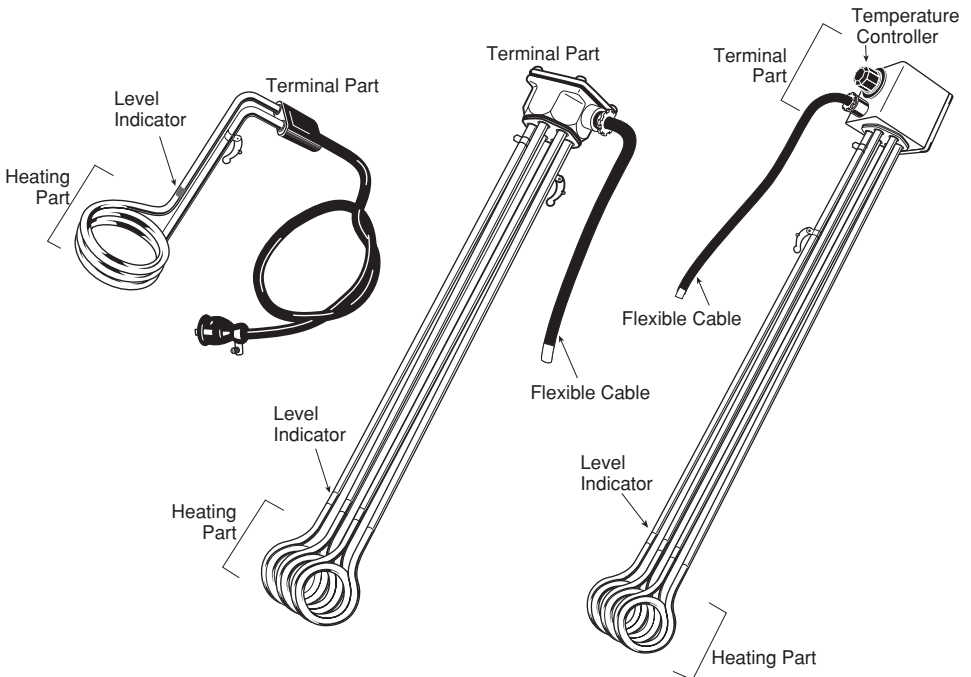


INSTRUCTIONS MANUAL

For Safe Use

Read the instructions before use and keep in the convenient place for future reference.

REMOVABLE IMMERSION HEATER for OIL



 **HAKKO ELECTRIC MACHINE WORKS CO., LTD.**

WARNING

● Do not heat any other liquids than oil.

Otherwise it may cause fire and electric shock.



● Do not put the terminal part or the temperature controller into oil.

Otherwise it may cause electric shock and leakage.



● Do not put the heater into unstable containers or those that may fall down.

Confirm that the container does not fall while putting the heater in, and pour oil into it. Falling may cause fire.



● Use containers made of metals, not of plastic materials.

Otherwise it may cause melt of containers, fire and electric leakage.



● Do not alter or deform the heater.

Otherwise it may cause fire or electric shock.



● Do not use the heater in the following condition. It may cause fire, electric shock or leakage.

- In case the heater merges into deposition in oil.
- In case foreign substances attach on the heater.
- In case the heating part is out of the oil surface.
- In case oil contacts with terminal part or the controller.



● Do not deform, bend nor pull forcibly the power cable.

Otherwise it may cause fire or electric shock. Ask the distributor to replace the cable if it is damaged.



● Do not touch the plug with wet hands.

Otherwise it may cause electric shock.



- **If the container falls while heating, unplug the heater and power off immediately.**

Otherwise it may cause fire.



- **Keep the heater in oil while heating.**

Keep the heating part below oil surface constantly. Otherwise it may cause fire, burns, or failures. The temperature controller does not have any boil-dry protection.



- **Unplug or break switch to power off the heater after use.**

Otherwise it may cause fire. The temperature controller does not have any switch to power off.



CAUTION

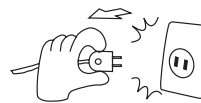
- **Power off and leave the heater in oil for one minute before taking it out of the container.**

Do not put the heater on inflammable materials just after taking it out of the container. Otherwise it may cause fire. Do not touch the heating part with bare hands. Otherwise it may cause burns.



- **Pull the power plug by hand.**

Damage on the power cable may cause fire and electric shock.



- **Do not use with any power voltage other than the indicated.**

Otherwise it may cause fire, electric shock or failures.



- **Do not leave the heater unattended while heating.**

Use oil feeding equipment, or power off the heater and leave for safety.



CAUTION

- **Connect to the ground if the heater has a ground terminal.**

Otherwise it may cause electric shock and leakage.



- **Caution for use in the countries other than Japan.**

The heater is designed following Electrical Appliances and Material Safety Act in Japan. When you use the heater in the countries other than Japan, follow their regulations of electric appliances.



Maintenance

○ Cleaning of the heater sheath

Power off the heater and cool to room temperature before you clean it. Wash the heater sheath by neutral detergent if foreign substances are attached. Wipe the heater with dry cloth or plastic brush. Do not use metal brushes or files.

○ Cleaning of the terminal part and the temperature controller

Wipe with wet cloth on the terminal part and the temperature controller. Use neutral detergent for stains. Organic solvent may cause damage on plastic materials of the heater.

After-Sale Service

If you have any questions,

If you have any questions about our products, contact with your distributors, or the Sales Head Office of HAKKO CO., LTD. The addresses and phone numbers are as follows.

○ **HAKKO CO.,LTD. THERMAL DEVICE SALES DIVISION**

HEAD OFFICE ,TOKYO BRANCH

153-0051 1-7-9 kamimeguro, Meguroku, Tokyo.

TEL.03(3464)8500

FAX.03(3464)8539

○ **HAKKO ELECTRIC THERMAL DEVICE (SHANGHAI) CO., LTD.**

No. 512 Yutan Rd., Songjiang, Shanghai, 201600, China.

TEL.(86)21-5774-3121

FAX.(86)21-5774-1700

○ **HAKKO (THAILAND) CO., LTD.**

9/41 Moo 5, Paholyotin Road, Klong 1, Klong Luang, Patumthani 12120, Thailand. TEL.(66)-2-902-2512 FAX.(66)-2-516-2155

○ **HAKKO ELECTRIC MACHINE WORKS CO.,LTD (manufacturer)**

HEAD OFFICE

389-0806, 1486 Ooaza Isobe, Chikuma City, Nagano Pref.

○ **Home page**

<http://www.hakko.co.jp/>