# Features of the HAKKO Hot Air Generator

- · High cleanliness and durability due to stainless steel heater.
- · Light weight and compact size.
- High safety specification.
- Controller can be separated from the body. Easy to build various devices in.
- · High durability.

Sheathed heater for hot air generator



### Difference between sheathed heater and bare heater wires

You may have seen bare heater wire used for conventional products such as a hair dryer or an electric oven. Sheathed heater wire is made of heater wire covered with a metal sheath (pipe) which is isolated. Conventional heater wire or sheathed heater wire are used for hot air generator.

	Sheathed heater	Bare heater wire
Structure	Stainless sheath  Insulation (magnesia) Heater wire	Heater wire
Lifecycle	Long lifecycle is retained in any environment since heater wire is covered with a sheath.	Lifecycle can be shortened due to corrosive gas or dust.
Heat value change	Heat value is stable after long-term use.	Heat value can be reduced due to heater wire corrosion by external environmental factors.
Insulation	Sheath and heater wire are insulated.	Heater wire is requires to be isolated by itself.
Safety	No risk of electrical leakage due to covered heater wire.	Electrical leakage can occur due to water entry.

#### **New Controller**

## Functions of hot air genarator have been enhanced.

(Common to Series 2000 and Series 3000)

- O Equipped with input terminal for outer thermocouple (dual)
  The following functions are available.
  - Temperature controlled by outer thermocouple
     The temperature of the hot air generation can be controlled by the outer thermocouple installed in the furnace or near the workplace.
  - Excessive temperature increase monitored by the outer thermocouple

When the temperature increases excessively, the electricity to the heater is cut.

 Temperature jointly controlled by built-in and outer thermocouples

One thermocouple controls the temperature, while the other shifts the functions depending on the temperature (cutting the electricity to the heater in case of high temperature and resuming sending hot air after decrease of temperature).

- O Shift start/stop by outer signal
  - Operation control by host device will contribute to line automation.
- Alarm functions work in case of various troubles.

Monitoring troubles by host device will contribute to centralized control.

O External temperature regulator can be set.

Your current temperature regulator can be set. Programmed temperature control is also available by setting controller program function.

O Cooling function is added.

When the hot air operation stops, the heater is automatically cooled

O Expanded safety features

With any failure in the controller under excessive temperature, the electricity to the heater is cut by the safety path built into the body.

#### Precautions in use

- If not used with the rated supply voltage, fire or electric shock may occur.
- Any modification is not permitted.
- Use in an explosive or inflammable atmosphere is strictly prohibited.
- Should pay attention to avoid pieces of cloth or dust from blocking the suction opening.