

For those who work in the food industry

Is there a problem with the heater?

Warm up, Warm up,

Problem solving

Prevention of water droplets due to temperature difference

Prevention of condensation

Prevention of temperature drop

Heating

Heater for stirrer
● Prevention of condensation

Heater for tank
● Prevention of temperature drop

Heater for cans
● Prevent it from solidifying
● Melting

Heater for hopper tank

● Melting

● Heating

Heater for plumbing

● Anti-freezing

● Keeping heat

Heater for refrigerator

● Prevention of condensation

● Prevention of condensation

Heater for the bottom of the can
● Prevent it from solidifying
● Melting

Prevent it from solidifying

Loosen the viscosity of oil etc.



Heater for spray
● Prevent it from solidifying
● Melting

● Prevention of temperature drop

Heater for workbench

● Keeping heat

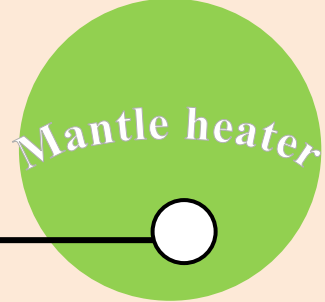
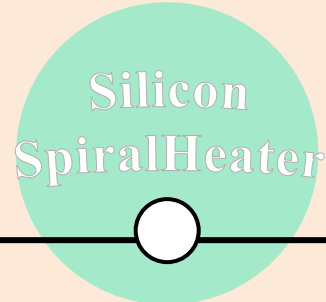
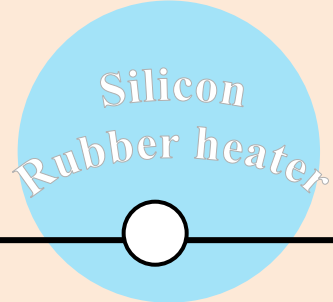
"Three High" is made to order from one

"Three High" manufactures a heater from one according to the customer's request.

keeping heat

Prevents the temperature inside the piping from dropping





Loosen the viscosity of edible fats and oils

Condensation countermeasures

Chocolate Prevention of temperature drop

Oil melting

~Previous Issues

In order to loosen the viscosity of edible fats and oils, We used to heat it by putting cans in constant-temperature tank. It cost lots of electricity using a constant-temperature tank when there was a small amount of fat and oil.

~Installed heater ~



Bottom Heater: Movable hot plate allows heating anywhere, as long as heating source is available.

~Advantages after Introduction~

- Can be heated simultaneously with four cans of one-to-one cans at 400W
- Simplification of temperature chambers can be done by covering the entire chamber with the thermal insulation (the temperature inside the chamber is about 60°C)
- Ability to save electricity bills and build a production system that considers environmental impact
- Save workers the trouble of transporting cans to constant-temperature tanks

~Previous Issues

Steam from food heated the metal at the top of the production line, causing condensation. There was concern that drops of water would fall into the food.

~Installed heater ~



Silicone rubber heater: Silicone rubber heater with the same shape as metal is manufactured and applied to metal with double-sided tape. It is possible to warm only the metal with a pinpoint.

~Advantages after Introduction~

- No need for significant movement of equipment
- By raising the temperature of the metal with a silicone rubber heater, condensation can be prevented by eliminating the temperature difference from the place heated by steam, and the problem can be solved without drastically moving the equipment.



~Previous Issues

The temperature of the chocolate fell at the piping between Tank A and Tank B, and it was solidified on the way.

~Installed heater ~



Silicone spiral heater: A silicone spiral heater is wrapped around the piping and heated from the outside. As the piping is cleaned regularly, we selected a heater that is easy to attach and detach.

~Advantages after Introduction~

- Yield improvement
- Since the piping itself is kept at 40°C and the temperature of the chocolate does not drop in the piping, the chocolate no longer solidifies. Quality was maintained and yield was improved.



~Previous Issues

When filling the retort pack with curry in the hopper tank, oil was solidified at the outlet, resulting in poor flow.

~Installed heater ~

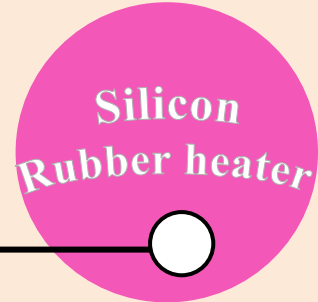
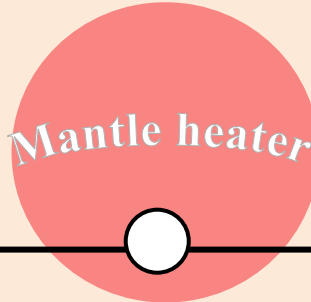
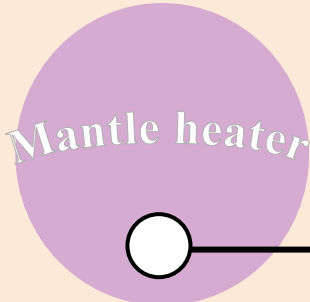


Mantle heater: A heater is wrapped around the cone of the hopper tank for heating. In order to prevent contamination from entering the tank, we used a PTFE cloth that does not scatter glass fibers, and applied a process that allows the heater to be removed easily when cleaning the tank.

~Advantages after Introduction~

- The increase of efficiency of work
- Oil near the exit melted, allowing the retort pack to be filled smoothly, and no longer delays work in the filling process.





Inside the piping Prevention of oil adherence

~Previous Issues

At a frozen food manufacturing factory, oil from meat accumulated inside the piping and the flow became poor. Therefore, the piping was poured with hot water throughout the day to melt the oil. In addition to the soaking of water inside the factory, the cost of water supply and electricity was also high.

~Installed heater ~



Mantle heaters: Heaters have been fitted to elbows that are particularly susceptible to oil build-up. Since there are pipes where people pass, and there is a risk of burns if the heater is accidentally touched, the heater has been made of an integrated insulation material to avoid problems even if it is touched. Due to the cleaning of the piping, one-touch removable processing has been applied.

~Advantages after Introduction~

- Cutting of the costs more than the current situation
- The installation of the heater has resulted in the melting of oil inside the piping, smoothing the flow, and improving the working environment. This also helped to save electricity and water bills.

To prevent condensation inside the agitator

~Previous Issues

Condensation occurs inside the agitator in winter when the temperature in the factory becomes low. The powder of snack confectionery was fooled by condensation, causing variation in quality.

~Installed heater ~



Aluminum foil heater: After attaching an aluminum foil heater to the outside of the agitator, it was covered with thermal insulation from above. Thermal efficiency was improved by attaching thermal insulation, improved and the heat uniformity in uniform heat.

~Advantages after Introduction~

- Realization of stable quality
- The quality is no longer uneven between summer and winter, and the powder becomes uniform in snacks. In addition, we were able to improve the yield.



Loosen the starch syrup

~Previous Issues

We used to heat water clams over a fire, but for safety reasons, we don't want to use the fire that caused the break out of fire.

~Installed heater ~



Mantle heaters: The outside and bottom of the tank were covered with heaters, and the heaters were lifted with metal fittings to improve heat conduction to the tank and mounted so that they are stick with the tank.

~Advantages after Introduction~

- Prevention of accidents and improvement of quality
- Besides being able to heat safely without using fire, thanks to the temperature setting, the water is no longer scorched, and the quality has been stabilized. Since the mantle heater is integrated with insulation material, there is little loss of heat, and we were able to warm it efficiently.



Thawing frozen meat

~Previous Issues

The frozen meat was thawed in running water, but the problem was that it would take some time to thaw.

~Installed heater ~



Silicone rubber heater: A silicone rubber heater is wrapped around the outer periphery of the stainless steel water tank to raise the temperature of the water. The electric power of the heater was reduced so that the water temperature do not rise too much, and temperature control was carried out with a temperature controller.

~Advantages after Introduction~

- Enabling tasks to be performed quicker
- Water temperature can be kept between 5 and 10°C, and thawing time can be shortened.



① Consult us



Prevention of freezing, heating, heat insulation, etc. If you face any issues in your business, please feel free to contact us.

⑤ Manufacturing



Maximizing our expertise in manufacturing and using the best of commercial heaters. With advanced technology Convert to gentleness, we will make the products one by one with all our heart and soul.

② Meetings



After consulting with us, We will have a meeting with the customer immediately. Please let us know about detailed requests and usage conditions.



⑥ Delivery



Once the product is finished, we will wrap it carefully, one by one, and deliver it to the customer.

③ Specification Study and Proposals



Set the optimum product specifications based on customer requests and operating conditions. Please let us make the proposal by visiting, call, fax, or e-mail.

⑦ Follow-up



During the time that customers use our products, we will do our best to follow up the usage. If you have any questions or concerns about installation, usage, malfunction, etc., please feel free to contact Three High.

④ Ordering



We will consider the production until the customer is satisfied, and if you satisfied with the product specifications proposed here, it will be a formal order. Three High supports the production from one piece to mass production.



We can also have a meeting at the showroom DEN.
Please see and experience Three High's manufacturing

Click here for
reservations



THREE HIGH
CO.,LTD. SINCE 1990



Head Office and Factory : 4-42-16 Higashiyamada, Tsuzuki Ward,
Yokohama City, Kanagawa 224-0023 JAPAN
DEN: 4-40-23 Higashiyamada, Tsuzuki Ward, Yokohama City,
Kanagawa 224-0023 JAPAN
TEL: +81-45-590-5561
FAX: +81-45-590-5571
Website: <https://www.threehigh.co.jp/> [\(Link\)](#)