Air Blow Heater

Super Small Heating Device

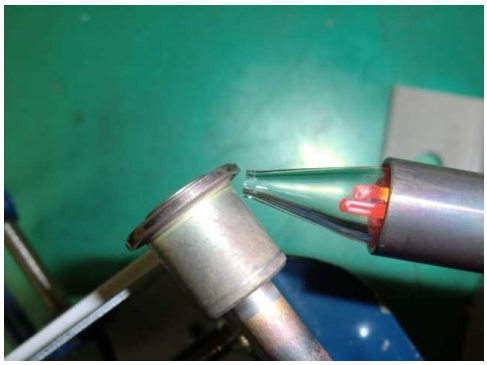
High heating for Gas & Air, Easy management temperature

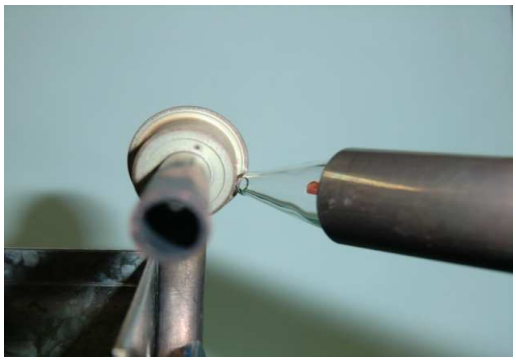
Simple, safe, clean, super-small high temperature heating device, using air as ubiquitous material.

"Air Blow Heater" considers the resources problem,
and promotes the materials science reformative.

Feature

- Hot output air temperature in short time of 1050 ℃.
- Temperature controlled easily by equipped with thermocouples.
- Nitrogen and Argon can be heated directly.
- Just output the air supply electricity heating, safe and clean.
- This Heater have attached the nozzle to suit the shape and heated.
- Air Blow Heater can be produced in range of 30w ~ 70kw.
- Φ4 ~ Φ38 outer diameter, and ultra-compact heating unit.





Heat-tech

9th edition

Heat-tech

I Applications and products

II Dimension and Outline

III Related Products

IV Heater Controllers

Applications of Air Blow Heater

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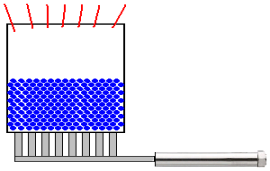
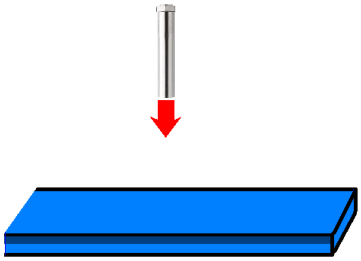
No.41 Dehumidification drying resin pellets



《 Problem Point 》
We used the industry dryer.
Unable to fine temperature control was a problem.

《 ⇒Kaizen Point 》
Heated and dried in large type the Air Blow Heater .
Dehumidification and sufficient quality of
injection molded raised in the proper preheat.

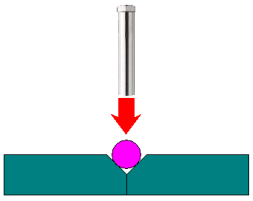
No.28 Preheating of resin board



《 Problem Point 》
When resin board was processed
while getting cold, breakage entered.

《 ⇒Kaizen Point 》
Resin board was preheated by the Air Blow Heater.
The flexibility was recovered and breakage was prevented.

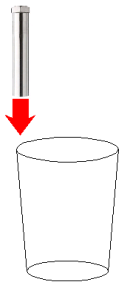
No.7 Torch of the resin weld



《 Problem Point 》
There was nothing good as a torch for resin welds,
and we were in trouble.

《 ⇒Kaizen Point 》
Spot was heated by the Air Blow Heater
and resin was welded.
The finish could heat a pinpoint, and became beautiful.

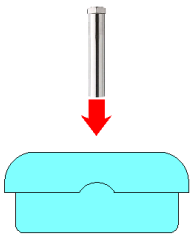
No.19 Deburr of resin mold



《 Problem Point 》
We were in trouble because
there were no deburring methods of a resin mold.

《 ⇒Kaizen Point 》
An abuse moth just applied hot air lightly by
the Air Blow Heater, and went off easily.
Yield rose substantially, and the profit increased.

No.20 Repair of resin mold



《 Problem Point 》
A few bruises were the claim, and we were in trouble.

《 ⇒Kaizen Point 》
It was heated lightly by the Air Blow Heater,
and the luster of the surface was taken good.

Applications of Air Blow Heater

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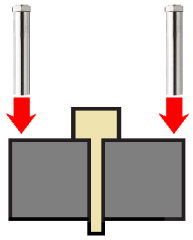
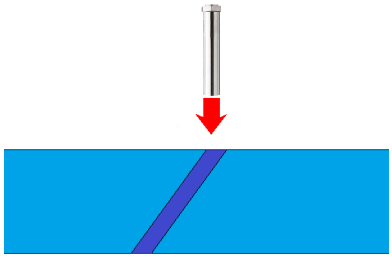
No.88 Thermal caulking of resin parts



《 Problem Point 》
There was no non-contact heater that can be accurately temperature control.

《 ⇒Kaizen Point 》
We were heated in the Air Blow Heater.
In the hot air that was temperature-controlled exactly, we were able to be processed.
Our manufacturing efficiency increased.

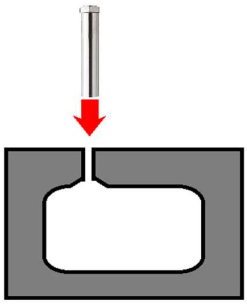
No.101 Adhesion of PVC sheet



《 Problem Point 》
The exact temperature control was necessary.

《 ⇒Kaizen Point 》
We adhered to PVC sheet using the Air Blow Heater.
Rise early, it has allowed accurate temperature control.
Besides, it became the maintenance-free as Air Blow Heater was non-contact heating without PVC attaching

No.103 Molding of a polyethylene container



《 Problem Point 》
The reduction of the defectiveness rate was necessary.

《 ⇒Kaizen Point 》
We ware molded using the Air Blow Heater.
Since the heating air fluidity of the resin is improved.

Applications of Air Blow Heater

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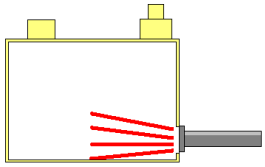
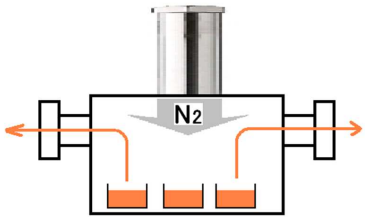
No.60 Rapid heating process chamber



《 Problem Point 》
The rapid heating is not possible to the chamber, had trouble.

《 ⇒Kaizen Point 》
In a large the Air Blow Heater warmed rapidly.
The rise of the processing cycle time,
significantly increasing the number of day treatment,
and increase productivity.

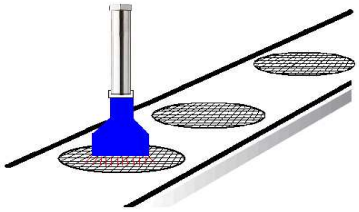
No.67 Concentration apparatus using nitrogen gas



《 Problem Point 》
We have no idea to concentrate without oxygen.

《 ⇒Kaizen Point 》
Nitrogen gas was blown into the sample directly and it was concentrated.
The volatile low solvent like DMSO and water could be concentrated
quickly by using the nitrogen gas which heated decompression.
Stainless steel and super engineering plastics were used,
so it could also be used for an expensive solvent of corrosive nature.

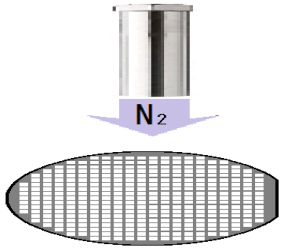
No.42 Drying of silicon wafers



《 Problem Point 》
The conventional method was in trouble
because it contains metal ions in dry air.

《 ⇒Kaizen Point 》
Heated and dried in the Air Blow Heater designed for clean room.
Since heating the coated glass, and metal ion content decreased.

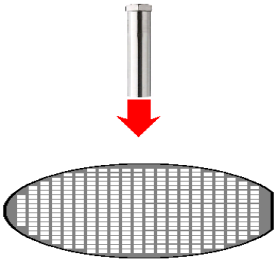
No.78 Dryness of Silicon wafers by the Nitrogen gas



《 Problem Point 》
The marks of water drop remained and were worrisome
when natural drying was carried out.

《 ⇒Kaizen Point 》
Nitrogen was heated with the Air Blow Heater and it dried.
The marks of water drop were lost,
and since there was also no oxidization, grace improved.

No.66 Heat source of the Silicon wafer inspection system



《 Problem Point 》
We have no idea about Silicon wafer easy heating.

《 ⇒Kaizen Point 》
The high temperature Nitrogen gas was injected
with the Air Blow Heater,
and the top surface temperature was adjusted to 400℃.
The Silicon wafer inspection system by
became possible though it did not make to the vacuum.

Applications of Air Blow Heater

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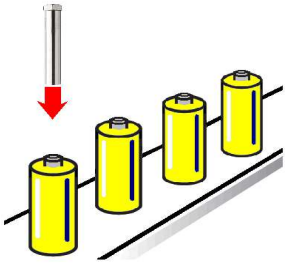
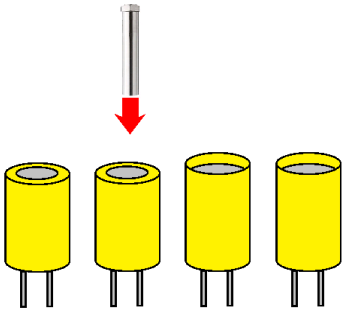
No.40 Heat shrinking of lithium batteries



《 Problem Point 》
We used the industry dryer.
Unable to fine temperature control was a problem.

《 ⇒Kaizen Point 》
Heated only the surface by the small calorie
by the Air Blow Heater and made them shrink.
Does not heat the cell body, it was able to improve reliability.

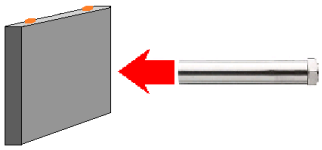
No.93 Heat shrink the capacitor



《 Problem Point 》
It did not shrink processed while temperature control.

《 ⇒Kaizen Point 》
The precise temperature control in the Air Blow heater,
it was appropriate temperature heating.
Thermal destruction is eliminated, defect rate was reduced.

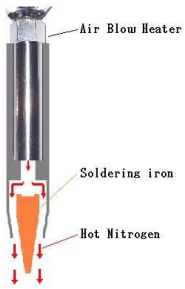
No.97 Temperature performance evaluation test of the rechargeable battery



《 Problem Point 》
The advanced battery with environment resistance is required for.

《 ⇒Kaizen Point 》
The temperature test was done using the Air Blow Heater.
The rapid temperature change
which was impossible until now has been reproduced.
The dynamic characteristic became clear.

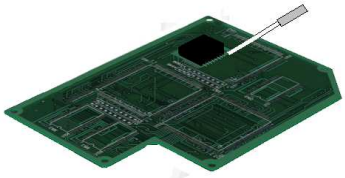
No.70 Heat source of nitrogen soldering iron



《 Problem Point 》
It was in trouble because the priority oxidation of the tin occurred.

《 ⇒Kaizen Point 》
The soldering iron shielded with the nitrogen gas was made.
The priority oxidation of tin is suppressed to solder
in the nitrogen gas atmosphere just like the TIG welding,
and defective solder has decreased.

No.16 Soldering of printed circuit board



《 Problem Point 》
We were in trouble because we couldn't soften
cream solder effectively.

《 ⇒Kaizen Point 》
We have heated the small spot by an extraordinarily
small Air Blow Heater and have solved problems.

Applications of Air Blow Heater

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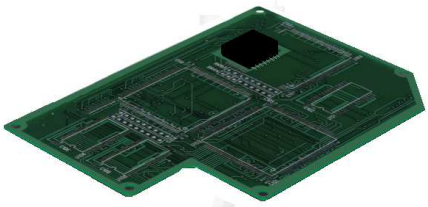
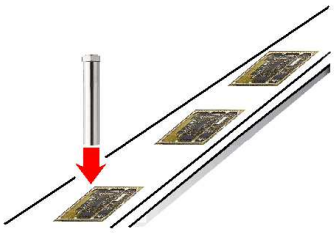
No.29 Preheating of printed circuit board



《 Problem Point 》
Gluing of lead free solder would be a problem badly.

《 ⇒Kaizen Point 》
The small spot was preheated by the Air Blow Heater.
After preheating, gluing of solder became good.
Moreover it was also heat damage prevention
by preheating of a pinpoint.

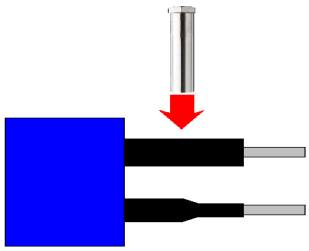
No.75 Aging of Printed Circuit Board



《 Problem Point 》
It was in trouble, there were no non-contact heaters on-line.

《 ⇒Kaizen Point 》
The high temperature air of the suitable temperature
was made with the Super Air Hater and it projected.
It came to be able to do aging easily online.

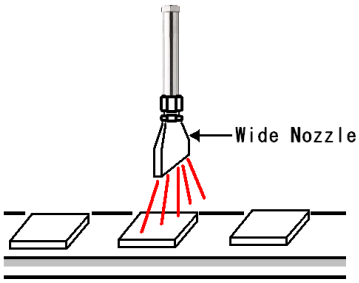
No.5 Heat-shrinkable tubing



Problem Point 》
/e were in trouble about a dryer for industry because
evices burned out because the area was too wide.

⇒Kaizen Point 》
/e heated only a lead by a small spot by
ıe Air Blow Heater and made them shrink.
)evices were not heated,
› we could improve the reliability.

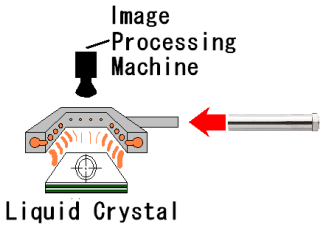
No.52 Aging of electronic components



《 Problem Point 》
It's being checked by the tester
just after the production of electronic components.
Control of the heat cycle was difficult.

《 ⇒Kaizen Point 》
Aging was done with a wide nozzle of the Air Blow Heater.
The accuracy of the inspection has improved
in an accurate temperature control.

No.37 Thermal distortion check of liquid crystal



《 Problem Point 》
There was no suitable one to check
the thermal distortion of liquid crystal.
《 ⇒Kaizen Point 》
It was necessary to do 100% inspection and
an image processing machine was adopted,
so the central part was made a hollow
and cold hot wind was ejected from
the environment by the Air Blow Heater
The accurate temperature control, improved product quality.

Applications of Air Blow Heater

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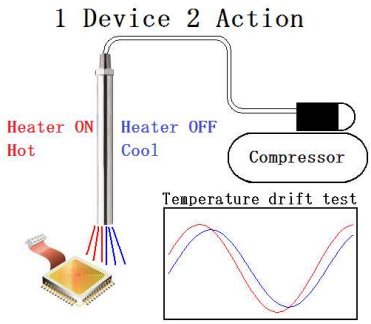
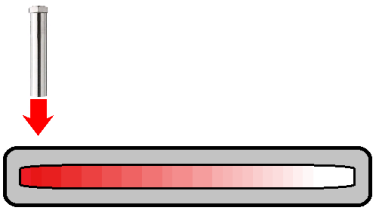
No.74 Temperature drift test of electronic device



《 Problem Point 》
It was in trouble because there were no heaters
which can do heating and cooling at the same time.
《 ⇒Kaizen Point 》
It made high fever air of a suitable temperature with
the Air Blow Heater, projected and captured data
at the time of temperature up. Afterwards, it turned off power,
and got data at the time of temperature-fall.
The cycle of the temperature rise and fall came by one device,
so the productivity rise up.

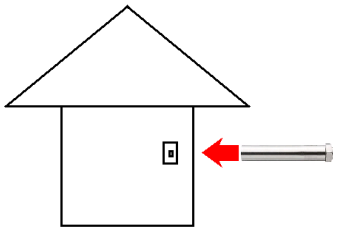
No.100 Differential temperature inspection of the heat pipe



《 Problem Point 》
Good operability heating equipment was needed.

《 ⇒Kaizen Point 》
We ware heated heat pipe using the Air Blow Heater.
It became possible to have multi-point measurement
that could not until now. Moreover, since the non-contact heating,
the quality of the product is improved.

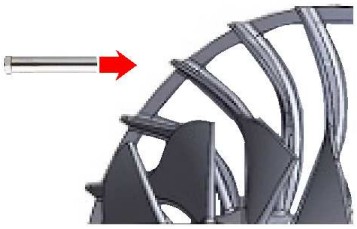
No.32 Working test of thermo switch



《 Problem Point 》
We were in trouble about the former jig
because we couldn't test in multiple steps at the site.

《 ⇒Kaizen Point 》
Several step of temperature was heated by
the Air Blow Heater and it was tested.
Working test of highly functional products became possible.

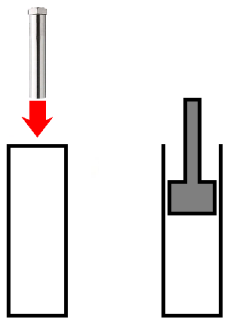
No.104 Examination of a engine turbine



《 Problem Point 》
Heating equipment of a lean air was needed.

《 ⇒Kaizen Point 》
Heating the turbine using the Air Blow Heater.
Lean air in proportion to the law of Charles was obtained.

No.105 Shrink fitting of a small cylinder



《 Problem Point 》
Heating equipment that can be used in online was necessary.

《 ⇒Kaizen Point 》
We ware shrink-fitted by using the Air Blow Heater.
The start of the line become faster.
Installation because it does not use the fire was easy.

Applications of Air Blow Heater

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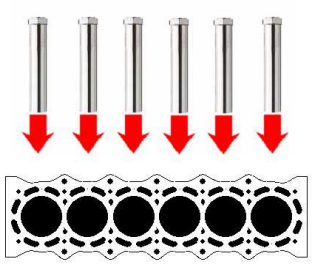
No.59 Drying of the engine block



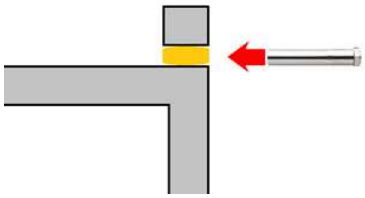
《 Problem Point 》
Flushing of chips remaining wash was in trouble

《 ⇒Kaizen Point 》
In a large Air Blow Heaters because the water flew residual
The prevention of water leakage in the next step.
Eliminates the need for water clean-up, raised productivity.

No.81 Burr melting of the Bumper

《 Problem Point 》
Although the drier for industry was used for the robot,
having attached it, broke down immediately and we were troubled.
《 ⇒Kaizen Point 》
The burr was melted with the Air Blow Heater.
Since discharge temperature management of the exact
hot wind was completed, the grace of the product improved.
Furthermore, since stand-up time was early,
the baton time was shortened.
MTBF was extended and the capacity utilization rate improved.

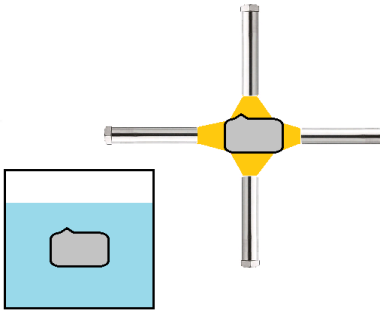
No.98 Drying of the adhesive seal



《 Problem Point 》
Shortening of tact time of the adhesive sealing process has been required

《 ⇒Kaizen Point 》
We dried seal by the Air Blow Heater.
The drying time is shortened by a double effect
of temperature and wind pressure.

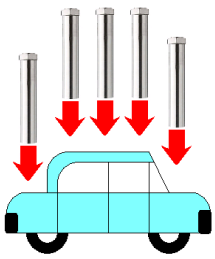
No.102 Drying after the leak test using a water tank



《 Problem Point 》
Shortening of the dry time was necessary.

《 ⇒Kaizen Point 》
We ware heated to work by using the Air Blow Heater.
Dry time became short more markedly than air blow drying.
Installation because it does not use the fire was easy.

No.82 Drying of the car after washing



《 Problem Point 》
When winter came, it was troubled without the water drop after car washing getting dry.

《 ⇒Kaizen Point 》
Drained and dried with the Air Blow Heater.

Applications of Air Blow Heater

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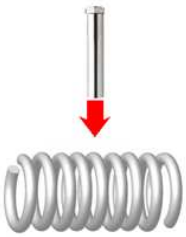
No.90 Heat test of bearing

《 Problem Point 》
Managing the heat-resistant temperature of grease,
it came to carry out a quality assessment and there was nothing.

《 ⇒Kaizen Point 》
It heated from room temperature to 550℃ with the Air blow heater.
The quality assessment in the arbitrary temperature
which was not made until now came made.

No.92 Temperature setting of the coil spring testing machine (low-temperature material)



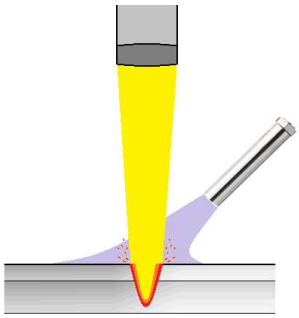
《 Problem Point 》
There was no evaluate the performance
while changing the temperature of the coil springs.

《 ⇒Kaizen Point 》
It heated from room temperature to 850℃ with the Air blow heater.
The quality assessment in the arbitrary temperature
which was not made until now came made.

Applications of Air Blow Heater

Haet-tech

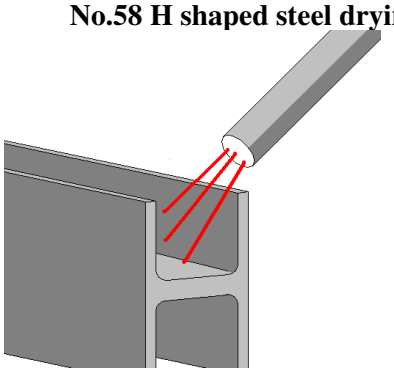
No.98 Drying of the adhesive seal



《 Problem Point 》
Shortening of tact time of the adhesive sealing process
has been required

《 ⇒Kaizen Point 》
We dried seal by the Air Blow Heater.
The drying time is shortened
by a double effect of temperature and wind pressure.

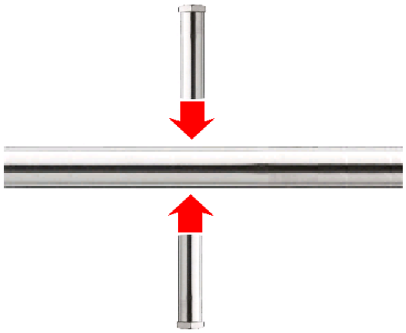
No.58 H shaped steel drying



《 Problem Point 》
Liquid left after molding process was in trouble

《 ⇒Kaizen Point 》
The Air Blow Heater, it flew in the residual water
and heat the air blow is coming out of rust.

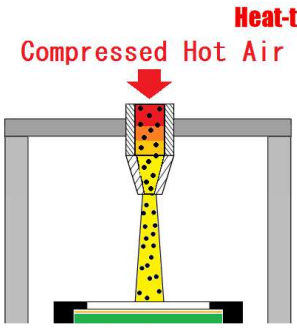
No.14 Dryness of electro-resistance-welded tube



Problem Point 》
/e were in trouble because there was no space
here BLOWER which transfers cooling water
ter the back weld pulled out is installed.

⇒Kaizen Point 》
was dried at high temperature
y the Power the Air Blow Heater.
rop water could dry beautifully completely.

No.95 Hot air shot peening

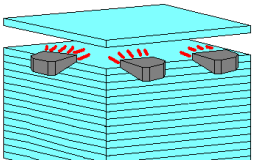


《 Problem Point 》
In order to thicken a metallic thin film,
the high temperature hot wind was required.

《 ⇒Kaizen Point 》
The shot-peened under high temperature conditions using
the Air Blow Heater.
Junction went well even if thickening the metal thin film.

No.56 Two piece feed prevention and preheat of blank material

《 Problem Point 》
Trouble was in close contact
with the blank material in rust preventative oil.

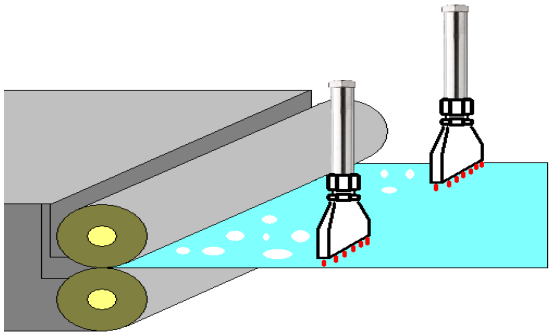


《 ⇒Kaizen Point 》
Air blow dry was done by the wide-nozzle of the Air Blow Heater.
Blank material was detached, and two piece feed prevention.
In addition, sufficient preheating, the wrinkle was reduced.

Applications of Air Blow Heater

Haet-tech

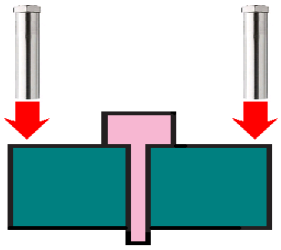
No.57 Drying of coated steel sheets



《 Problem Point 》
After washing the remaining pickling was in trouble

《 ⇒Kaizen Point 》
The Air Blow Heater, it flew in the residual water
and heat the air blow is coming out of rust.

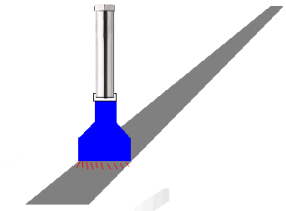
No.9 Thermal caulking / grilled fit



Problem Point 》
When baking was put in by gas,
control of a rubber gas hose was serious.

⇒Kaizen Point 》
was changed so that baking might
e put in by the Air Blow Heater.
o a process layout became free
nly a point and instrumentation air.

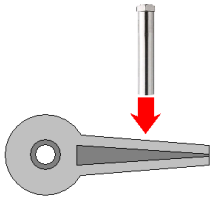
No.45 Dryness of metal film



《 Problem Point 》
The control of the surface tension of a metallic film was difficult
when drying with the high temperature gas.

《 ⇒Kaizen Point 》
It dried using a wide nozzle by the Air Blow Heater.
The surface tension was kept in the accurate temperature control.

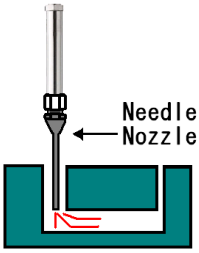
No.10 Cleaning aluminium Jaggy



《 Problem Point 》
Grinder was being used for deburring of aluminium die casting.
Hairline can't leave remaining gloss for the surface.

《 ⇒Kaizen Point 》
Spot was heated by the Air Blow Heater.
and it was deburred.
We could cast and secure the luster of the skin.

No.54 Drying of Drilled Hole



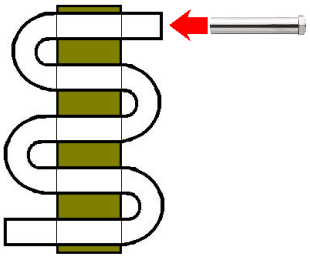
《 Problem Point 》
When cleaning after cutting chips, water drops were still in trouble

《 ⇒Kaizen Point 》
The Air Blow Heater, attached to the needle nozzle, dry blower.
Because the hot air blower hot moment, better drying.

Applications of Air Blow Heater

Haet-tech

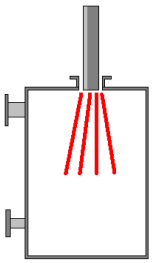
No.55 Internal drying of pipe products



《 Problem Point 》
It was in trouble because Flushing cleaning solution
after plumbing processing was left.

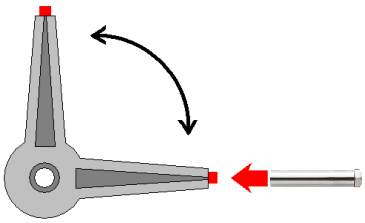
《 ⇒Kaizen Point 》
Rust did not go out because it had dried remaining water
by the Air Blow Heater .

No.61 After drying pressure vessel hydraulic leak test



《 Problem Point 》
If there is no way of drying the water
as soon as the test was in trouble.
《 ⇒Kaizen Point 》
We use the high-temperature heating
with the Air Blow Heater blower capacity.
We can work faster, more and more test cases.
We flew with residual heat of water, the rust was coming out.

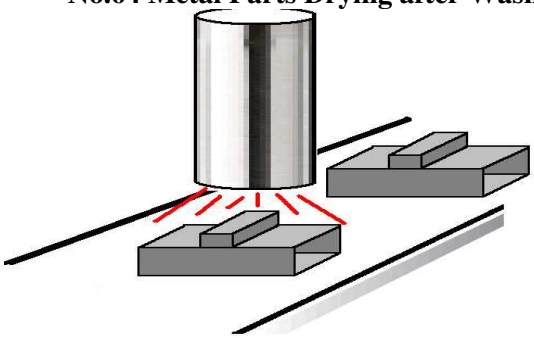
No.63 Heating of the Moving parts



《 Problem Point 》
We have no know-how to heating moving parts.

《 ⇒Kaizen Point 》
Heating by the Air Blow Heater.
Able to maintain the mobility can be heated without contact.

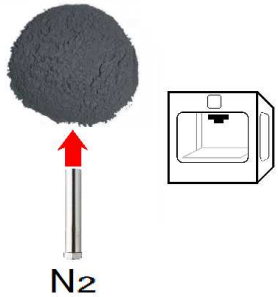
No.64 Metal Parts Drying after Washing



《 Problem Point 》
We have no know-how to faster drying Metal parts

《 ⇒Kaizen Point 》
Large size the Air Blow Heater did the high temperature blower.
The number of washing has increased
because it can work in a short time.
Rust did not go out
because it had flown the remainder water by the high temperature.

No.85 Breeze nitrogen heating of powder metal for 3D printer.



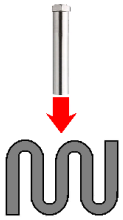
《 Problem Point 》
There was no the Air Blow Heater that can be heated in a nitrogen breeze.

《 ⇒Kaizen Point 》
We were heated in the breeze by the Air Blow Heater ABH-13AM/100V-50W.
It is possible to heat transport in the breeze of 250cc per minute the powder metal, control of 3D printers has improved.

Applications of Air Blow Heater

Haet-tech

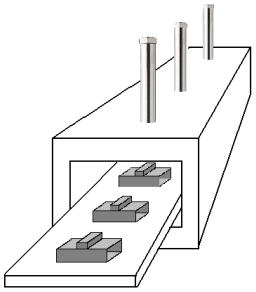
No.84 Study of shape memory alloy



《 Problem Point 》
Temperature control was difficult
because it was heating with warm water.

《 ⇒Kaizen Point 》
The alloy heated by the Air Blow Heater. Since it heated at an exact temperature of a unit once, reproducibility of the test is much better.
In addition, it is possible cooling to one degree unit after heating.
The hysteresis test make it easy by the Air Blow Heater.

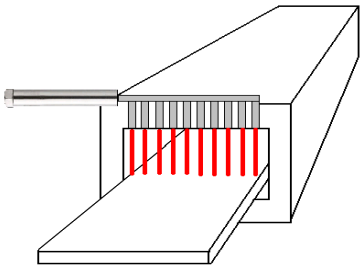
No.65 Heat source of the small size tunnel furnace



《 Problem Point 》
We have no idea about small size furnace.

《 ⇒Kaizen Point 》
Large size the Air Blow Heater did the high temperature blower.
Since the tunnel furnace heated in a short time,
increased operating time.
Now able to respond flexibly to sudden interruption tasks.

No.48 Air curtain of furnace



《 Problem Point 》
Heat ran away from the furnace,
was the problem of quenching quality.

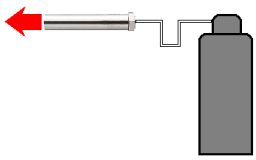
《 ⇒Kaizen Point 》
The furnace was air sealed with the Air Blow Heater.
The temperature of the interior was kept,
and the quality of quenching has improved.

Applications of Air Blow Heater

Haet-tech

No.27 Production of hot nitrogen gas

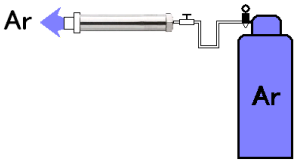
《 Problem Point 》
It wasn't possible to make hot nitrogen gas
while keeping the purity.



《 ⇒Kaizen Point 》
Nitrogen was heated by the Air Blow Heater.
Air didn't get mixed and it was possible to make
high temperature gas while keeping high degree of purity.

No.76 Argon gas heating

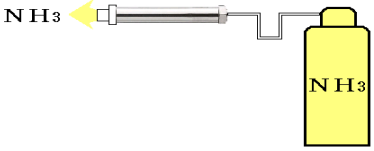
《 Problem Point 》
It wasn't possible to make hot argon gas while keeping the purity.



《 ⇒Kaizen Point 》
Argon gas was heated by the Air Blow Heater DGH type.
Air did not mix and the high temperature gas of 550℃
was able to be made while keeping high purity.

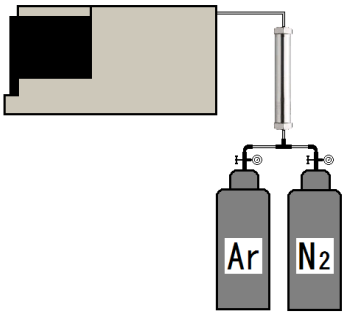
No.38 Ammonia gas heating

《 Problem Point 》
The ammonia gas was dangerous,
so it couldn't be heated safely and I was in trouble.



《 ⇒Kaizen Point 》
It heated air tightly by DGH series of the Air Blow Heater.
An experiment heated it safely, and became efficient.

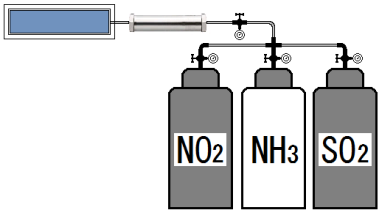
No.86 Heating of the shielding gas of thermal analysis equipment.



《 Problem Point 》
There was no the Air Blow Heater hat can heat a small
amount of shielding gas.

《 ⇒Kaizen Point 》
We were heated in the breeze by the Air Blow Heater ABH-13AM/100V-50W.
It can be pre-heated at a high temperature shielding gas, heating speed of the analyzer is raised.

No.89 Heating of the gas for evaluation.



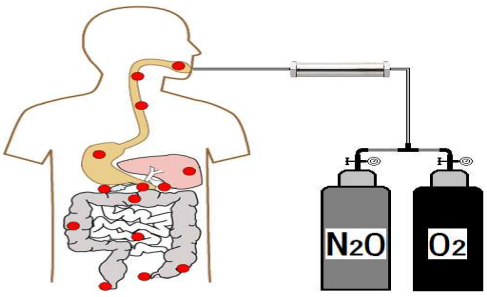
《 Problem Point 》
Could not be heated the dummy gas to evaluate the
performance of the catalyst.

《 ⇒Kaizen Point 》
The double glazing tube specification DGH type for medicine-proof of the Air Blow Heater was used, and it heated from normal temperature to 550 ℃.
The quality assessment in arbitrary temperature came made.

Applications of Air Blow Heater

Haet-tech

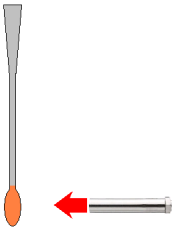
No.87 Heating of endoscopy inspection gas



《 Problem Point 》
There was no small the Air Blow Heater which can heat a little inspection gas.

《 ⇒Kaizen Point 》
We were heated in the breeze by the Air Blow Heater ABH-13AM/100V-50W.
Since inspection gas was preheated by the optimum temperature, the user's reaction became smooth.

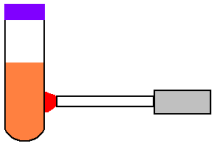
No.36 Sterilization of spatula



《 Problem Point 》
Until now had been roasted in the flames of gas pipe where the gas had no trouble using the impossible

《 ⇒Kaizen Point 》
The Air Blow Heater to heat sterilization at high temperatures.
If it has any electric power outlet,
heat sterilization can now everywhere.

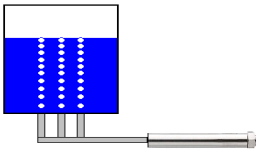
No.21 Heating of test tubes



《 Problem Point 》
It couldn't be heated by correct temperature control,
and we were in trouble.

《 ⇒Kaizen Point 》
A spot was heated by
the small type of the Air Blow Heater.
The experimental precision could experiment
with accurate temperature control, and rose.

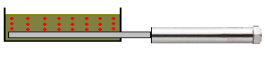
No.43 Heat sterilization of liquid by aeration



《 Problem Point 》
It was troubled to be contaminated with airborne bacteria breeding in the liquid directly in the aeration air.

《 ⇒Kaizen Point 》
The aeration was done after heating was sterilized
by the Air Blow Heater .
Airborne bacteria were sterilized by heating,
so liquid wasn't polluted and became good.

No.44 Uniform heating of the medium



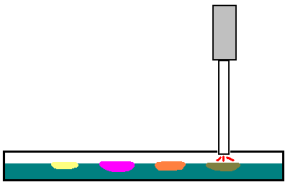
《 Problem Point 》
It'll be done only to heat a culture medium from the surface.
It couldn't be heated uniformly and in trouble.

《 ⇒Kaizen Point 》
The heating air was made with the Air Blow Heater .
The accuracy of the experiment has improved being able to heat the surface and the inside uniformly.

Applications of Air Blow Heater

Haet-tech

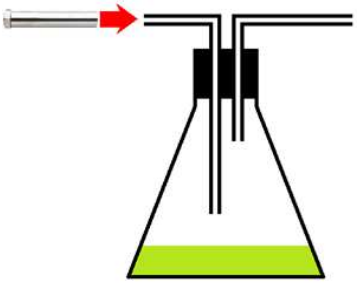
No.34 Partial heating of the culture medium



《 Problem Point 》
The thermostat tank is used so far,
so partial heating of a culture medium isn't done.

《 ⇒Kaizen Point 》
The spot was heated by the Air Blow Heater.
Differential expression changes in the growth of species
in the same temperature condition.
Expanded the possibility of more conventional tests

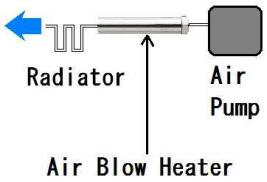
No.98 Culture of anaerobic microorganisms



《 Problem Point 》
It could not be freely temperature change Dummy-gas.

《 ⇒Kaizen Point 》
We use the Air Blow Heater DGH series for environmental,
We made dummy gas change the temperature freely,
and a cultivation test of an anaerobic microorganism was performed.
Novel data were got a lot, and a research was advanced.

No. 35 Manufacturing of heating sterilization air

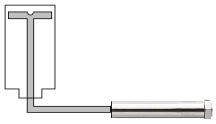


《 Problem Point 》
Until now we had a filter on the decontamination of
heavy equipment

《 ⇒Kaizen Point 》
The Air Blow Heater to heat sterilization.
So small, now can be used anywhere in the air sterilization

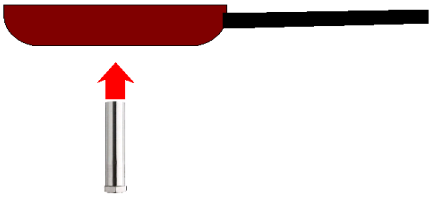
No.46 Dryness of the glass bottle

《 Problem Point 》
It was dry by steam.
When winter came, we were in trouble
because it condensed into dew.



《 ⇒Kaizen Point 》
Heated and dried in the Air Blow Heater.
The dewfall disappeared because it used dry air.

No.47 Replacement of gas in laboratory electrified



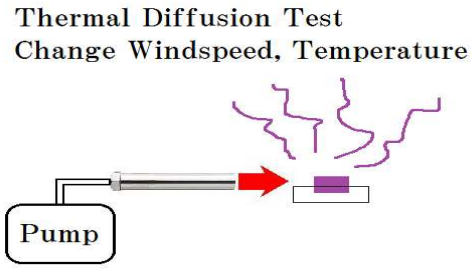
《 Problem Point 》
Laboratory has been electrified,
the gas was not able to be used and I was in trouble.

《 ⇒Kaizen Point 》
It was heated by the Air Blow Heater.
It was very useful for high temperature heating in clean air.

Applications of Air Blow Heater

Haet-tech

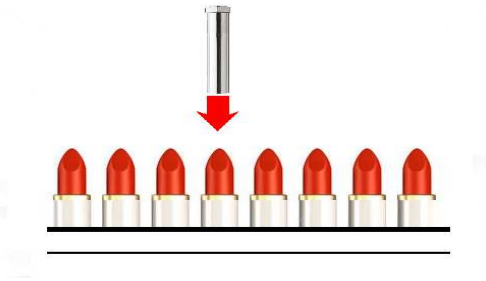
No.79 Thermal Diffusion test of perfumes



《 Problem Point 》
There was omitted thermal diffusion test by air.

《 ⇒Kaizen Point 》
The diffusion test was done, the amount control of winds in increments of 1liter unit raising temperature in increments of 1 degree unit with a hot wind heater.
The residual effect can be measured now.

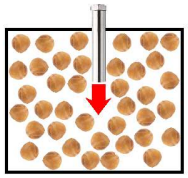
No.18 Finishing of lipsticks



《 Problem Point 》
Even the hit bruise done a little was returned as a defective product, and we were in trouble.

《 ⇒Kaizen Point 》
The yield which heated a spot by the Air Blow Heater, took on and restored a bruise improved, and the claim decreased.

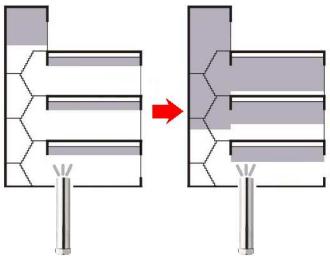
No.113 Activated carbon regeneration



《 Problem Point 》
There was no device that was small and could be inlined

《 ⇒Kaizen Point 》
Using hot air heater environment resistant type DGH series, Heated steam was blown into the activated carbon.
The accumulated dirt was removed and the activated carbon was regenerated.
Maintenance can be automated because it can be used inline.

No.114 Simulation of smoke diffusion



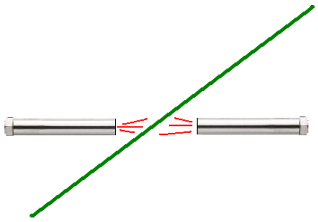
《 Problem Point 》
There was nothing that could heat the dummy gas at any temperature

《 ⇒Kaizen Point 》
A air blow heater was used.
Since there is a controller that can automatically control the temperature and hot air flow rate, it was easy to make a prototype

Applications of Air Blow Heater

Haet-tech

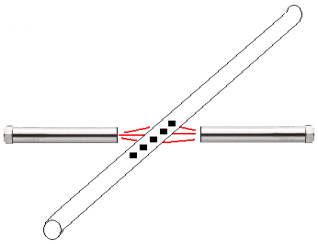
No.49 Dryness of electric wire



《 Problem Point 》
Resin insulating coating was being used,
so control of the dry temperature was difficult.

《 ⇒Kaizen Point 》
It dried spotting heating by the Air Blow Heater.
The quality of the product has improved
in the accurate temperature control.

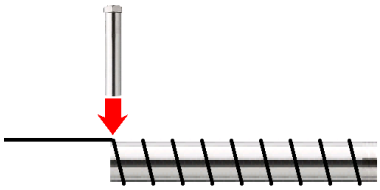
No.50 Dryness of the electric wire mark print



《 Problem Point 》
Resin insulating coating was being used,
so control of the dry temperature was difficult.

《 ⇒Kaizen Point 》
It dried spotting heating by the Air Blow Heater.
The quality of the product has improved
in the accurate temperature control.

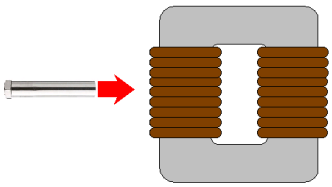
No.77Heating of tungsten material by the Air Blow Heater



《 Problem Point 》
When processing the wire produced by powder metallurgy,
it had trouble to cracking or cutting.

《 ⇒Kaizen Point 》
So brittle, while heating to the processing 400 ℃ - 700 ℃
by the Air Blow Heater.
The quality is consistent no broken and no cracked.

No.17 Self-bonding wire coil wound



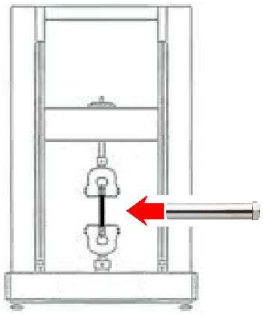
《 Problem Point 》
The rolling mark remained in the thin line
and we were in trouble.

《 ⇒Kaizen Point 》
The smooth back into the twisting winding heating
the Air Blow Heater
Self-bonding caused by heating up the coil after all.
It can fine temperature control, raised the machining accuracy.

Applications of Air Blow Heater

Haet-tech

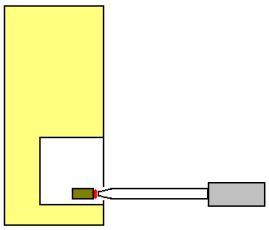
No.91 Temperature setting of the tensile testing machine (low-temperature material)



《 Problem Point 》
There was no evaluate the performance
while changing the temperature of the test piece.

《 ⇒Kaizen Point 》
It heated from room temperature to 850℃ with the Air blow heater.
The quality assessment in the arbitrary temperature
which was not made until now came made.

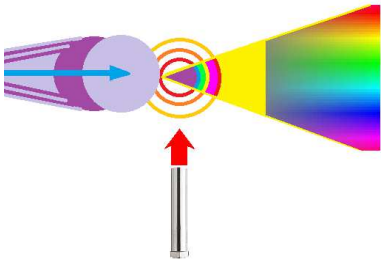
No.22 Electron-microscope sample heating



《 Problem Point 》
There was nothing which can be heated hotly in the stand
of electron-microscope, and we worried.

《 ⇒Kaizen Point 》
The spot was heated by the small type of the Air Blow Heater.
The precision of the analysis could control
the accurate temperature , and rose.

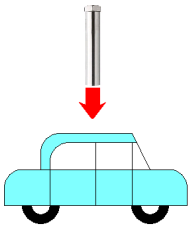
No.80 Heating of the materials in the Linear accelerator · X-ray laser



《 Problem Point 》
There was no good thing can be transparent while keeping the high-temperature heating the glass tube.

《 ⇒Kaizen Point 》
Were tested while raising the temperature up to 1000 ℃ in the Air Blow Heater
Accuracy of the analysis is improved.

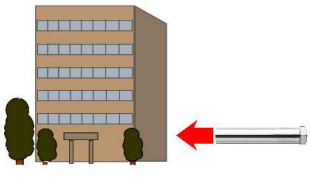
No.31 Surface Analysis of Materials



《 Problem Point 》
The sample was too big, and it couldn't be stored
in the thermostat tank, and we were in trouble.

《 ⇒Kaizen Point 》
The test point was heated by the Air Blow Heater.
Heat cycle testing could be done now
using a program temperature controller.
It was impossible in the past.

No.33 Bonding strength test of tile building



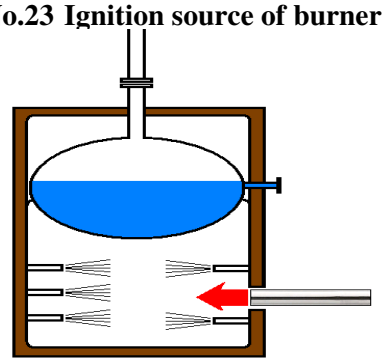
《 Problem Point 》
We were in trouble because we couldn't do
the heat cycle test by the real thing so far.

《 ⇒Kaizen Point 》
The test point was heated by the Air Blow Heater.
Heat cycle testing could be done now
using a program temperature controller.
It was impossible in the past.

Applications of Air Blow Heater

Haet-tech

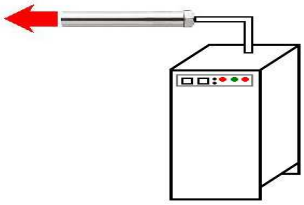
No.23 Ignition source of burner



《 Problem Point 》
We were in trouble because
there were no small ignition sources.

《 ⇒Kaizen Point 》
The Air Blow Heater ignited heated to high temperature.

No.68 Manufacturing of dryness steam of electric boiler

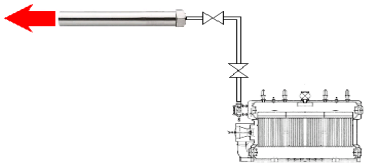


《 Problem Point 》
It was in trouble because the temperature of
the boiler steam didn't rise.

《 ⇒Kaizen Point 》
Steam was heated by the Air Blow Heater.
Wet steam became dry steam.

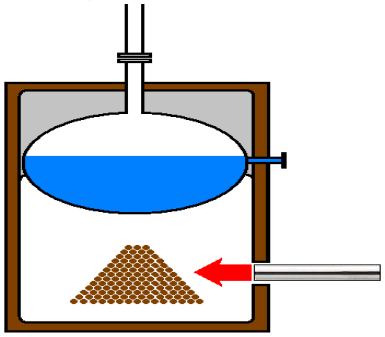
No.71 Manufacturing of superheated steam

《 Problem Point 》
There was distance from a boiler, it was in trouble
because the temperature of the steam fell.



《 ⇒Kaizen Point 》
Steam has overheated with the Air Blow Heater.
It is possible to make overheating saturated steam
with the free temperature.

No.83 Ignition source of biomass boiler



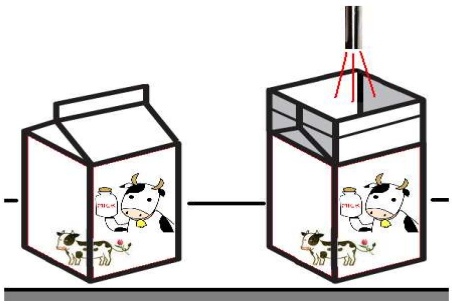
《 Problem Point 》
Because the fuel is wet,
we were in trouble without good source of ignition.

《 ⇒Kaizen Point 》
Output the high temperature air blow in the Air Blow
Heater, was heated and dried. Since fresh air is
supplied, the first stage burned and a spread became
good. Moreover, because the material is dried as fuel,
extinguishment of a fire was lost.

Applications of Air Blow Heater

Haet-tech

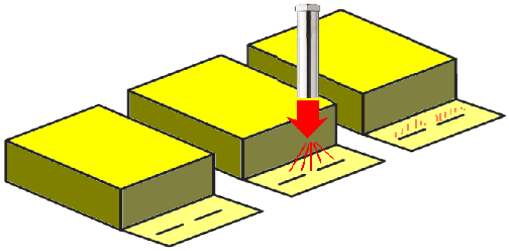
No.8 Heat sealing of paper carton



《 Problem Point 》
When it was heated, paper caught fire,
and we were in trouble about gas.

《 ⇒Kaizen Point 》
It was heated, and did heat sealing of a spot
by the Air Blow Heater
It could be worked in the safe temperature now.

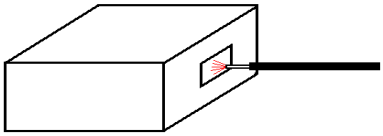
No.6 Remelting of the hot glue



《 Problem Point 》
Over time the molten adhesive is applied to the box,
the box was also open to poor adhesion.

《 ⇒Kaizen Point 》
The remelting of the hot-spot heating
with the Air Blow Heater
And good adhesion, the claim is lost.

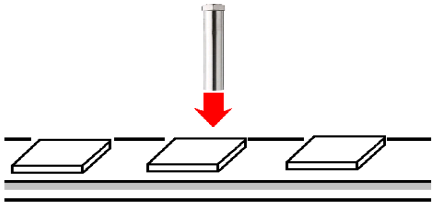
No.39 Peel seal and Sticker remover



《 Problem Point 》
Had trouble peeling off the seal is broken at the end.

《 ⇒Kaizen Point 》
A spot was heated by the Air Blow Heater
and the glue was made soft.
The productivity came off well, and improved.

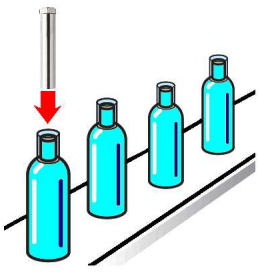
No.26 Smoothing down of DVD baling machine



《 Problem Point 》
Wrinkles of shrink films of DVD packing were left,
and we were in trouble.

《 ⇒Kaizen Point 》
It was heated by a slight fever by the Air Blow Heater
and wrinkles were flatted.
The quality of the packing improved, and the claim decreased.

No.3 Cap Seal



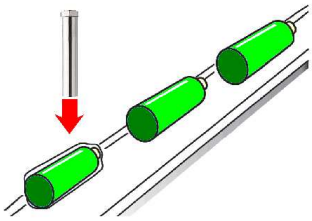
《 Problem Point 》
There were no tools in which chocolate is dissolved
by the pinpoint, and We were in trouble.

《 ⇒Kaizen Point 》
A pen heater was made using
an extraordinarily the Air Blow Heater
We could give the form to an idea,
so the sales increased.

Applications of Air Blow Heater

Haet-tech

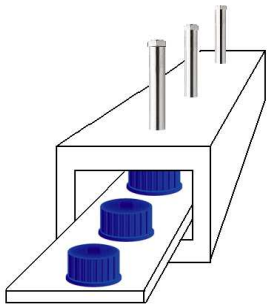
No.4 Film shrink



《 Problem Point 》
Dryer for industry was being used.
Without being made,
accurate temperature control would be a problem.

《 ⇒Kaizen Point 》
We can control the accurate temperature by
the Air Blow Heater, so wrinkles and a spot of sticker
material have disappeared.

No.72 Heat sterilization of PET bottle caps



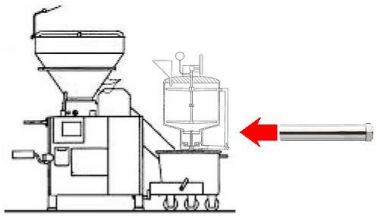
《 Problem Point 》
It was in trouble, the heat resistant of the polyethylene is low.

《 ⇒Kaizen Point 》
The temperature of air of the heating sterilization furnace
has been adjusted with the Air Blow Heater.
Possible to heat it at an accurate temperature, it ended
without exceeding HDT, and the quality is able to be maintained.

Applications of Air Blow Heater

Haet-tech

No.94 Hot air anthelmintic



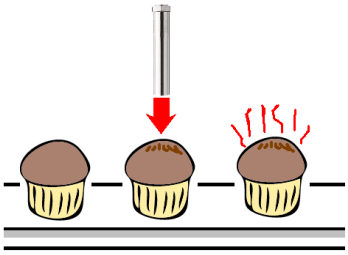
《 Problem Point 》

Requires secure chemical-free pest control that do not use chemical fumigation.

《 ⇒Kaizen Point 》

Hot air is anthelmintic, in a way that does not use chemicals, to disinfect from egg to adult in a hot-air, By maintaining 4-24 hours at 55 ℃ -60 ℃ ambient temperature, you can disinfect (egg, larva, pupa, adult) of insects of all stages. Because it does not use drugs, friendly to the environment and humans, by removal once, by which the insect subsequent management, It will prevent the occurrence of insects. In addition, from dying to come out in the place where it appears in a glance, it can see by looking at the eyes of adult deworming

No.1 Coloring of the cake baking



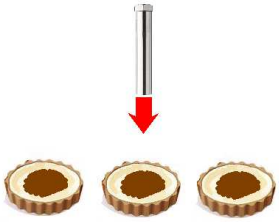
《 Problem Point 》

When the baking color was put, the smell of the gas shifted,
so we were in trouble about gas.

《 ⇒Kaizen Point 》

The spot was heated by the Air Blow Heater
and the baking color was put.
The specification did clean air,
and the good fragrance was kept.

No.69 Colouring of tart



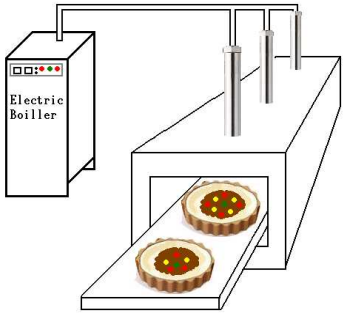
《 Problem Point 》

It was in trouble because the surface of the tart burned.

《 ⇒Kaizen Point 》

The surface was warmed over by the Air Blow Heater.
The temperature was able to be adjusted, the combustion colour is able to be coloured at the suitable temperature.
Gas wasn't used, so it was also possible to stop gas smell.

No.73 Manufacturing of superheated steam of steam-oven



《 Problem Point 》

It was in trouble because the temperature of steam
of the tunnel type steam-oven was not able to be adjusted.

《 ⇒Kaizen Point 》

Steam has overheated with the Air Blow Heater.
It is possible to make overheating saturated steam
with the free temperature.

No.2 Processing of chocolate

《 Problem Point 》

There were no tools in which chocolate is dissolved
by the pinpoint, and We were in trouble.

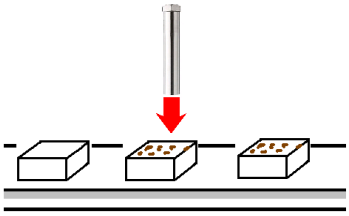
《 ⇒Kaizen Point 》

A pen heater was made using
an extraordinarily the Air Blow Heater
We could give the form to an idea,
so the sales increased.

Applications of Air Blow Heater

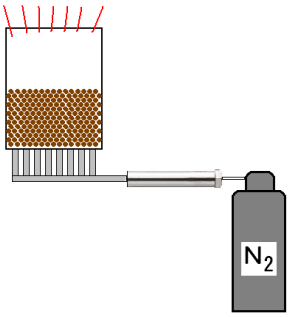
Haet-tech

No.24 Grilled "Tofu" processing



《 Problem Point 》
When the baking color was put,
the smell of the gas shifted,
so we were in trouble about gas.
《 ⇒Kaizen Point 》
A spot was heated by the Air Blow Heater.
and the baking color was put.
The specification did clean air,
and the good fragrance was kept.

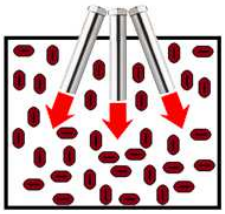
No.51 Dryness of the groceries.



《 Problem Point 》
We were bagged and dried groceries.
But there was trouble grows mold.

《 ⇒Kaizen Point 》
It dried heating nitrogen by the Air Blow Heater.
Because nitrogen did not contain water vapor.
It became the anti-mold countermeasure.

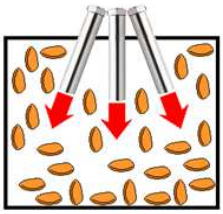
No.106 Hot air roasting of Coffee beans



《 Problem Point 》
We could not roast uniformly at the optimum temperature up to now.

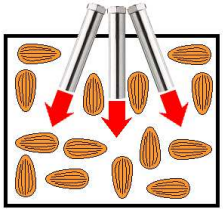
《 ⇒Kaizen Point 》
We roasted with Air blow Heaters.
Delicate temperature control of roasting at 180 ° C for the first time
and roast at 200 ° C to 230 ° C at the second time,
It became easy to do it by 1 ℃ unit. From light roasting to dark roasting,
city roasting, medium roasting, and high roasting were easy.

No.107 Hot air roasting of Cacao beans



《 Problem Point 》
We could not roast uniformly at the optimum temperature up to now.
《 ⇒Kaizen Point 》
We roasted with Air blow Heaters.
Delicate temperature control around from light roasting 120℃ to
dark roasting 160℃, can be easily done in 1℃ increments.
Moreover, since it was automatically stirred with hot air and it was
uniformly heated from the all surface,
The variation in roasting was reduced and the product value increased.

No.108 Hot air roasting of Almond nuts

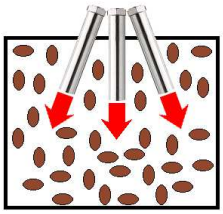


《 Problem Point 》
We could not roast uniformly at the optimum temperature up to now.
《 ⇒Kaizen Point 》
We roasted with Air blow Heaters.
Delicate temperature control around 150℃ can be easily done in 1℃ increments.
Moreover, since it was automatically stirred with hot air and it was
uniformly heated from the all surface,
The variation in roasting was reduced and the product value increased.
Furthermore, since there is a controller which can automatically control roasting
time and hot air flow rate, it was easy to prototype.

Applications of Air Blow Heater

Haet-tech

No.109 Hot air roasting of Peanuts



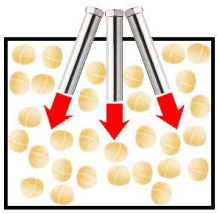
《 Problem Point 》

We could not roast uniformly at the optimum temperature up to now.

《 ⇒Kaizen Point 》

We roasted with Air blow Heaters.
Delicate temperature control around 180℃ can be easily done in 1℃ increments.
Moreover, since it was automatically stirred with hot air and it was uniformly heated from the all surface,
The variation in roasting was reduced and the product value increased.

No.110 Hot air roasting of Macadamia nuts



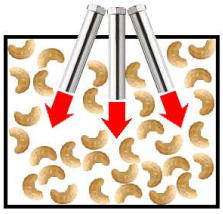
《 Problem Point 》

We could not roast uniformly at the optimum temperature up to now.

《 ⇒Kaizen Point 》

We roasted with Air blow Heaters.
From light roasting 140℃ to dark roasting 170℃, can be easily done in 1℃ increments.
Moreover, since it was automatically stirred with hot air and it was uniformly heated from the all surface,
The variation in roasting was reduced and the product value increased.

No.111 Hot air roasting of Cashew nuts



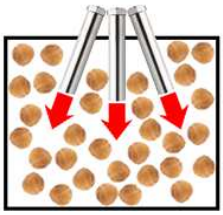
《 Problem Point 》

We could not roast uniformly at the optimum temperature up to now.

《 ⇒Kaizen Point 》

We roasted with Air blow Heaters.
Delicate temperature control in the 150℃. band and the 230℃ band, can be easily done in 1℃ increments.
Moreover, since it was automatically stirred with hot air and it was uniformly heated from the all surface,
The variation in roasting was reduced and the product value increased.

No.112 Hot air roasting of Hazelnuts



《 Problem Point 》

We could not roast uniformly at the optimum temperature up to now.

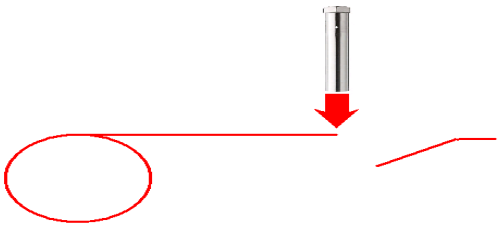
《 ⇒Kaizen Point 》

We roasted with Air blow Heaters.
Delicate temperature control around 160℃ can be easily done in 1℃ increments.
Moreover, since it was automatically stirred with hot air and it was uniformly heated from the all surface,
The variation in roasting was reduced and the product value increased.

Applications of Air Blow Heater

Haet-tech

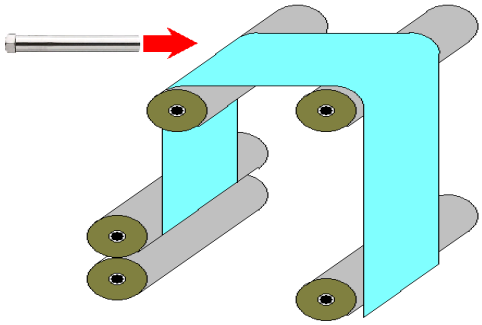
No.25 Terminal cutoff processing of the fiber



《 Problem Point 》
We suffered from coming loose after cutoff.

《 ⇒Kaizen Point 》
The spot was heated and cut according to the temperature
of the chemical fiber by the Air Blow Heater.
End face processing became unnecessary.

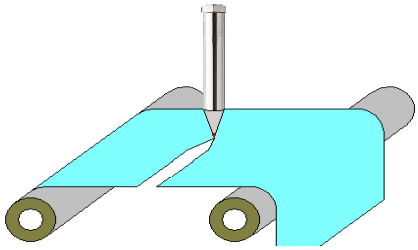
No.30 Preheating of calendaring roll



《 Problem Point 》
When it was worked in the calendaring roll which got cold,
horizontal stripes occurred.

《 ⇒Kaizen Point 》
Calendaring roll was preheated by the Air Blow Heater.
Horizontal-striped occurrence was prevented.

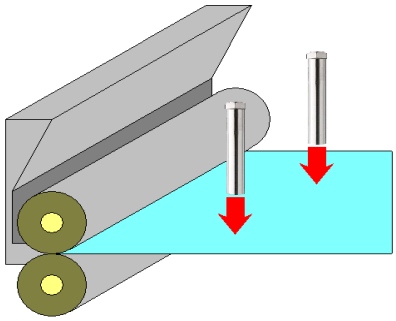
No.11 Heating cutoff of resin seat



《 Problem Point 》
Resin seat was cut by a blade, it comes loose from the end,
and we were in trouble.

《 ⇒Kaizen Point 》
Hot wind was narrowed down to a pinpoint
by the taper type of the Air Blow Heater and it was fused.
Problem could do the end stop tightly, and settled it.

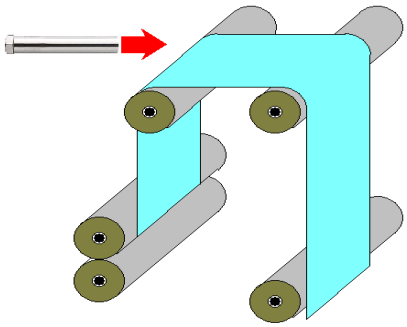
No.12 Dryness of a coater



《 Problem Point 》
Air blow dry was being done in room temperature,
but we were in trouble because it wasn't dried.

《 ⇒Kaizen Point 》
Air blow dry was done by the Air Blow Heater.
It was appropriate temperature control and dried tightly.

No.13 Dryness of printed matter



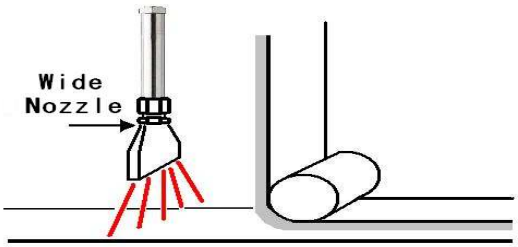
《 Problem Point 》
Air blow dry was being done in room temperature,
but we were in trouble because it wasn't dried.

《 ⇒Kaizen Point 》
Air blow dry was done by the Air Blow Heater.
It was appropriate temperature control and dried tightly.

Applications of Air Blow Heater

Haet-tech

No.53 Bonding of the film and paper



《 Problem Point 》

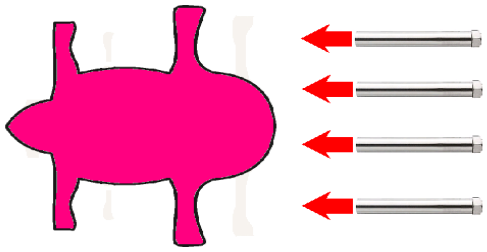
When the adhesive film and paper, air bubbles were made trouble.

⇒Kaizen Point 》

Wide nozzle attached to the preheated the Air Blow Heater.

To improve the adhesion of air bubbles disappeared.

No.15 Dryness of leather



《 Problem Point 》

It was dry by gas, but they couldn't lay the pipes any more
and we were in trouble about layout change.

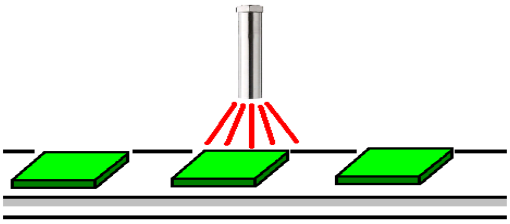
《 ⇒Kaizen Point 》

Spot was heated by the Air Blow Heater, and it dried.
Moreover only the necessary area could dry,
so it was energy conservation.

No.62 Faster drying water-based paints

《 Problem Point 》

We have no know-how to faster drying water-based paints



《 ⇒Kaizen Point 》

High temperature Air Blow Heater with the large blower.

We can work faster drying, the production number has increased.

Heat-tech

【 Model List of Air Blow Heaters 】

Diameter	Super Small	Standard	For high temperature	200℃ Heat resistant	Parallel large	Double glass tube	Vacuuming correspondence	Pt heater
φ4	ABH-4D 50W~100W							
φ6	ABH-6□ 50W~100W							
φ8	ABH-8□ 100W~300W							
φ10.5			ABH-11M 170W~1.4kW					
φ13		ABH-13A 50W~1kW		ABH-HR-13A 50W~200W		DGH-13N 100W~150W		PTH-13N 85W~800W
φ14							VAH-14N 100W~1.2kW	
φ19		ABH-19A 650W~1.6kW	ABH-19A 2kW~3.4kW	ABH-HR-19A 2kW~3.4kW		DGH-19N 150W~300W	VAH-19N 650W~1.6kW	
φ22		ABH-22N 1kW~3kW	ABH-22A 4.1kW~6kW	ABH-HR-22A 4.1kW~6kW				
φ28			ABH-28A 6.3kW~9kW	ABH-HR-28A 6.3kW~9kW				
φ34		ABH-34N 2kW~5kW				DGH-34N 1kW	VAH-34N 2kW~5kW	
φ38					ABH-38X6 2.5kW~5kW			
φ42.7		ABH-43N 5kW~6kW				DGH-43N 1.5kW~4kW		
φ50					ABH-50X6 6kW~18kW	DGH-50N 3kW~4kW		
φ60.5					ABH-61X6 20kW~24kW			
φ65					ABH-65-28AX3 23kW			
φ95					ABH-95-28AX6 45kW			
φ101.6					ABH-102X6 18kW~30kW	DGH-102X6 3kW~12kW		
φ130					ABH-130-28AX9 68kW			
φ139.8						DGH-140X6 12kW		

Types of available gas　　Please contact us, When it is not in the table below.

Types of gas	ABH	DGH	Notes
Air, Oxygen *1	◎	◎	Contain neither oil mist nor water.
Nitrogen, Argon *2	○	◎	All inert gases can be used.
Hydrogen	△	◎	Ignites when becoming over 600℃ mixed air.
Green Gas	△	◎	Green Gas has reduction.
Steam *3	X	◎	ABH is impossible, DGH can be use.
Town Gas, LPG	X	X	Carbon cling to heat element.

*1 Heating wires are used in Air Blow Heater has the most durable in the oxidizing atmosphere.
ABH types are in direct contact with the gas so that the heating wire, high heat transfer efficiency, high temperature (800 ℃-900℃ approximately) can be obtained.
*2 ABH type is used for argon and nitrogen, compared to the air life tend to be shorter.
*3 DGH type does not contact the heating wire and gas.
Therefor, can heat the gas in many type, become slightly larger, even up to 500 ℃ hot gas temperature.

Heat-tech

Standard type Air Blow Heaters Ultra small and small size

《 Ultra-small Air Blow Heater 》ABH-4D
Ultra-small matchstick size.
ABH-4D is less than a pencil.
ABH-4D is popular in the dissolution of the solder.

《 Ultra-small Air Blow Heater》ABH-6☐
The heating tube is a pencil size of ϕ 6.
This heater has a quartz glass heating tube.

《 Ultra-small Air Blow Heater》ABH-8☐
The heating tube is a pencil size of ϕ 6.
This heater has a metal glass heating tube.

ABH-8☐ can do the flange welding, too.

《 Super breeze Air Blow Heater 》 ABH-13AM/100V-50W
This heater can respond to 250cc/minute flow.

《 DC power Air Blow Heater .》 ABH-13AM/12V/24V
ABH-13AM/12V/24V can respond from
DC12v-50w to DC24v-200w.

《 Small size Air Blow Heater 》ABH-13A
The most popular model of small Air Blow Heater.
ABH-13A can install many accessories.

《 Small size Air Blow Heater 》ABH-19A
ABH-19A is Air Blow Heater one size larger than 10PS.
ABH-19A can install many accessories.

Heat-tech

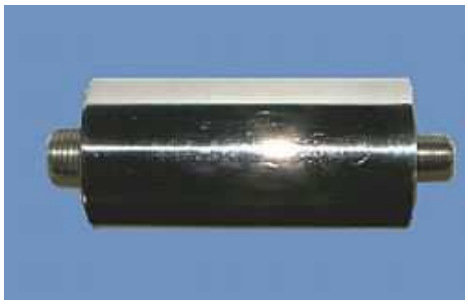
Standard type Air Blow Heaters Medium and Large size

《 Medium size Air Blow Heater 》 ABH-22N
ABH-22N is a upper model of ABH-15H,
is twice length and output power.
ABH-22N is the optimal to heat the crevice.

《 Medium size Air Blow Heater 》 ABH-34NM
ABH-34NM is the standard model of the
medium-sized Air Blow Heater.

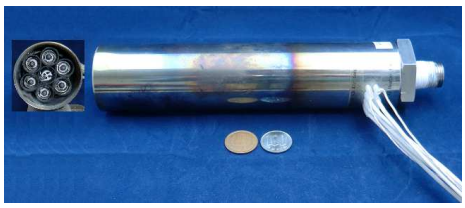
ABH-34NM is popular in Deburring of resin.

《 Large size Air Blow Heater 》 ABH-43NM
ABH-43NM is more popular in Deburring of resin.



《 Parallel large size Air Blow Heater》
ABH-38X6

The waistline becomes large, but it is
popular with customers who want a short
size.



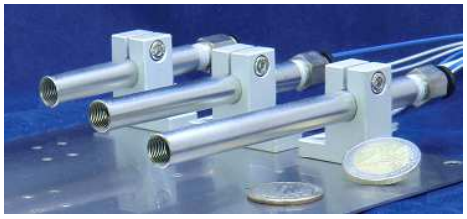
《 Parallel large size Air Blow Heater 》 ABH-50X6
ABH-50X6 is the best-selling large-sized models.
ABH-50X6 6kw is an easy-to-use.

《 Parallel large size Air Blow Heater》ABH-61X6
High power Air Blow Heater

《 Parallel large size Air Blow Heater》ABH-102X6
Most high power Air Blow Heater

Heat-tech

For high temperature Air Blow Heater

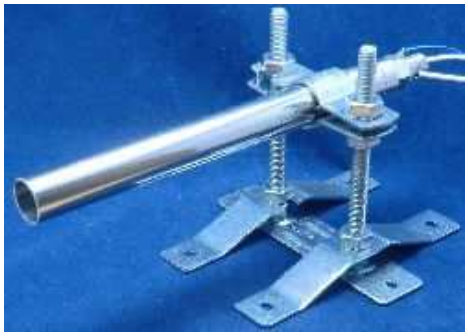


《 High temperatur small size Air Blow Heater 》
ABH-11NM

This heater can discharge a hot wind of a maximum of 1000℃.

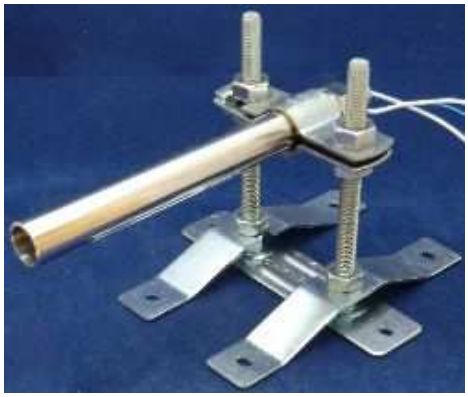
《 High temperatur small size Air Blow Heater 》
ABH-19A

This heater can discharge a hot wind of a maximum of 1050 ℃.



《 High temperatur medium size Air Blow Heater 》
ABH-22A

This heater can discharge a hot wind of a maximum of 1050 ℃.



《 High temperatur high power Air Blow Heater 》
ABH-28AM

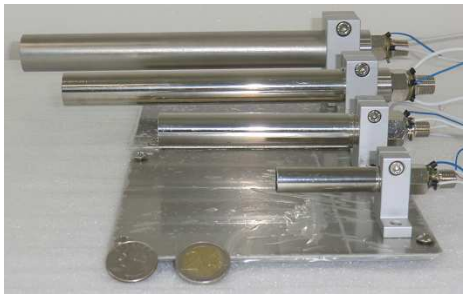
This heater can discharge a hot wind of a maximum of 1050 ℃.

《 Large size assembly unit type Air Blow Heater 》
ABH-28AMX

Large output of 45kw.

Heat-tech

Air Blow Heater 200℃ Heat resistant type



《 200℃ Heat resistant 》ABH-HR-13AM

《 200℃ Heat resistant 》ABH-HR-19AM

《 200℃ Heat resistant 》ABH-HR-22AM

《 200℃ Heat resistant 》ABH-HR-28AM

This heater is popular for testing electronic devices.

Heat-tech

Double Glass tube Air Blow Heater DGH Series

For Clean-room, Semiconductor and Chemical gas Air Blow Heater

Since the heating element of the DGH series is stored in a glass tube, contamination of the heating element is zero.

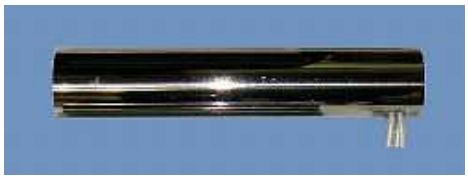
《 Double Glass tube Air Blow Heater 》 DGH-13NM
This heater is the smallest heater in the DGH series.

《 Double Glass tube Air Blow Heater 》 DGH-19NM
This heater is popular for testing electronic devices.

《 Double Glass tube Air Blow Heater 》 DGH-34NM
This heater is for device heating test in the clean room.

《 Double Glass tube Air Blow Heater 》 DGH-43NM
This heater is popular for drying silicon wafers.

《 Double Glass tube Air Blow Heater 》 DGH-50NM
This heater is popular for drying silicon wafers.



《 Double Glass tube Air Blow Heater 》 DGH-102X6PH
This heater is for drying the film in a clean room.

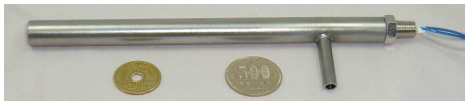
《 Double Glass tube Air Blow Heater 》 DGH-140X6PH
This heater is the largest heater in the DGH series.

Heat-tech

Vacuuming correspondence Air Blow Heater VAH series

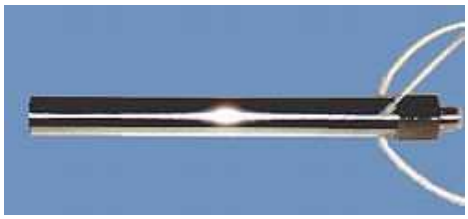
For vacuum chamber

《 Vacuuming correspondence Air Blow Heater》 VAH-14NM
For Deoxygenated nitrogen heating of semiconductor



《 Vacuuming correspondence Air Blow Heater》 VAH-19NM
For the pre-heating of the vacuum chamber

Platinum heating element Air Blow Heater

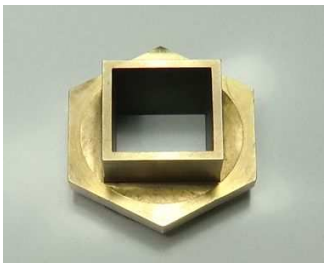


《 Platinum heating element Air Blow Heater 》
PTH-13NM

For the platinum catalytic evaluation.
For the fuel cell evaluation.

Air Blow Connector

We produce Centimeter size and Inch size.



The exit metal fittings of the special shape.

Heat-tech

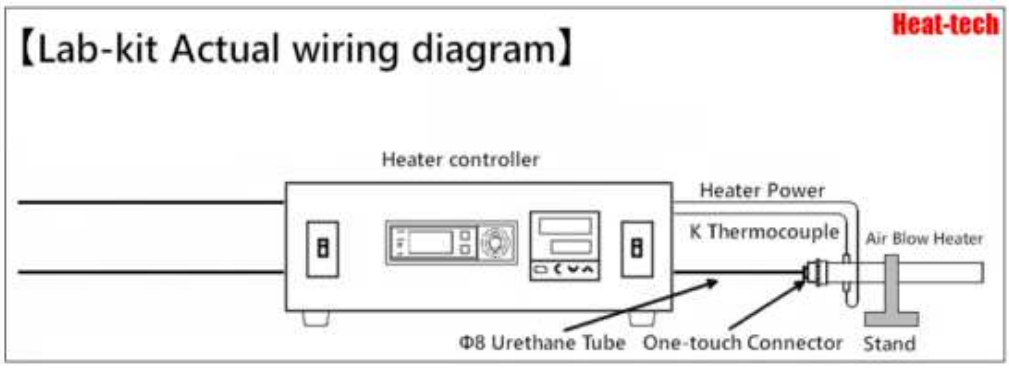
Air Blow Heater Lab Kit
LKABH-13AM/220V-350W + HCAFM

◆ **Feature** ◆

1 Since it is a kit, the Air Blow Heater can be used easily.
2 Output a moment 900 ℃ high temperature hot air.
3 Air is supplied, and it heats and only blows off!
4 Equipped with a thermocouple to the hot air blow section. Temperature can be managed easily.
5 Various attachments can be mounted to the screw portion of the M12F.
6 No flame safe and clean! No flame, it can easy clearly photo shoot!

【 Laboratory Kit Packing List 】

1 Heater Controller HCAFM
2 Stand for the Air Blow Heater
3 Power cable for heater controller
4 Φ8Urethane tube 1m
5 Air Blow Heater ABH-13AM/220V-350W/K (with built-in thermocouple code 1m)
6 One-touch connector for the Air Blow Heater



Heat-tech

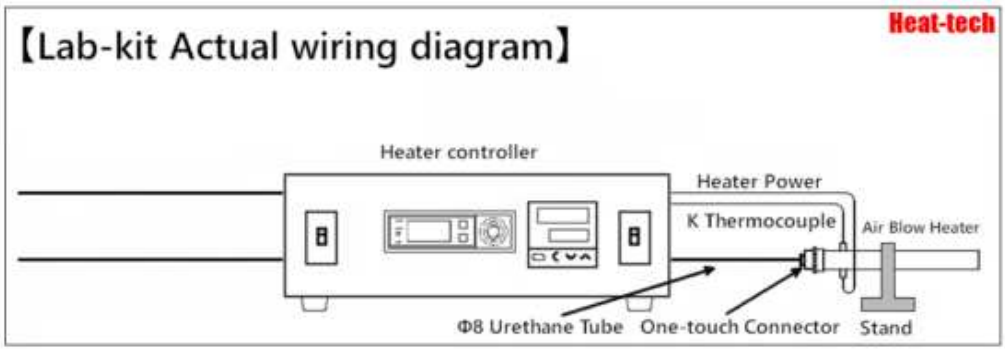
Air Blow Heater Lab Kit
LKABH-19AM/220V-1.6kW+ HCAFM

◆ **Feature** ◆

1 Since it is a kit, the Air Blow Heater can be used easily.
2 Output a moment 900 ℃ high temperature hot air.
3 Air is supplied, and it heats and only blows off!
4 Equipped with a thermocouple to the hot air blow section. Temperature can be managed easily.
5 Various attachments can be mounted to the screw portion of the M17F.
6 No flame safe and clean! No flame, it can easy clearly photo shoot!

【 Laboratory Kit Packing List 】

1 Heater Controller HCAFM
2 Stand for the Air Blow Heater
3 Φ8Urethane tube 1m
4 Air Blow Heater ABH-19AM/220V-1.6kW/K (with built-in thermocouple code 1m)
5 One-touch connector for the Air Blow Heater



Heat-tech

Air Blow Heater Lab Kit
LKABH-34NM/220V-3kW + HCAFM

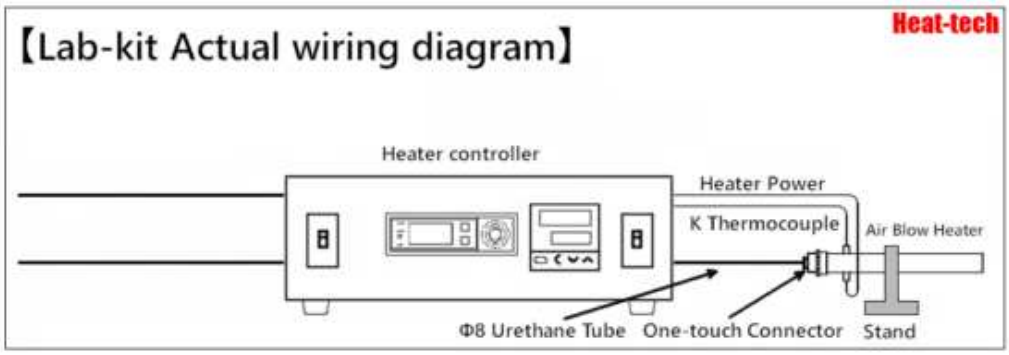
◆ **Feature** ◆

1 Since it is a kit, the Air Blow Heater can be used easily.
2 Output a moment 900 ℃ high temperature hot air.
3 Air is supplied, and it heats and only blows off!
4 Equipped with a thermocouple to the hot air blow section. Temperature can be managed easily.
5 Various attachments can be mounted to the screw portion of the M32F.
6 No flame safe and clean! No flame, it can easy clearly photo shoot!

(Assembly example ※ Laboratory Kit is delivered as individual components.)

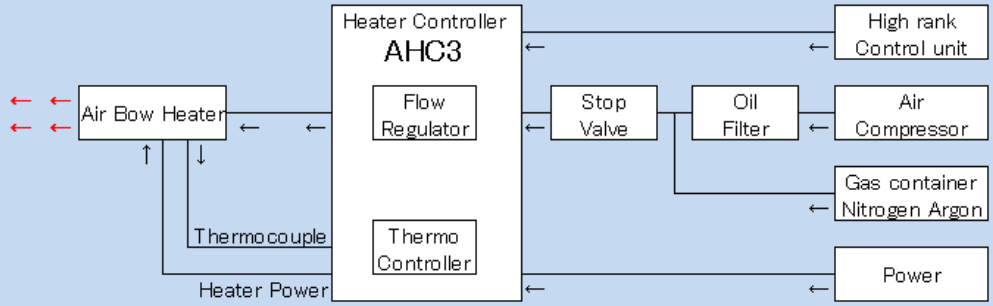
【 Laboratory Kit Packing List 】

1 Heater Controller HCAFM
2 Stand for the Air Blow Heater
3 Φ8Urethane tube 1m
4 Air Blow Heater ABH-34NM/220V-3kW/K(with built-in thermocouple code 1m)
5 One-touch connector for the Air Blow Heater

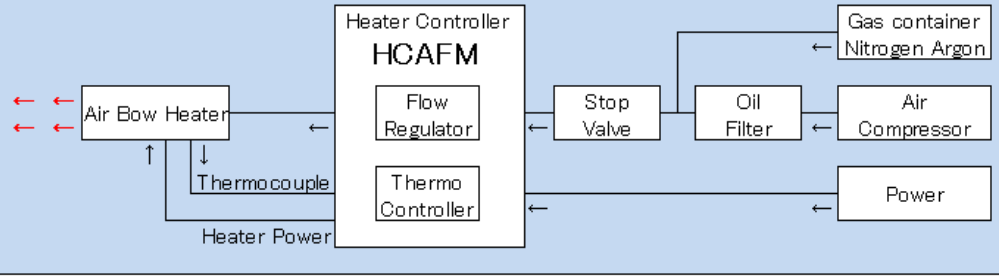


Heat-tech

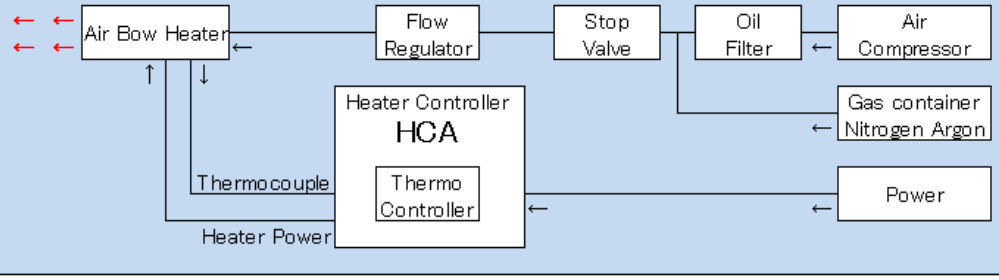
Configuration example－1 Factory production line



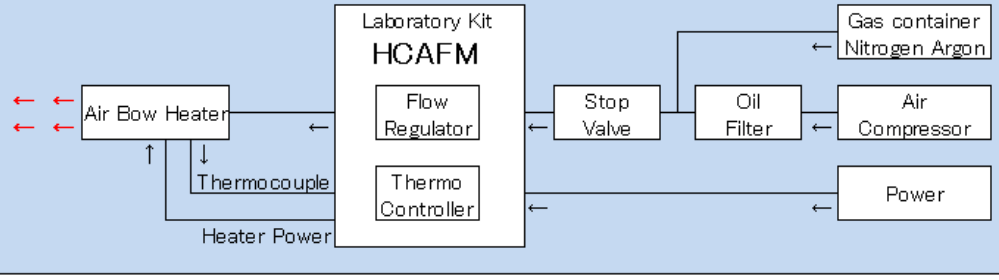
Configuration example－2 Deburring of resin and resin weld

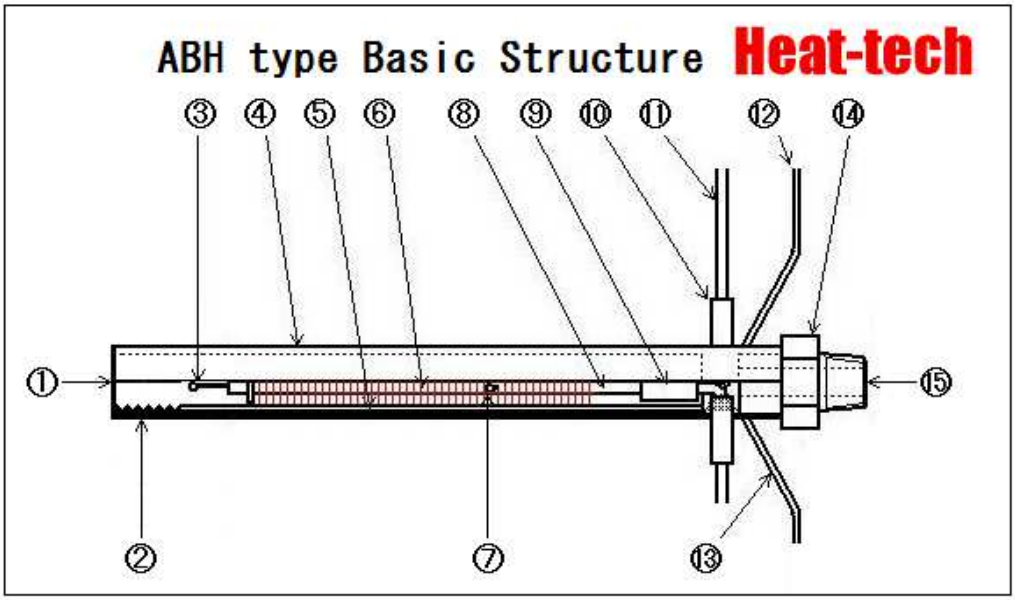


Configuration example－3 Factory production line Simplified type

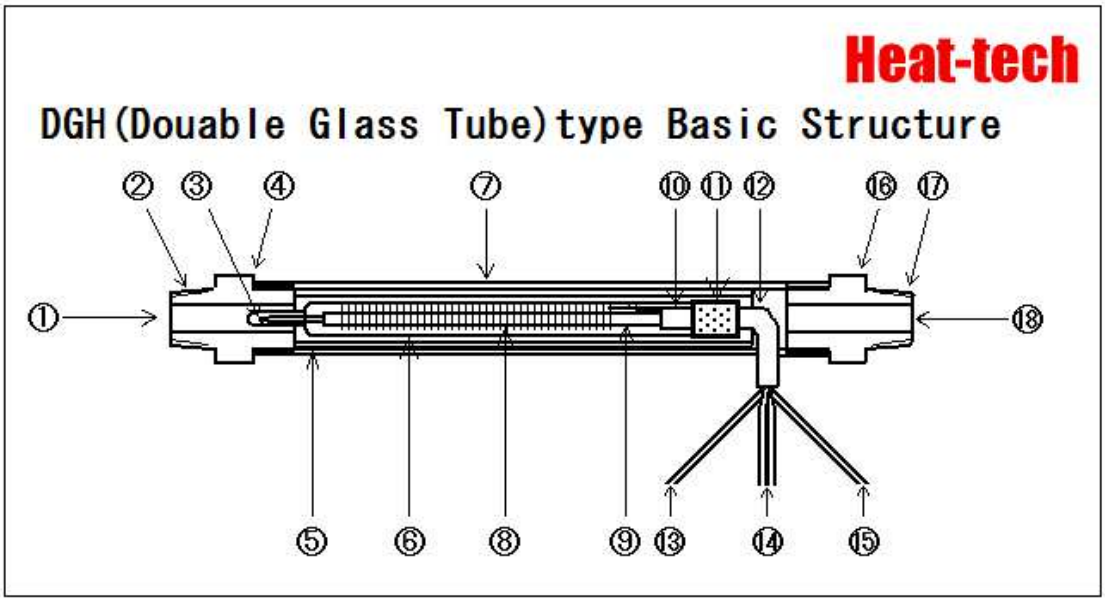


Configuration example－4 Laboratory & Research institute





①Hot air blow output
②Screw for attachment
③Thermocouple for output air temperature
④Metal case stainless SUS304
⑤Heat tube Quartz glass
⑥Heat element Fe-Cr-Al alloy
⑦Thermocouple for heat element
⑧Insulation Alumina ceramics
⑨Mount base Steatite
⑩Insulating silicon rubber
⑪Power wire Glass cloth or Silicon rubber
⑫Thermocouple for output air Glass cloth or Silicon rubber
⑬Thermocouple for heat element Glass cloth or Silicon rubber
⑭Air input connector Nickel plated Brass
⑮Air input



①Hot air blow output
②Tapered Screw
③Thermocouple for output air temperature
④Air output connector Nickel plated Bras
⑤Metal case cover Quartz glass tube
⑥Heat element cover Quartz glass tube
⑦Metal case stainless SUS304
⑧Heat element Fe-Cr-Al alloy
⑨Insulating silicon rubber
⑩Mount base Steatite
⑪Stopper Silicon rubber
⑫Heat proof silicon rubber
⑬Thermocouple for output air Glass cloth or Silicon rubber
⑭Power wire Glass cloth or Silicon rubber
⑮Thermocouple for heat element Glass cloth or Silicon rubber
⑯Air input connector Nickel plated Bras
⑰Tapered Screw
⑱Air input

Types of available gas　　Please contact us, When it is not in the table below.

Types of gas	ABH	DGH	VAH	Notes
Air, Oxygen *1	◎	◎	◎	Contain neither oil mist nor water.
Nitrogen, Argon *2	○	◎	○	All inert gases can be used.
Hydrogen	△	◎	△	Ignites when becoming over 600℃ mixed air.
Green Gas	△	◎	△	Green Gas has reduction.
Steam *3	×	◎	△～×	ABH is impossible, DGH can be use.
Town Gas, LPG	×	×	×	Carbon cling to heat element.

*1 Heating wires are used in Air Blow Heater has the most durable in the oxidizing atmosphere.
ABH types are in direct contact with the gas so that the heating wire, high heat transfer efficiency, high temperature (800 ℃-900℃ approximately) can be obtained.
*2 ABH type is used for argon and nitrogen, compared to the air life tend to be shorter.
*3 DGH type does not contact the heating wire and gas.
Therefor, can heat the gas in many type, become slightly larger, even up to 500 ℃ hot gas temperature.

① Flow of model selection

1. Determine the model in the installation environment.
2. Determine the target temperature.
3. Determine the required airflow.
4. Obtain the power (Watt) from the table below ""“Temperature and Airflow at the Maximum Power” " ta
5. Multiply the power by the safety factor twice to determine the number of model Watts.
6. In the "Model List table" below, narrow down candidate models.
7. Examine the external dimensions and details with the specification sheet of each model.
8. Check the price in the price list.
9. Order from the price list.

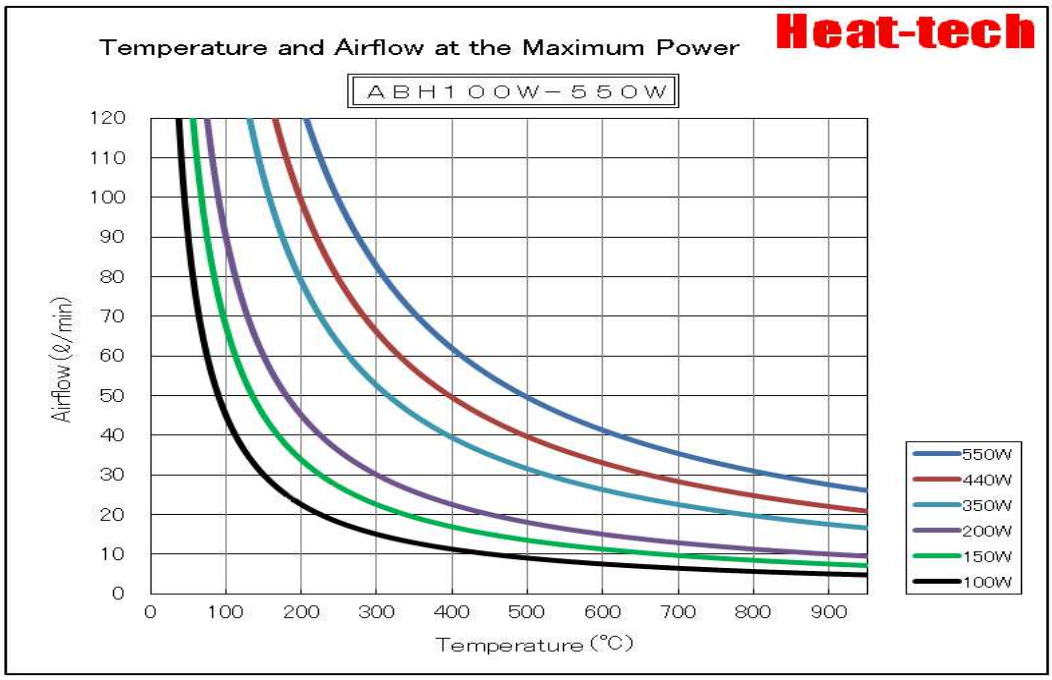
10. In case user want to easy trial, we prepared 3 kinds of "Laboratory Kit".

10-1 Air Blow Heater Laboratory Kit　LKABH-13AM/220V-350W + HCAFM
10-2 Air Blow Heater Laboratory Kit　LKABH-19AM/220V-1.6kW+ HCAFM
10-3 Air Blow Heater Laboratory Kit　LKABH-34NM/220V-3kW + HCAFM

② Model selection in installation environment

Q1. Is it installed in a vacuum chamber?　Yes ⇒ VAH type
Q2. Is it installed in a clean room?　Yes ⇒ DGH type
Q3. Is the heated gas corrosive gas?　Yes ⇒ DGH type
If it does not apply to the above Q1 to Q3, select standard ABH type

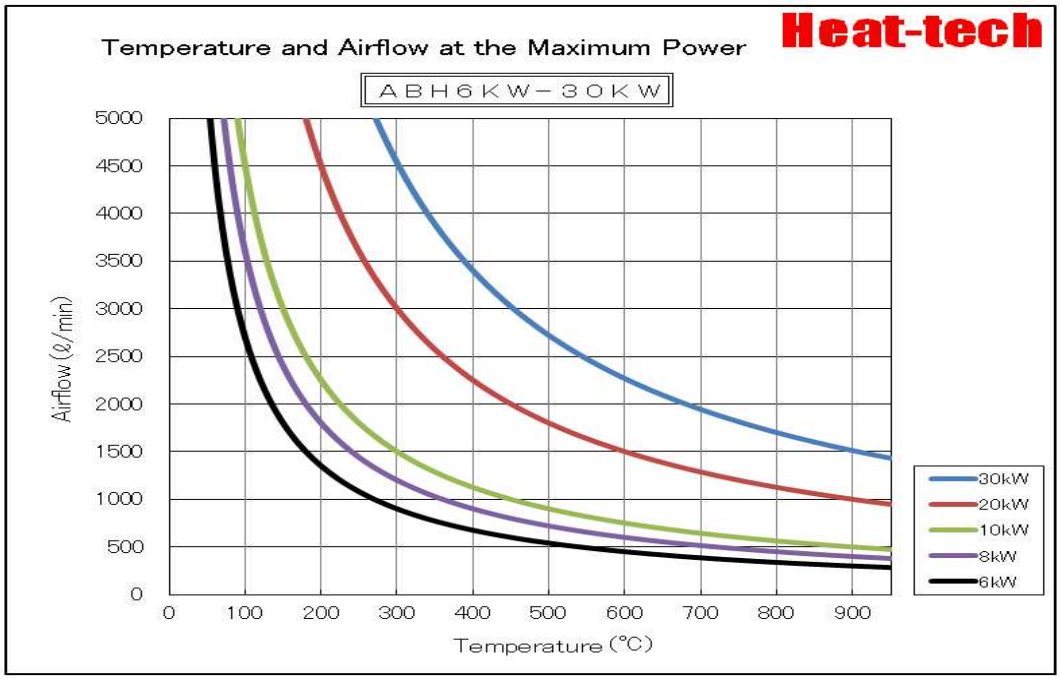
③ “Temperature and Air flow at the Maximum Power" graph



【 Model Selection Method of Air Blow Heater 】

【Example】 I want a hot air at 500 ℃ with air flow of 40ℓ/min, installed at factory.

1).Normal air, normal environment and normal pressure, standard ABH type is selected
2)..A point of intersection of 40 (ℓ/min) and 500 ℃ is asked.
3).The point of intersection will be a line of 440W.
4). 880W is multiplying 440w by the safety factor of 200% due to disturbance.
5).The rating near 880W product is 1kW product.
6).Confirm the "Model List of Air Blow Heaters" table.
7). [Applicable model] ABH-19A 650 - 1.6kW
8).Details confirmed on "ABH -19A" specification sheet.
9).In this case ABH-220v-1kw/K/+PK2m selected

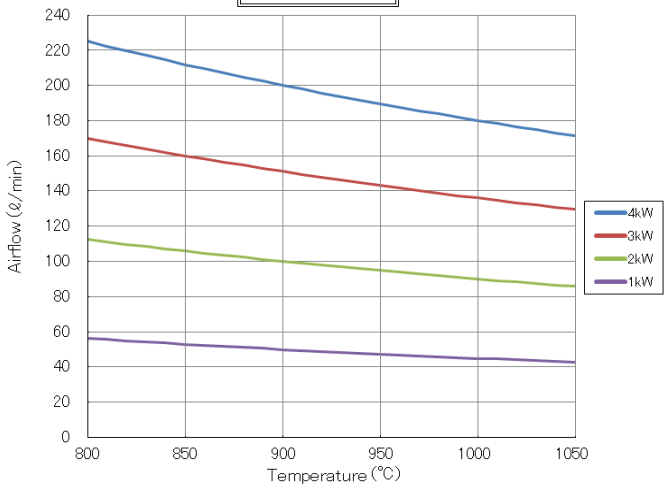


Heat-tech

Temperature and Airflow at the Maximum Power

For high temperature type

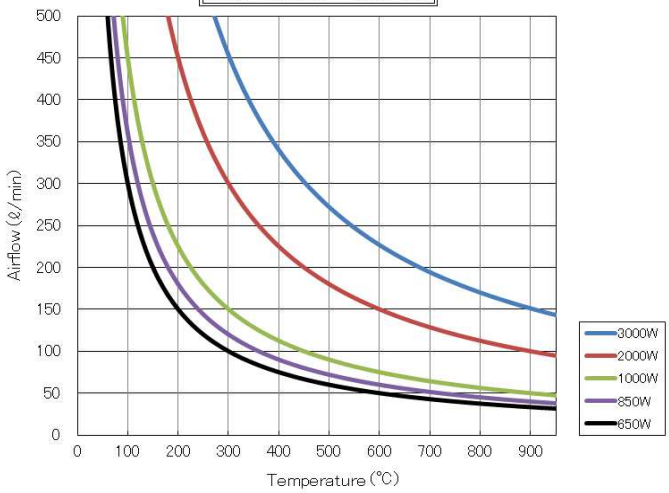
ABH1KW－4KW



Heat-tech

Temperature and Airflow at the Maximum Power

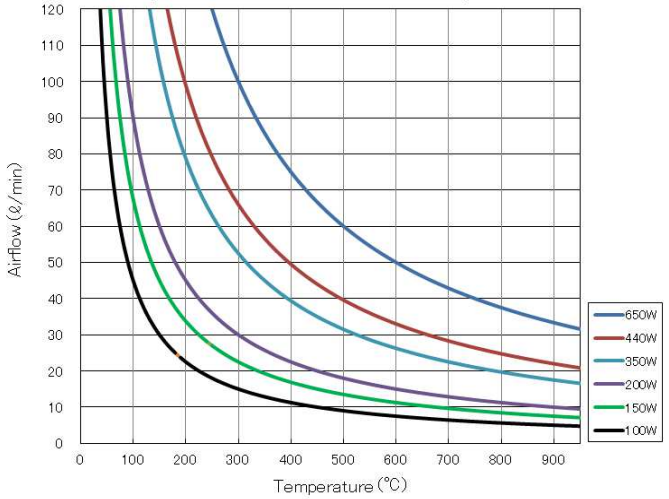
ABH650W－3000W



Heat-tech

Temperature and Airflow at the Maximum Power

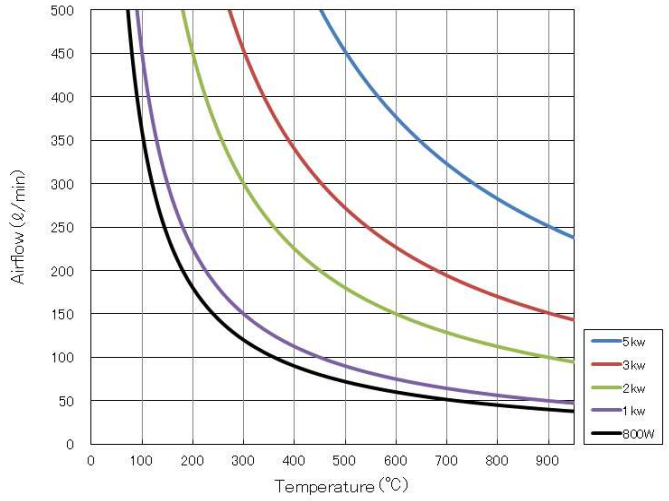
VAH100W－650W



Heat-tech

Temperature and Airflow at the Maximum Power

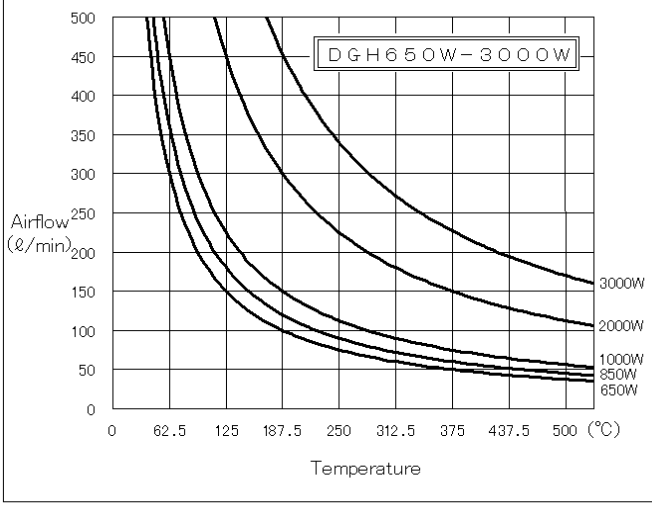
VAH800W－5kW



Heat-tech

Temperature and Airflow at the Maximum Power

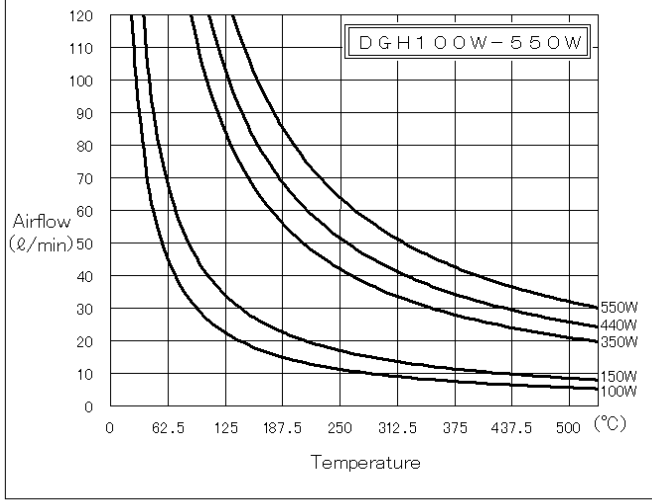
DGH650W－3000W



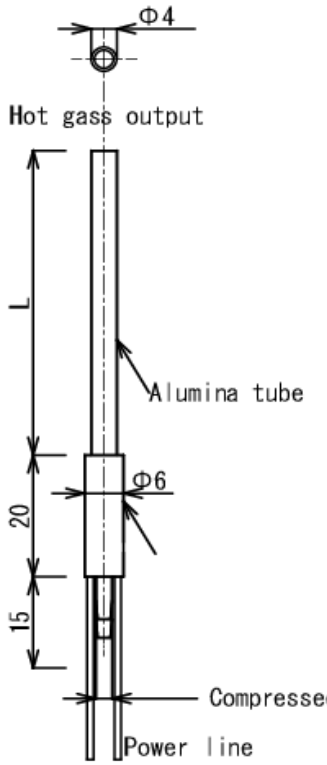
Heat-tech

Temperature and Airflow at the Maximum Power

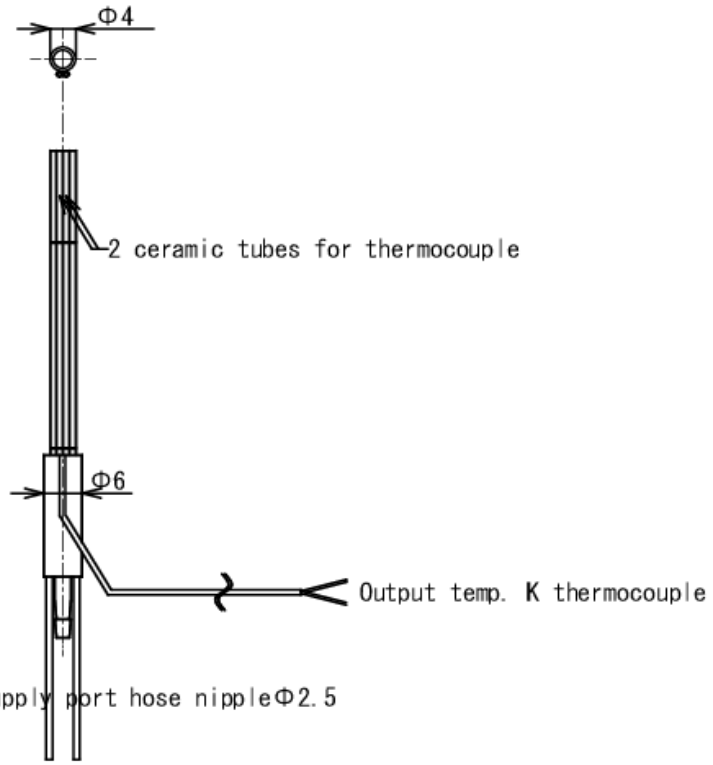
DGH100W－550W



D type
Direct injection



D type
Direct injection
with K thermocouple



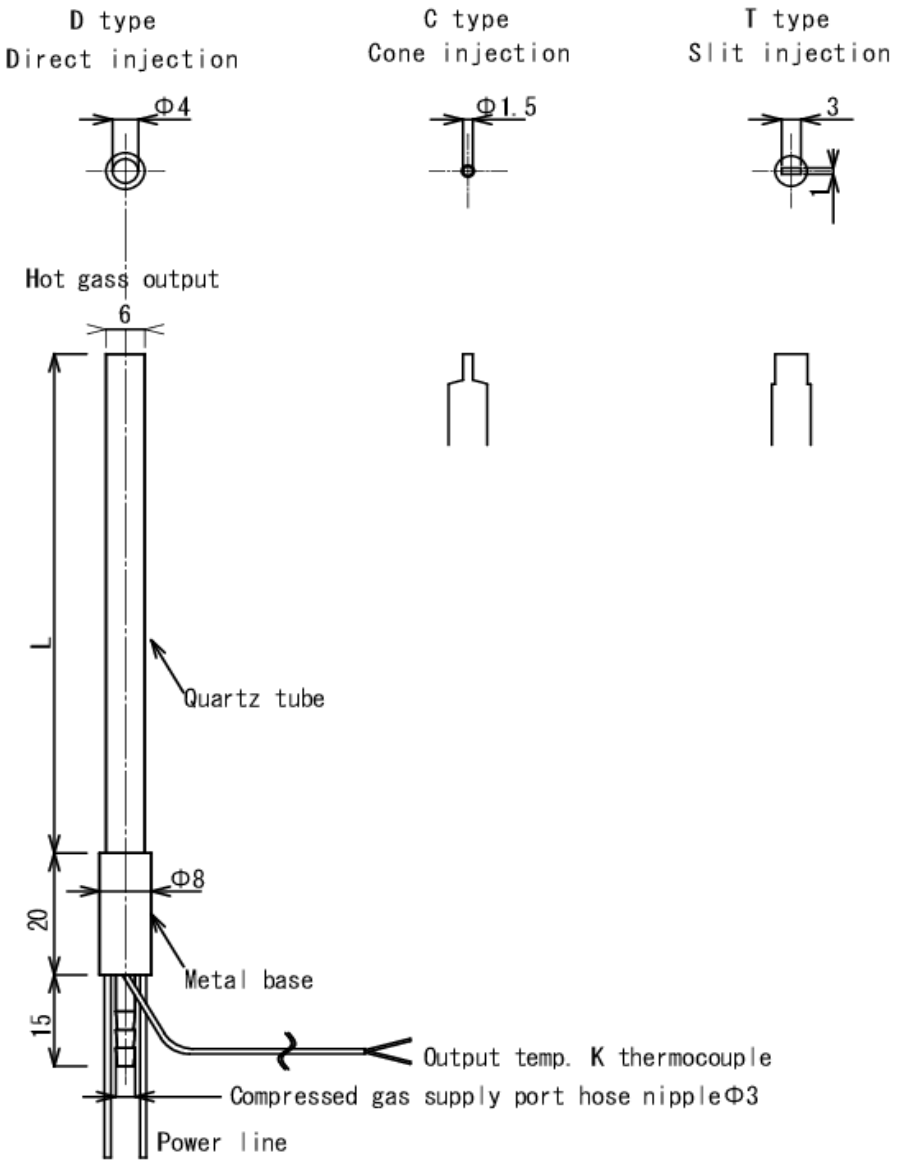
【Specify at the ordering】
- □V Specify Voltage
- □W Specify Wattage
- L□ Specify Base Length

【Optional addition】
- /K Output temp. K thermocouple
- /P□m Specify Power Line
- /K□m Specify Thermocouple line

【Notes】
①Pressure resistance 0.3MPa
②Remove oil mist, hydration from the supply gas.
③When heated without supplying cold gas, the heater will burn out.

Length	40mm	50mm
Wattage	50W	100W
Voltage	100V, 110V, 120V	
D/#	ABH-4D/□V-□W/L□/option	
Model	Air Blow Heater	

Date	Drawing number	
2023.03.30	ABH-E1	Heat-tech Co.,Ltd.



【Specify at the ordering】
6□ Specify tip shape
□V Specify Voltage
□W Specify Wattage
L□ Specify Base Length

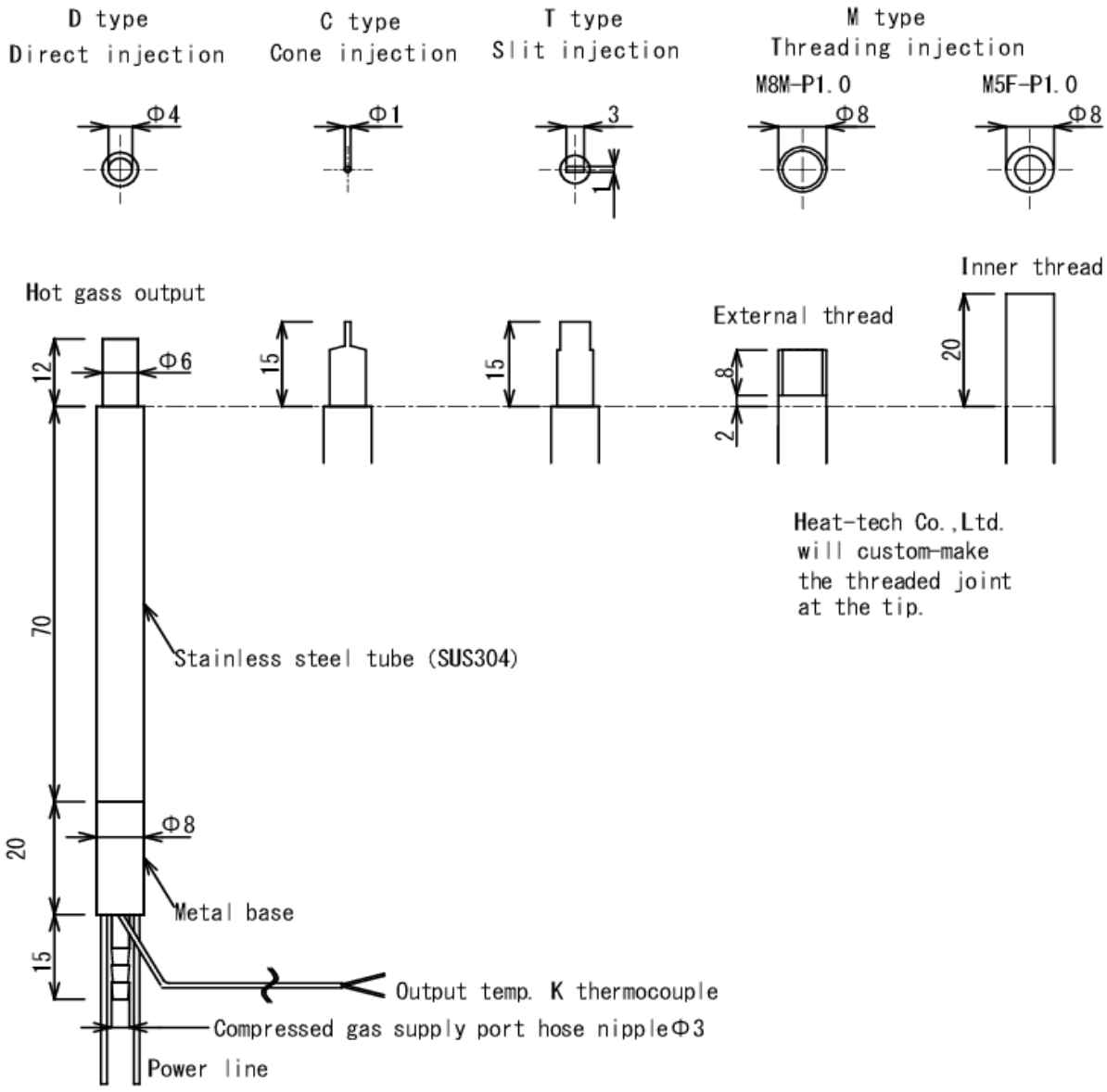
【Optional addition】
/K Output temp. K thermocouple
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①Pressure resistance 0.3MPa
②Remove oil mist, hydration from the supply gas.
③When heated without supplying cold gas, the heater will burn out.

Length	60mm	80mm
Wattage	50W	100W
Voltage	100V, 110V, 120V	
D/#	ABH-6□/□V-□W/L□/option	
Model	Air Blow Heater	

Date	Drawing number
2023.03.30	ABH-E2

Heat-tech Co.,Ltd.



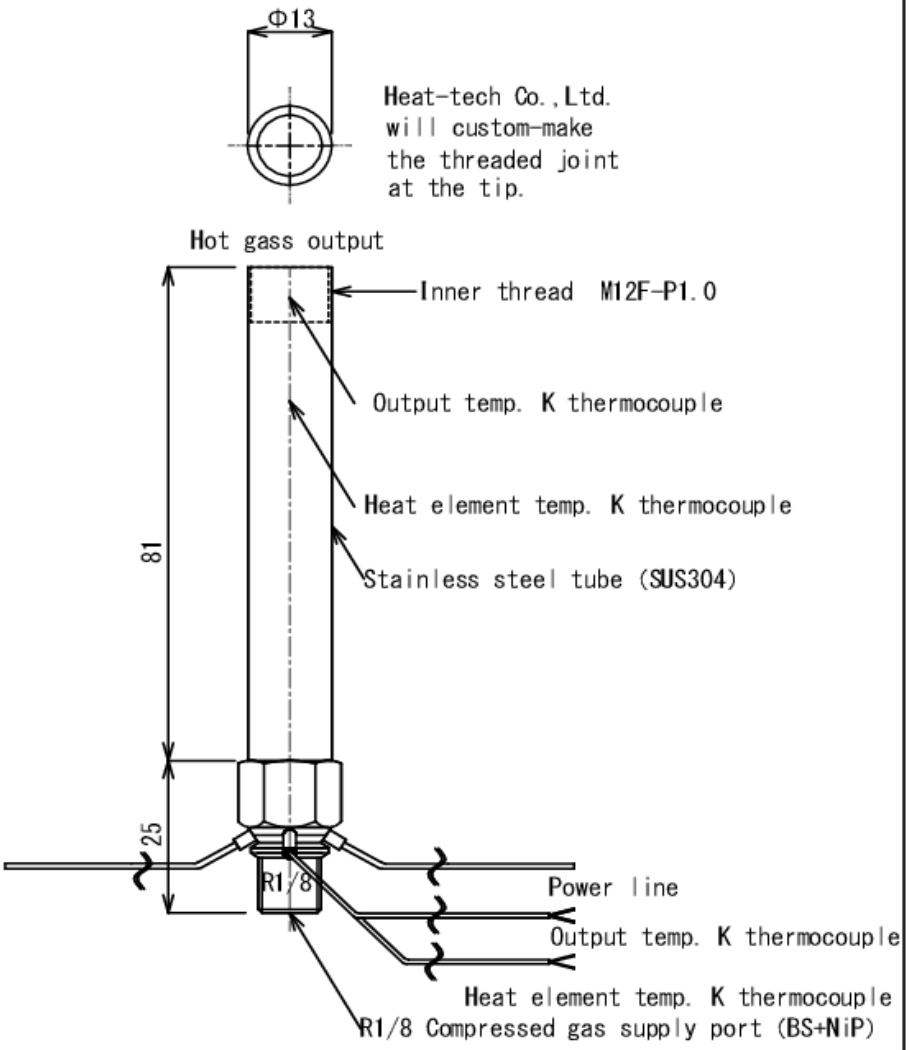
【Specify at the ordering】
8□ Specify tip shape
□V Specify Voltage
□W Specify Wattage
【Optional addition】
/K Output temp. K thermocouple
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①Pressure resistance 0.3MPa
②Remove oil mist, hydration from the supply gas.
③When heated without supplying cold gas, the heater will burn out.

Length	70mm	
Wattage	100W, 180W	300W
Voltage	100V, 110V, 120V	200V, 220V, 230V, 240V
D/#	ABH-8□/□V-□W/L70/option	
Model	Air Blow Heater	

Date	Drawing number	
2023.03.30	ABH-E3	Heat-tech Co.,Ltd.

M type
Threading injection



【Specify at the ordering】
□V Specify Voltage

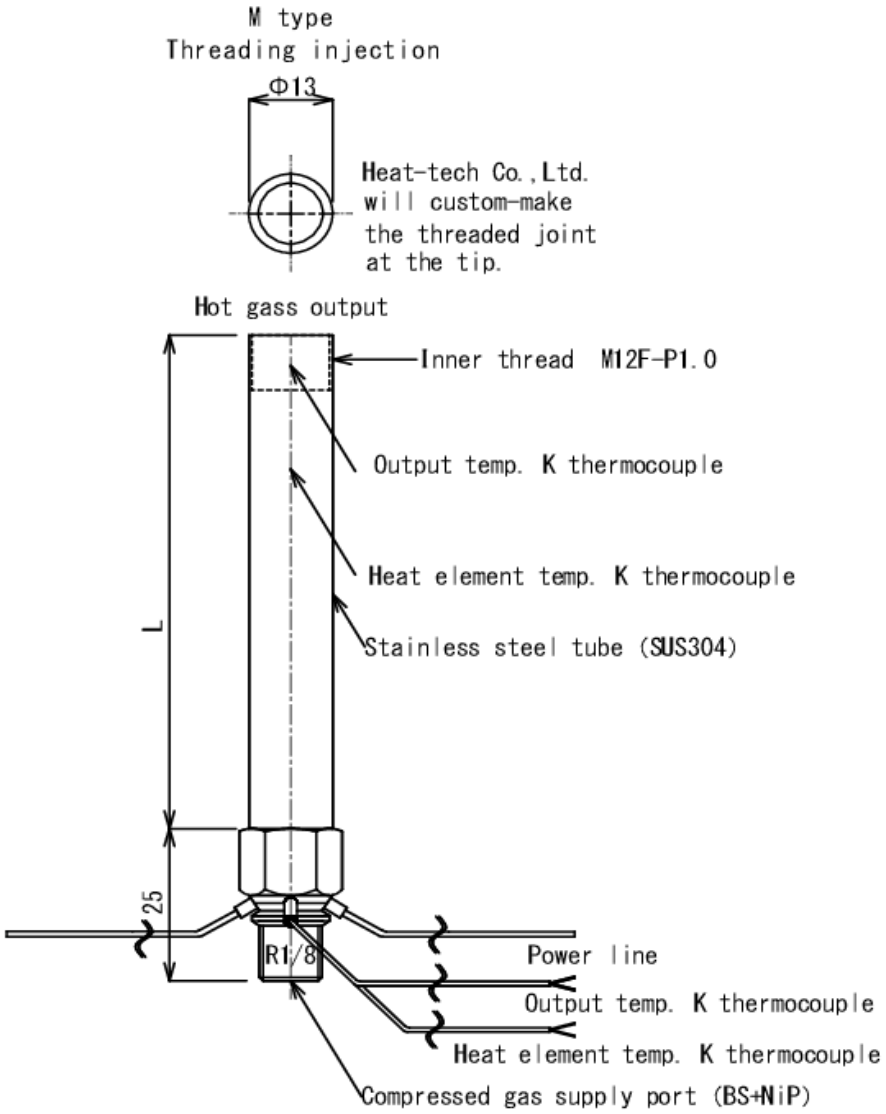
【Optional addition】
/K Output temp. K thermocouple
/2K Output temp. K thermocouple
& heat element temp. K thermocouple
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①Pressure resistance 0.3MPa
②Remove oil mist,hydration from the supply gas.
③When heated without supplying cold gas,
the heater will burn out.

Wattage	50w
Voltage	100v, 110v, 120v
D/#	ABH-13AM/□V-50W/L81/option
Model	For super breeze Air Blow Heater

Date	Drawing number
2023.03.30	ABH-E4

Heat-tech Co.,Ltd.



【Specify at the ordering】
- □V Specify Voltage
- □W Specify Wattage
- L□ Specify Base Length

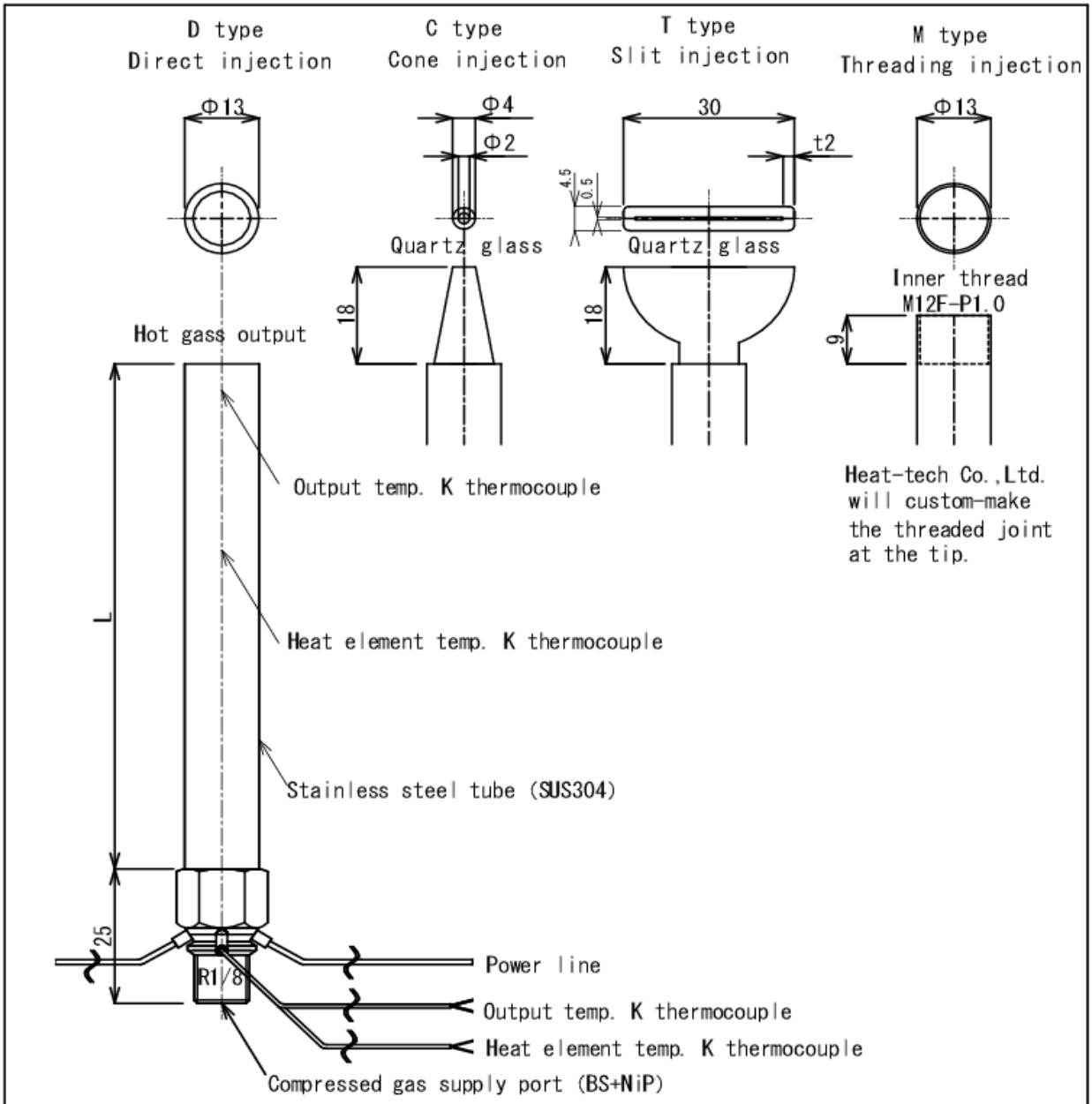
【Optional addition】
- /K Output temp. K thermocouple
- /2K Output temp. K thermocouple & heat element temp. K thermocouple
- /P□m Specify Power Line
- /K□m Specify Thermocouple line

【Notes】
①Pressure resistance 0.3MPa
②Remove oil mist,hydration from the supply gas.
③When heated without supplying cold gas, the heater will burn out.

Length	50mm	66mm	103mm
Wattage	50W	100W	200W
Voltage	12V, 24V		24V
D/#	ABH-13AM/□V-□W/L□/option		
Model	DC power Air Blow Heater		

Date	Drawing number
2023.03.30	ABH-E5

Heat-tech Co.,Ltd.



【Specify at the ordering】
A□ Specify tip shape(D,C,T,M)
□V Specify Voltage
□W Specify Wattage
L□ Specify Base Length

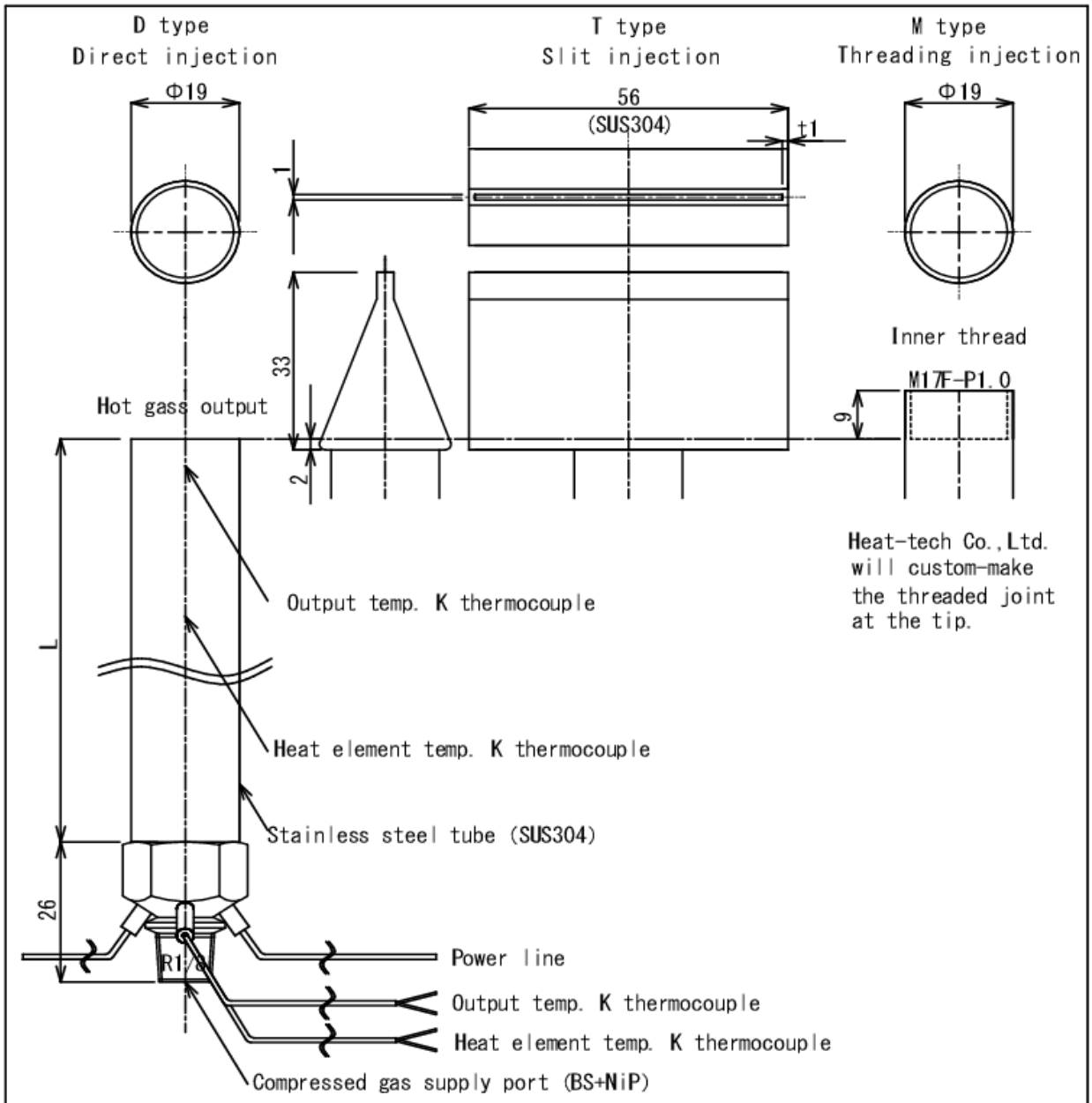
【Optional addition】
/K Output temp. K thermocouple
/2K Output temp. K thermocouple
& heat element temp. K thermocouple
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①Pressure resistance 0.3MPa
②Remove oil mist,hydration from the supply gas.
③When heated without supplying cold gas,
the heater will burn out.

Length	57mm			94mm		
Wattage	100W	150W	200W	500W	850W	1000W
	350W	450W		650W		
Voltage	100V	110V	120V		200V	220V
	200V	220V	230V	240V	230V	240V
D/#	ABH-13A□/□V-□W/L□/option					
Model	Air Blow Heater					

Date	Drawing number
2023.03.30	ABH-E6

Heat-tech Co.,Ltd.



【Specify at the ordering】
A□ Specify tip shape(D,T,M)
□V Specify Voltage
□W Specify Wattage
L□ Specify Base Length

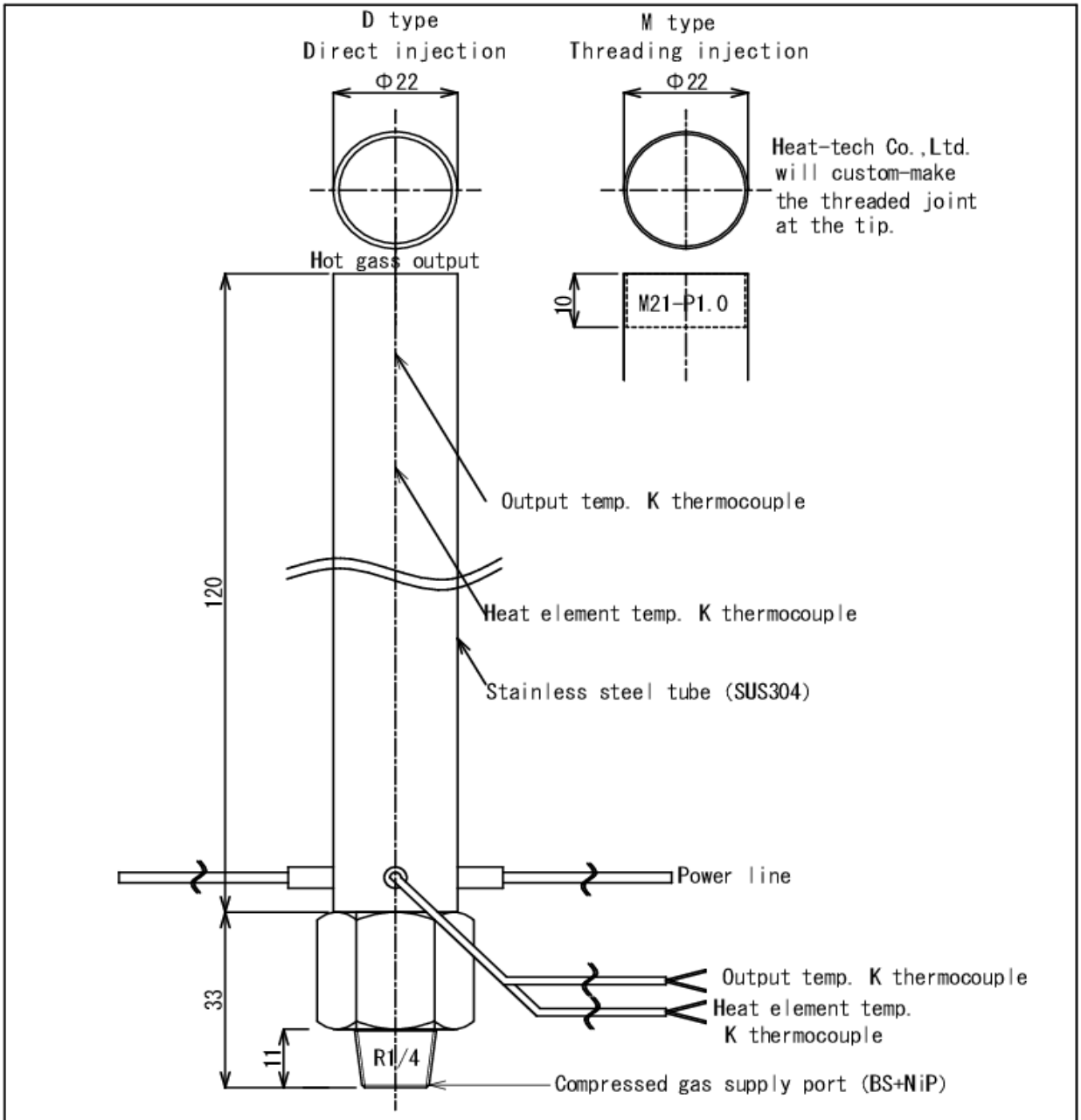
【Optional addition】
/K Output temp. K thermocouple
/2K Output temp. K thermocouple
& heat element temp. K thermocouple
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①Pressure resistance 0.3MPa
②Remove oil mist,hydration from the supply gas.
③When heated without supplying cold gas,
the heater will burn out.

Length	75mm		95mm		120mm	
Wattage	650W	800W	1kW	1.2kW	1.4kW	1.6kW
Voltage	100V 110V 120V 200V 220V 230V		200V	220V	230V	240V
D/#	ABH-19A□/□V-□W/L□/option					
Model	Air Blow Heater					

Date	Drawing number
2023.03.30	ABH-E7

Heat-tech Co.,Ltd.



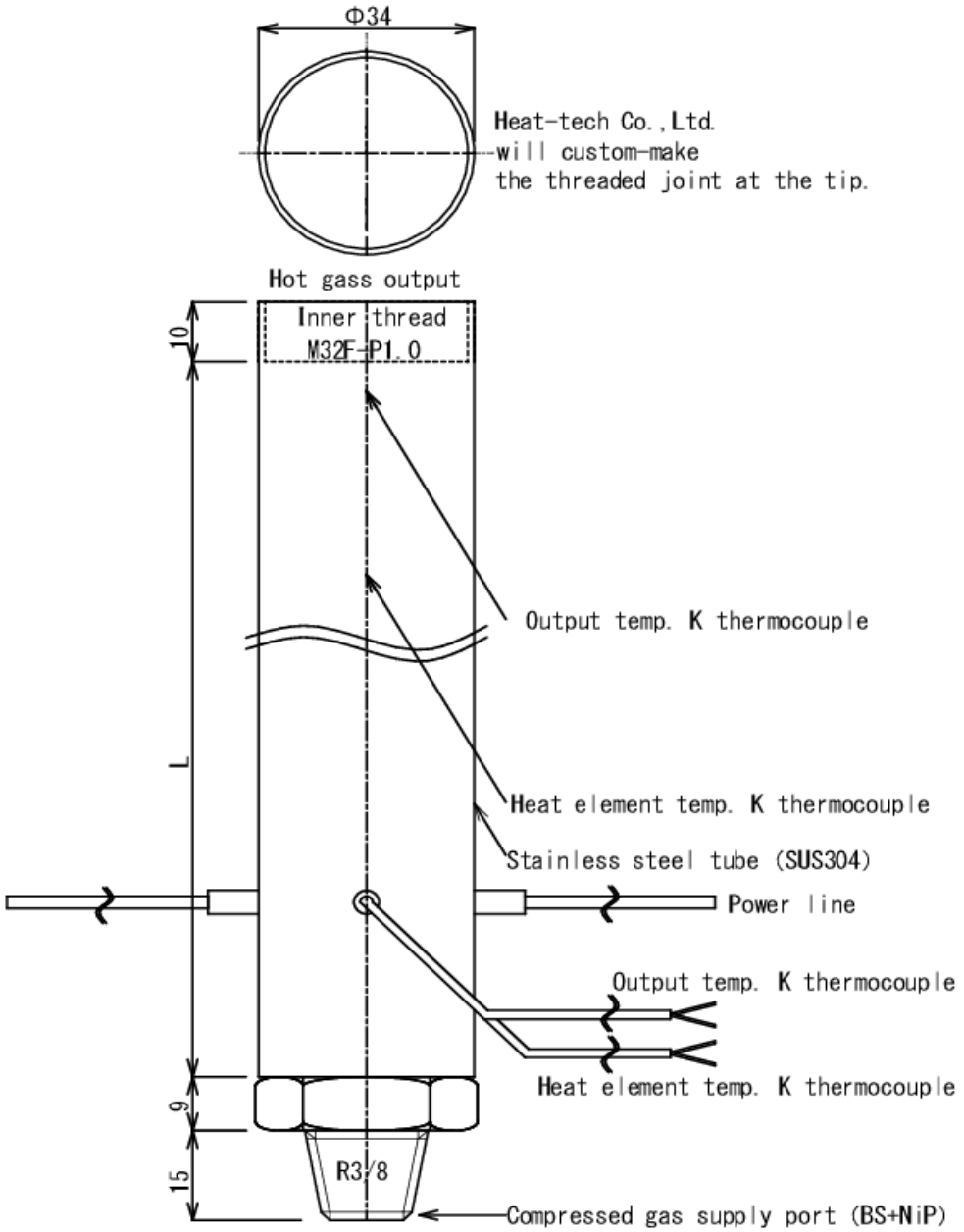
【Specify at the ordering】
N□ Specify tip shape(D,M)
□V Specify Voltage
□W Specify Wattage
L□ Specify Base Length
【Optional addition】
/K Output temp. K thermocouple
/2K Output temp. K thermocouple
& heat element temp. K thermocouple
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①Pressure resistance 0.3MPa
②Remove oil mist,hydration from the supply gas.
③When heated without supplying cold gas,
the heater will burn out.

Length	178mm	278mm	378mm
Wattage	1kW	2kW	3kW
Voltage	200V, 220V, 230V, 240V		
D/#	ABH-22N□/□V-□W//L□/option		
Model	Air Blow Heater		

Date	Drawing number
2023.03.30	ABH-E8

Heat-tech Co.,Ltd.



【Specify at the ordering】
- □V Specify Voltage
- □W Specify Wattage
- L□ Specify Base Length

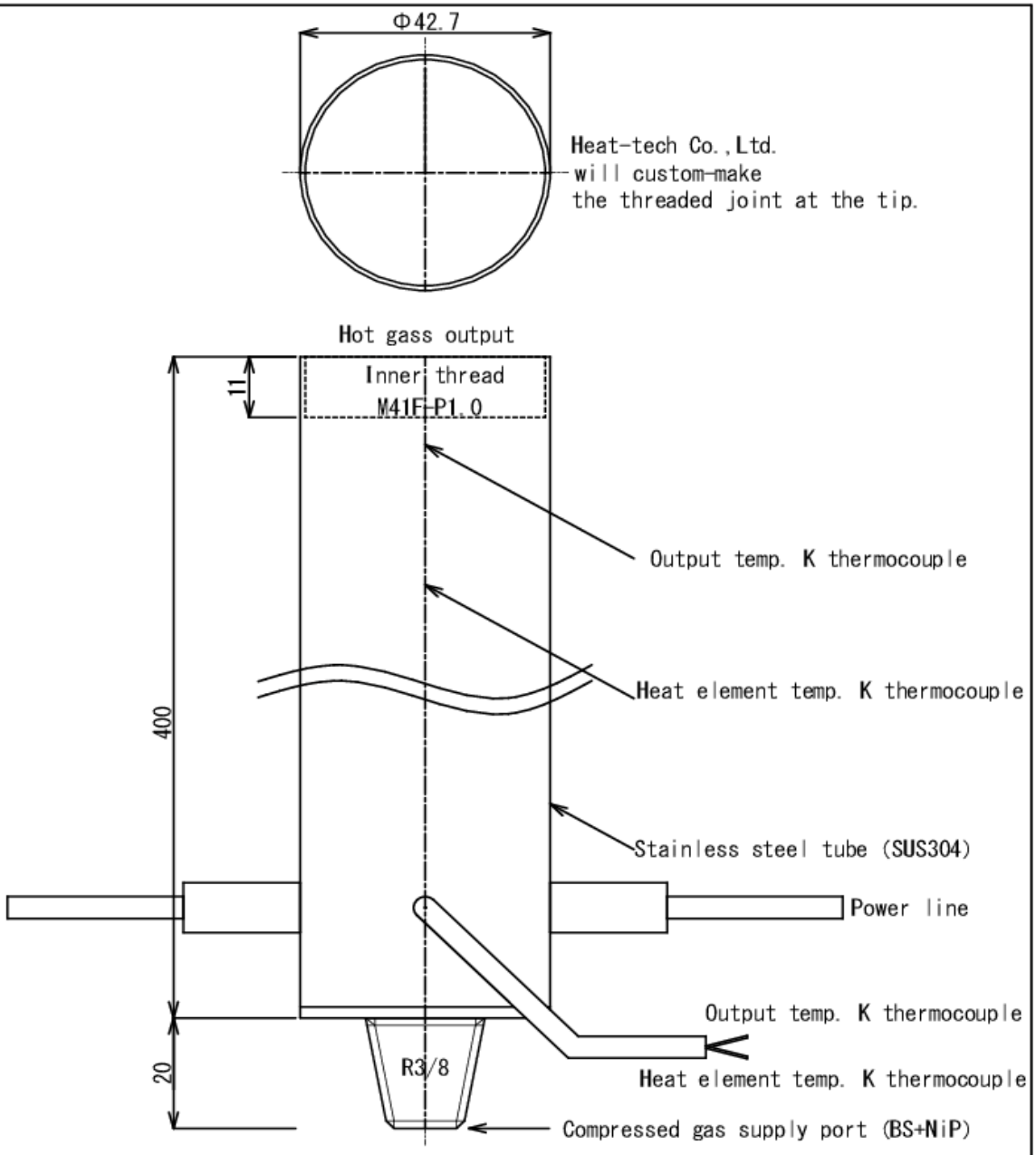
【Optional addition】
- /K Output temp. K thermocouple
- /2K Output temp. K thermocouple & heat element temp. K thermocouple
- /P□m Specify Power Line
- /K□m Specify Thermocouple line

【Notes】
①Pressure resistance 0.3MPa
②Remove oil mist, hydration from the supply gas.
③When heated without supplying cold gas, the heater will burn out.

Length	220mm	290mm	440mm
Wattage	2kW	3kW	4kW,5kW
Voltage	200V, 220V, 230V, 240V		
D/#	ABH-34N□/□V-□W/L□/option		
Model	Air Blow Heater		

Date	Drawing number
2023.03.30	ABH-E9

Heat-tech Co.,Ltd.



【Specify at the ordering】
- □V Specify Voltage
- □W Specify Wattage

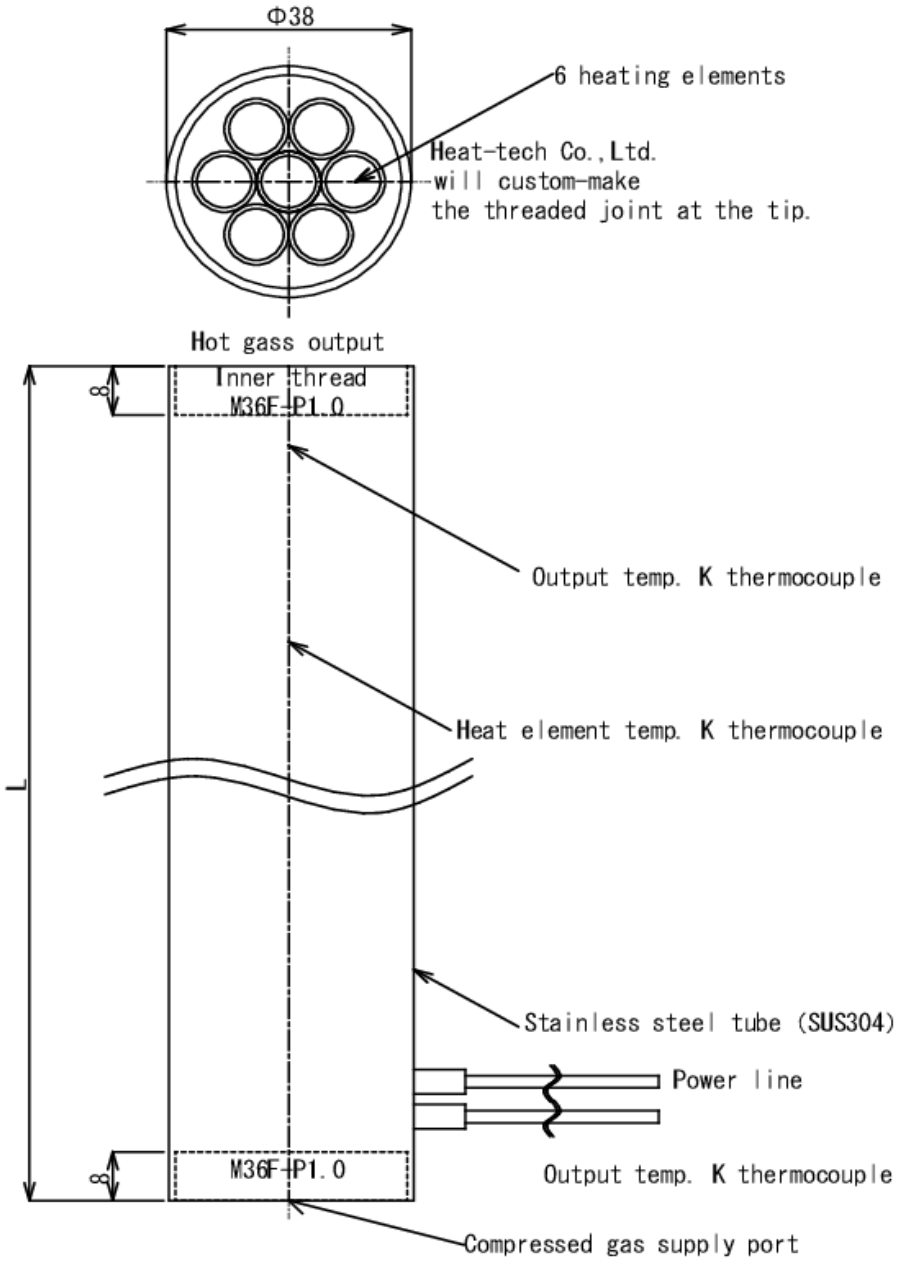
【Optional addition】
- /K Output temp. K thermocouple
- /2K Output temp. K thermocouple & heat element temp. K thermocouple
- /P□m Specify Power Line
- /K□m Specify Thermocouple line
- /(R3/4) Specify input port R3/4

【Notes】
①Pressure resistance 0.3MPa
②Remove oil mist, hydration from the supply gas.
③When heated without supplying cold gas, the heater will burn out.

Length	400mm	
Wattage	5kw	6kw
Voltage	200V, 220V, 230V, 240V	
D/#	ABH-43N□/□V-□W/L□/option	
Model	Air Blow Heater	

Date	Drawing number
2023.03.30	ABH-E10

Heat-tech Co.,Ltd.



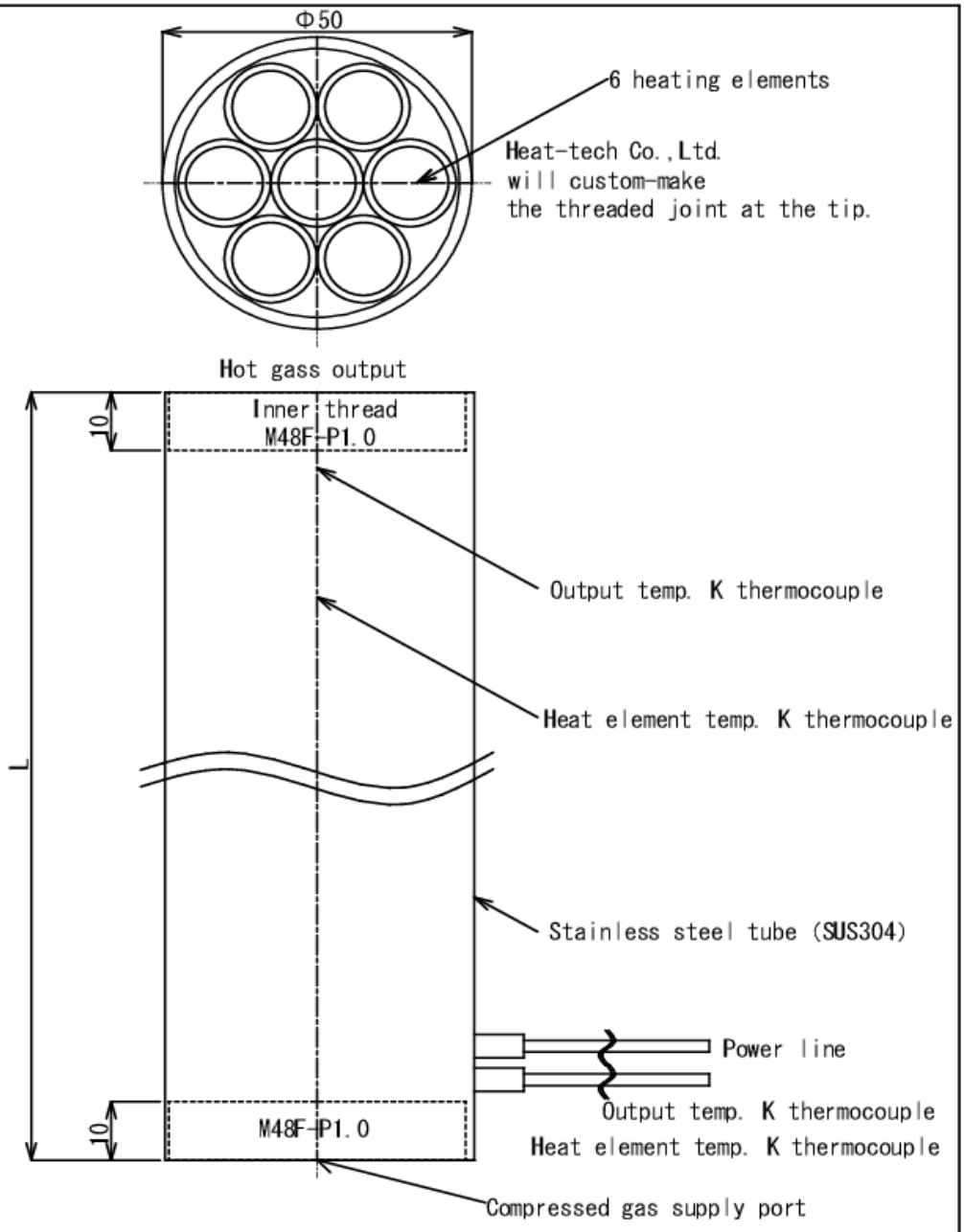
【Specify at the ordering】
- □V Specify Voltage
- □W Specify Wattage
- L□ Specify Base Length

【Optional addition】
- /K Output temp. K thermocouple
- /2K Output temp. K thermocouple & heat element temp. K thermocouple
- /P□m Specify Power Line
- /K□m Specify Thermocouple line

【Notes】
①Pressure resistance 0.3MPa
②Remove oil mist, hydration from the supply gas.
③When heated without supplying cold gas, the heater will burn out.
④Gas flow range 30L～900L/min

Length	100mm	137mm	193mm
Wattage	2.5kw	3kw	5kw
Voltage	200V, 220V, 230V, 240V		
D/#	ABH-38X6/□V-□W/L□/option		
Model	Parallel large size Air Blow Heater		

Date	Drawing number	
2023.03.30	ABH-PL-E1	**Heat-tech Co.,Ltd.**



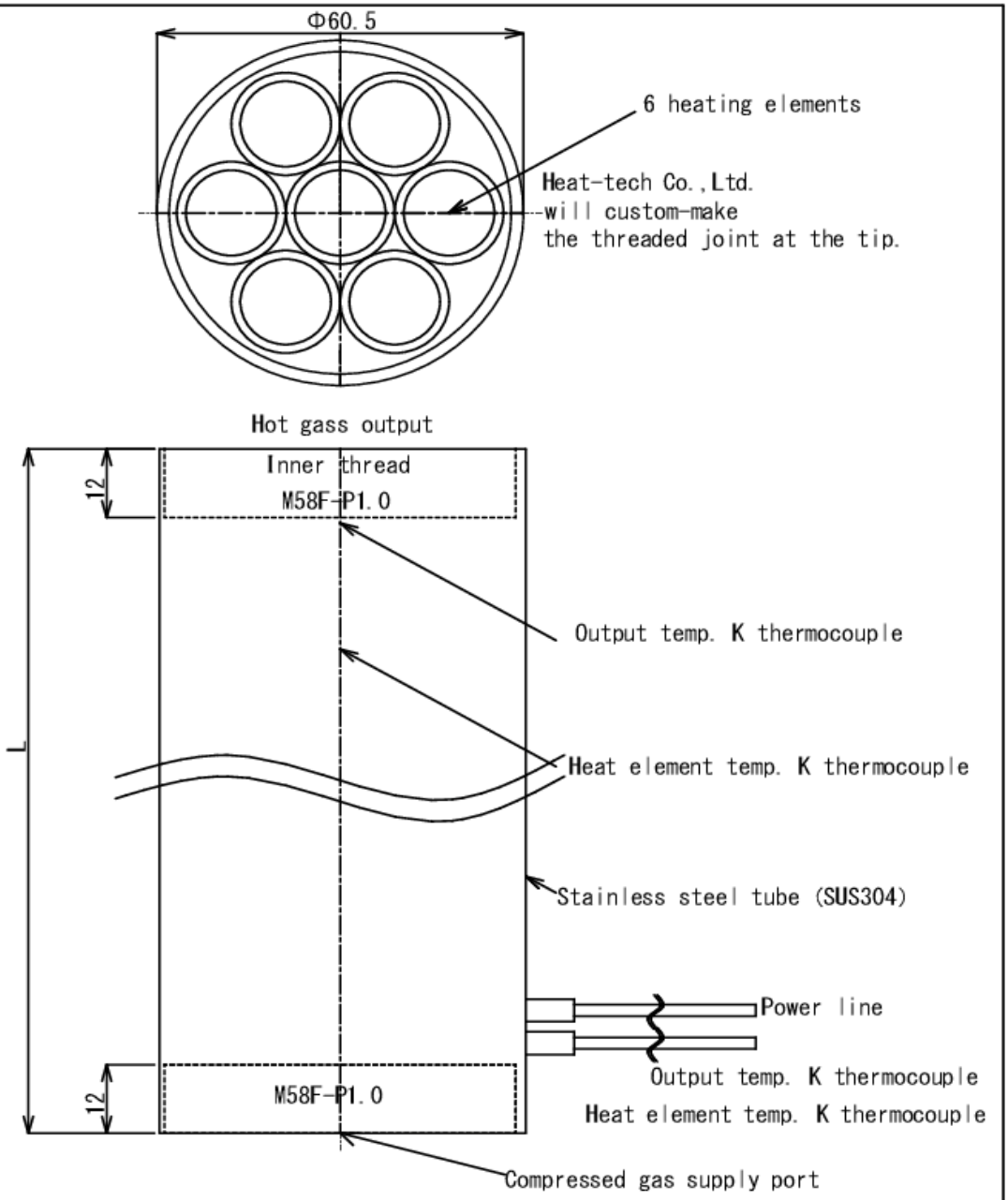
【Specify at the ordering】
- □V Specify Voltage
- □W Specify Wattage

【Optional addition】
- /K Output temp. K thermocouple
- /2K Output temp. K thermocouple & heat element temp. K thermocouple
- /P□m Specify Power Line
- /K□m Specify Thermocouple line

【Notes】
①Pressure resistance 0.3MPa
②Remove oil mist, hydration from the supply gas.
③When heated without supplying cold gas, the heater will burn out.
④Gas flow range 40L～1300L/min

Length	215mm	275mm
Wattage	6kw 8kw 10kw	15kw 18kw
Voltage	200V, 220V, 230V, 240V	
D/#	ABH-50X6/□V-□W/L□/option	
Model	Parallel large size Air Blow Heater	

Date	Drawing number	
2023.03.30	ABH-PL-E2	**Heat-tech Co.,Ltd.**



【Specify at the ordering】
- □V Specify Voltage
- □W Specify Wattage

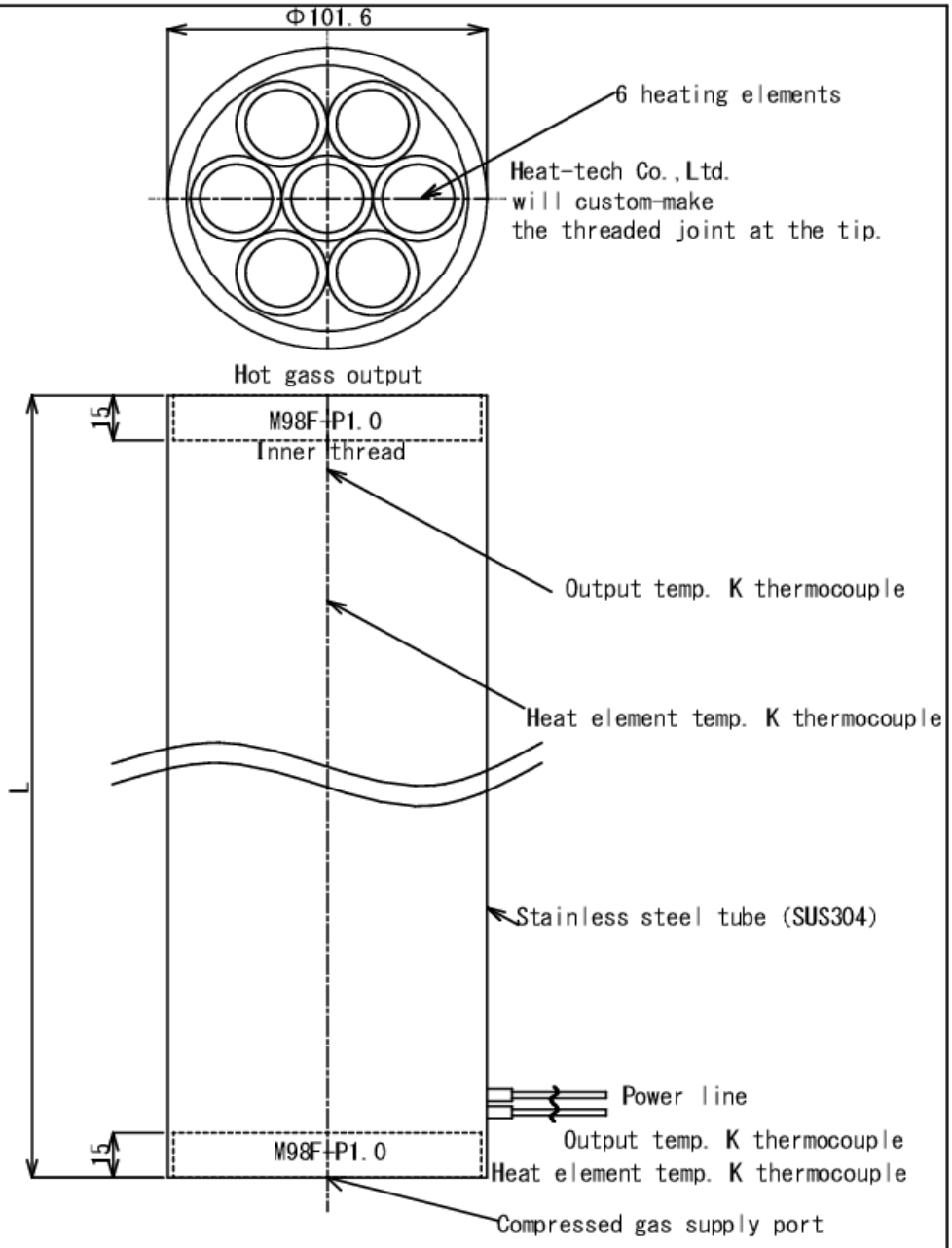
【Optional addition】
- /K Output temp. K thermocouple
- /2K Output temp. K thermocouple & heat element temp. K thermocouple
- /P□m Specify Power Line
- /K□m Specify Thermocouple line

【Notes】
①Pressure resistance 0.3MPa
②Remove oil mist,hydration from the supply gas.
③When heated without supplying cold gas, the heater will burn out.
④Gas flow range 50L～1800L/min

Length	300mm
Wattage	20kw 24kw
Voltage	200V, 220V, 230V, 240V
D/#	ABH-61X6/□V-□W/L□/option
Model	Parallel large size Air Blow Heater

Date	Drawing number
2023.03.30	ABH-PL-E3

Heat-tech Co.,Ltd.



【Specify at the ordering】
- □V Specify Voltage
- □W Specify Wattage
- L□ Specify Base Length

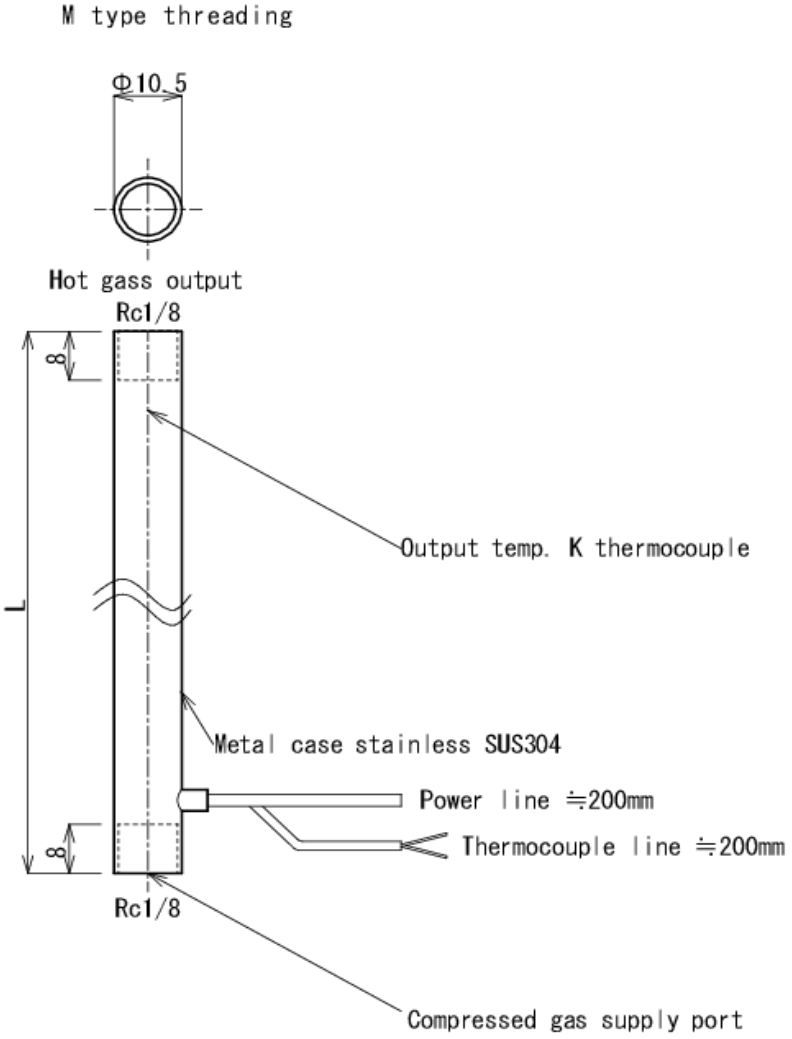
【Optional addition】
- /K Output temp. K thermocouple
- /2K Output temp. K thermocouple & heat element temp. K thermocouple
- /P□m Specify Power Line
- /K□m Specify Thermocouple line

【Notes】
①Pressure resistance 0.3MPa
②Remove oil mist, hydration from the supply gas.
③When heated without supplying cold gas, the heater will burn out.
④Gas flow range 120L～4000L/min

Length	430mm(MAX600℃)	680mm(MAX800℃)
Wattage	18kW 27kW 30kW	27kW 30kW
Voltage	200V 220V 230V 240V	380V 400V 440V
D/#	ABH-102X6/□V-□W/L□/option	
Model	Parallel large size Air Blow Heater	

Date	Drawing number
2023.03.30	ABH-PL-J4

Heat-tech Co.,Ltd.



【Specify at the ordering】
□V Specify Voltage
□W Specify Wattage
L□ Specify Base Length
□ G1/8 Specify Screw G

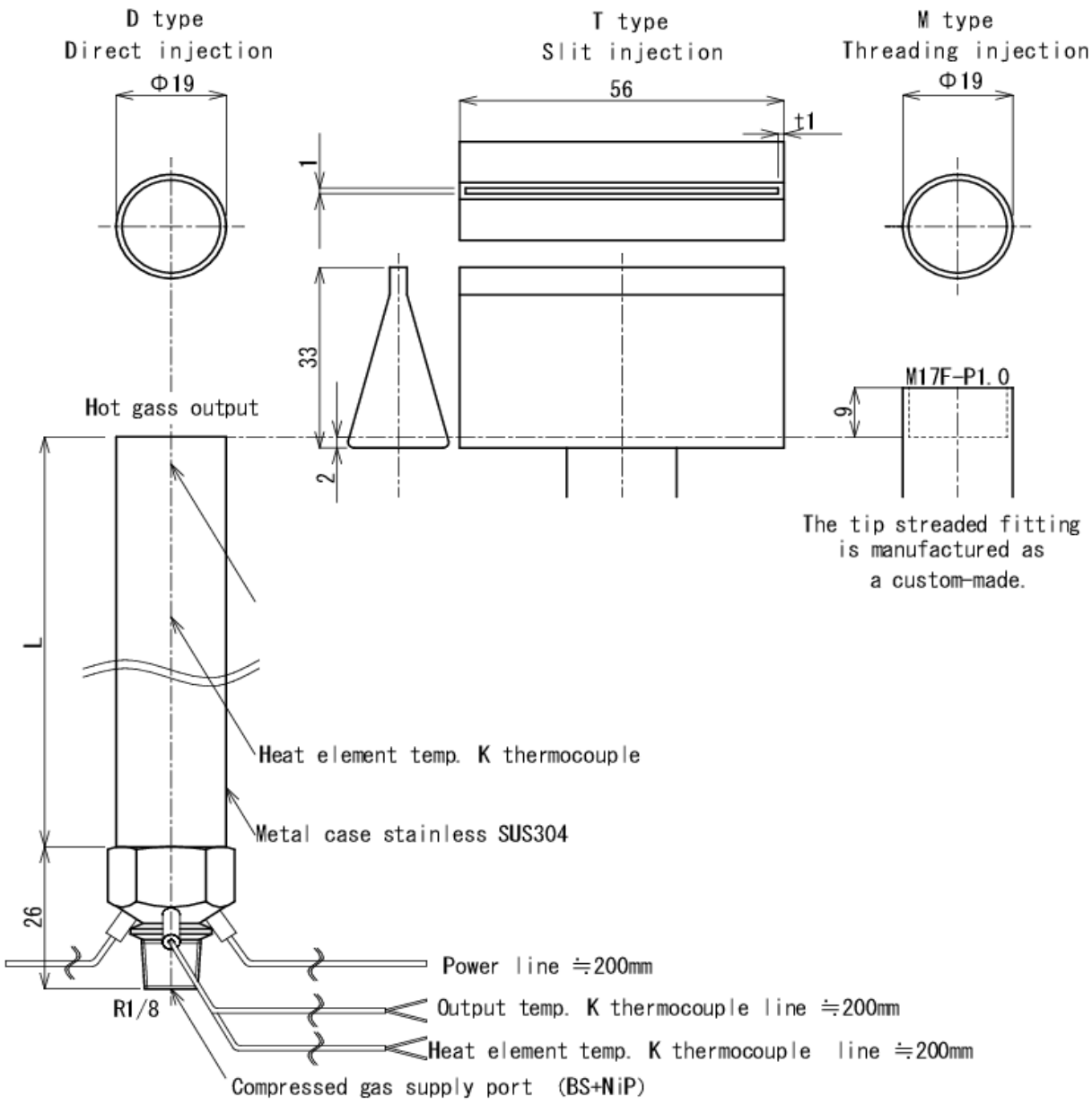
【Optional addition】
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①The pressure resistance :0.8MPa.
②The supply air and gas, please remove drain.
③If user heat Without supplying cold air and gas, the heater burns.

Length (L)	62mm	89mm	119mm	
Wattage	170W	580W	580W	1180W
Voltage	24V	100V	220V	
D/#	ABH-11NM/□V-□W/L□/K/P□m/K□m			
Model	High temperatur Air BloW Heater			

Date	Drawing number
2023.03.30	ABH-HT-E1

Heat-tech Co.,Ltd.



【Specify at the ordering】
□V Specify Voltage
□W Specify Wattage
□S Specify tip shap (D、T、M)
L□ Specify Base Length

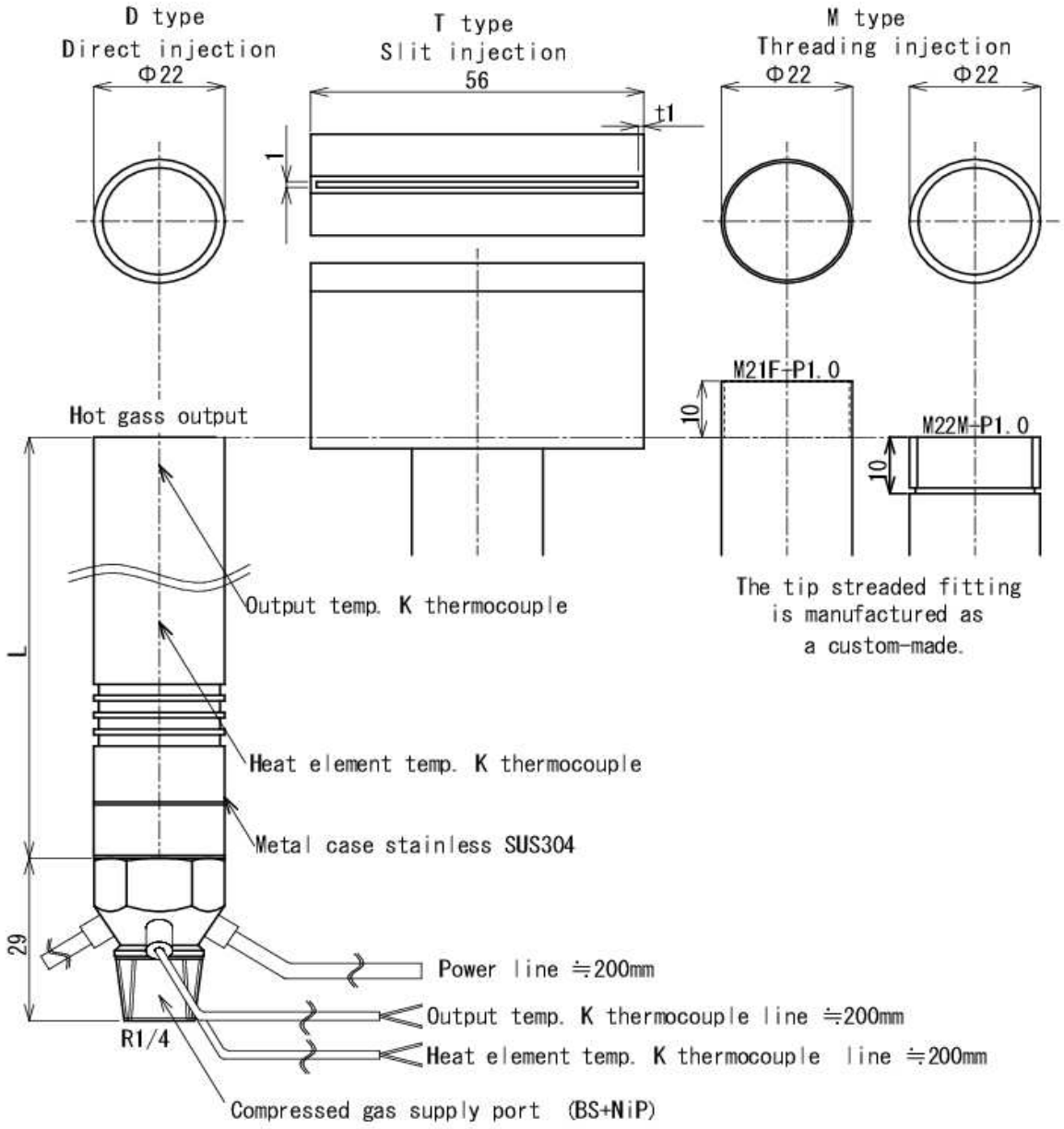
【Optional addition】
/K Output temp. K thermocouple
/2K Output & heat element temp.
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①The pressure resistance :0.3MPa.
②The supply air and gas, please remove drain.
③If user heat Without supplying cold air and gas, the heater burns.

Length (L)	138mm	155mm	
Wattage	2kw	2.8kw	3.4kw
Voltage	100v, 200v, 220v	200v	220v
Temp.	25℃～1050℃		
D/#	ABH-19A□/□V-□W/L□/Option		
Model	High temperatur Air BloW Heater		

Date	Drawing number
2023.03.30	ABH-HT-E2

Heat-tech Co.,Ltd.



【Specify at the ordering】
□V Specify Voltage
□W Specify Wattage
□S Specify tip shap (D、T、M)
L□ Specify Base Length

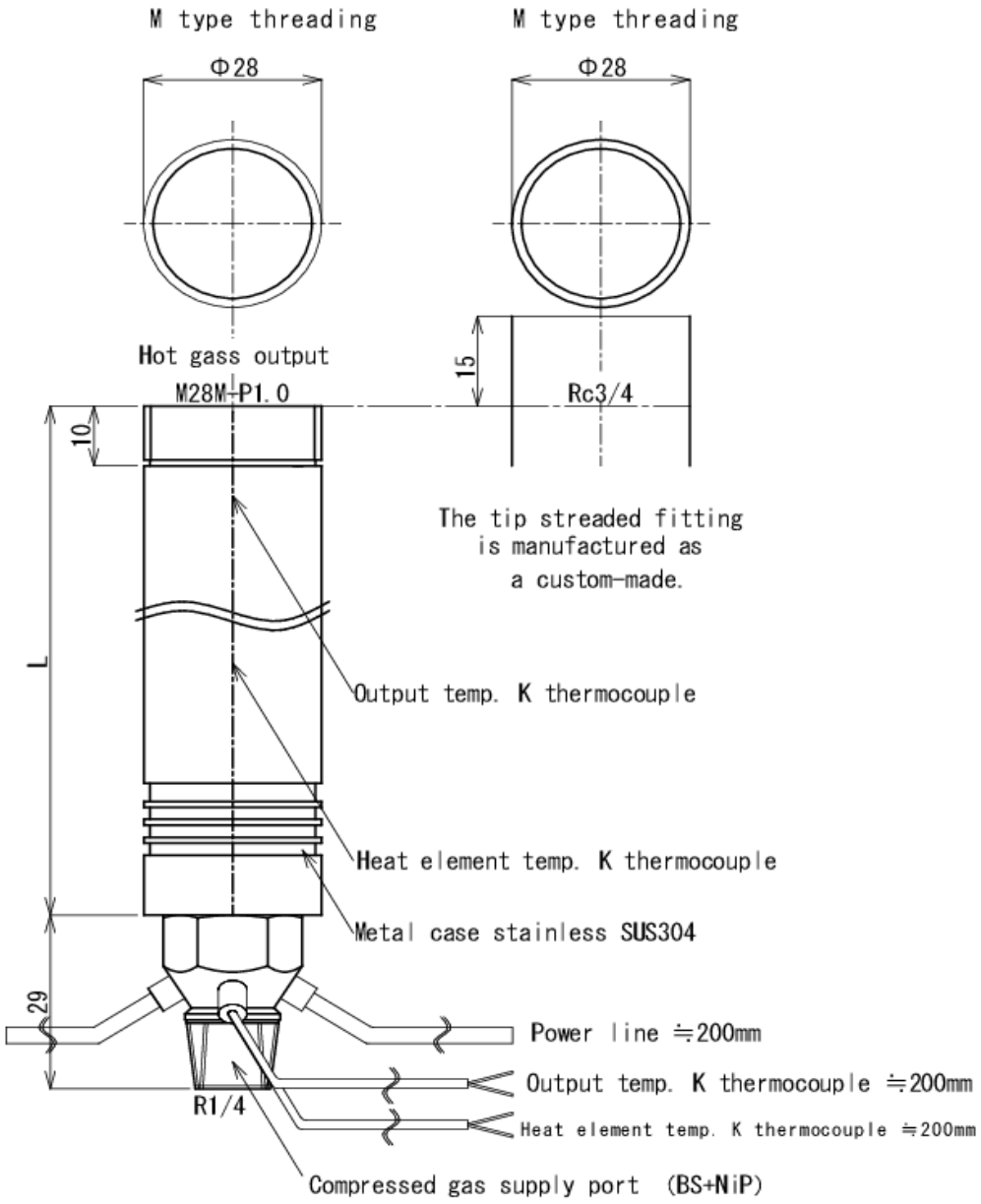
【Optional addition】
/K Output temp. K thermocouple
/2K Output & heat element temp.
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①The pressure resistance :0.3MPa.
②The supply air and gas, please remove drain.
③If user heat Without supplying cold air and gas, the heater burns.

Length (L)		210mm	
Wattage	4.1kw	5kw	6kw
Voltage	200v	220v	240v
Temp.	25℃～1050℃		
D/#	ABH-22A□/□V-□W/L□/K/P□m/K□m		
Model	High temperatur Air BloW Heater		

Date	Drawing number
2023.03.30	ABH-HT-E3

Heat-tech Co.,Ltd.



【Specify at the ordering】
□V Specify Voltage
□W Specify Wattage

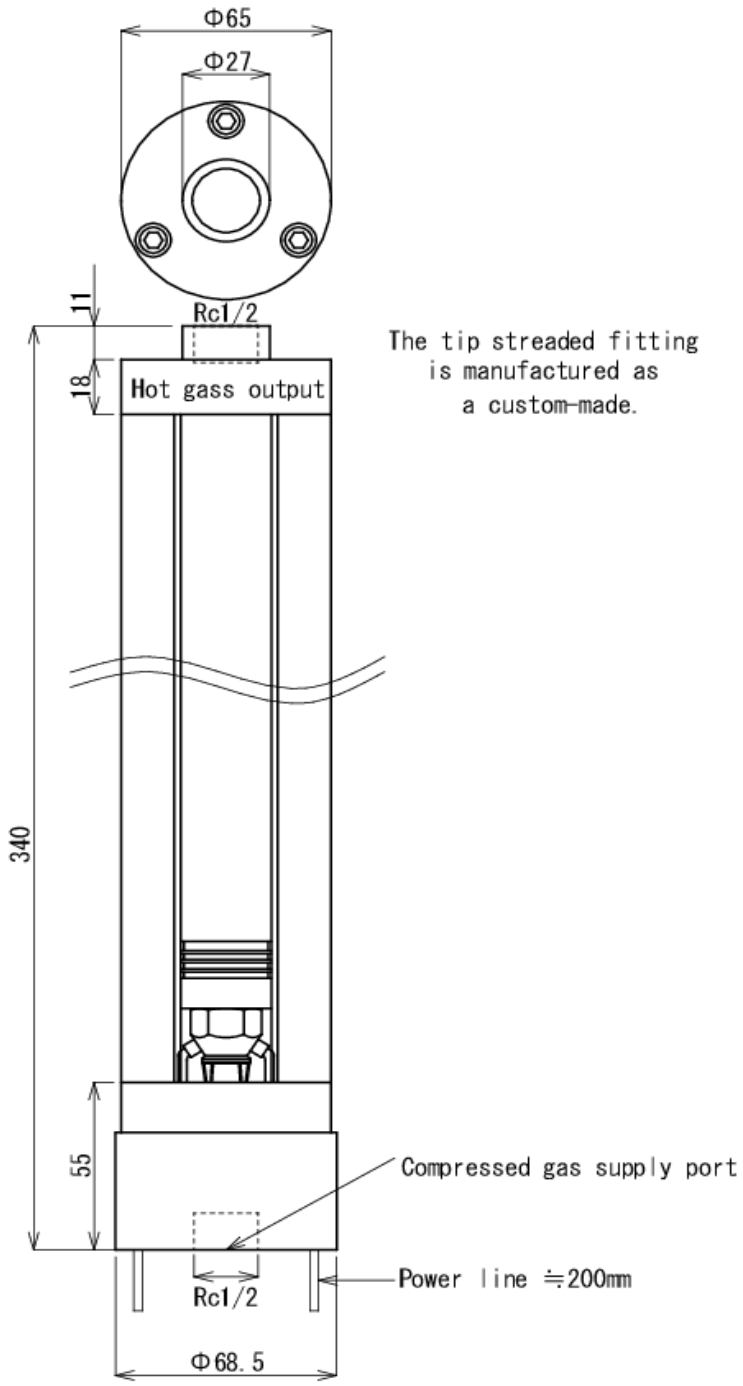
【Optional addition】
/K Output temp. K thermocouple
/2K Output & heat element temp.
/P□m Specify Power Line
/K□m Specify Thermocouple line
/K(FR) flexible robot cable
K thermocouple

【Notes】
①The pressure resistance :0.3MPa.
②The supply air and gas, please remove drain.
③If user heat Without supplying cold air and gas, the heater burns.

Length (L)	240mm		
Wattage	6.3kW	7.6kW	9kW
Voltage	200V	220V	240V
Temp.	25℃～1050℃		
D/#	ABH-28AM-□/□V-□W/L240/K		
Model	High temperatur High power Air Blow Heater		

Date	Drawing number
2023.03.30	ABH-HT-E4

Heat-tech Co.,Ltd.

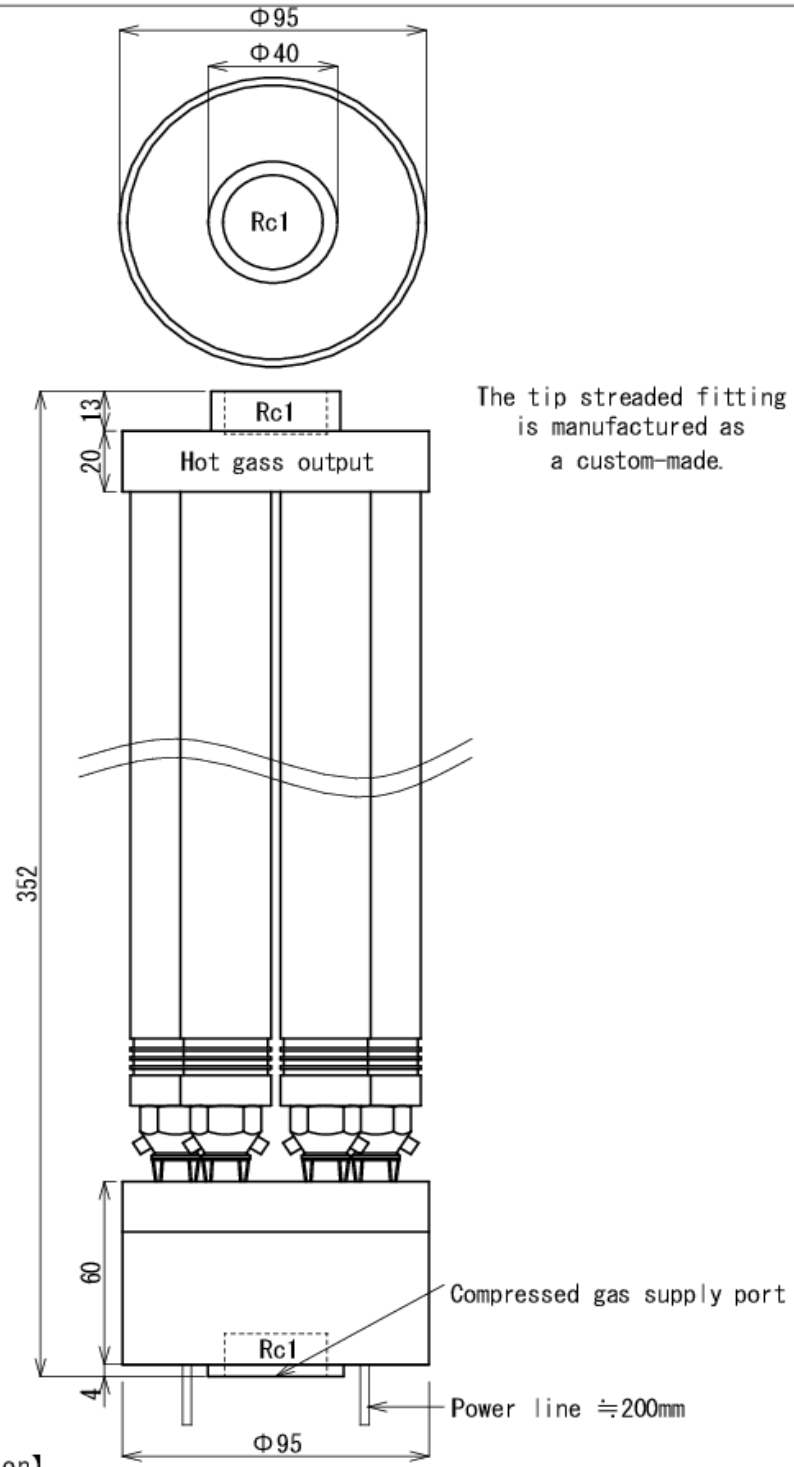


【Optional addition】
/2K Output & heat element temp.
/P□m Specify Power Line
/K□m Specify Thermocouple line
/K(FR) flexible robot cable
K thermocouple

Wattage	23kW
Voltage	Three-phase 220V
D/#	ABH-65-28AX3/220V-23kW/K/option
Model	High temperatur Parallel large size Air Blow Heater

Date	Drawing number
2023.03.30	ABH-AU-E1

Heat-tech Co.,Ltd.



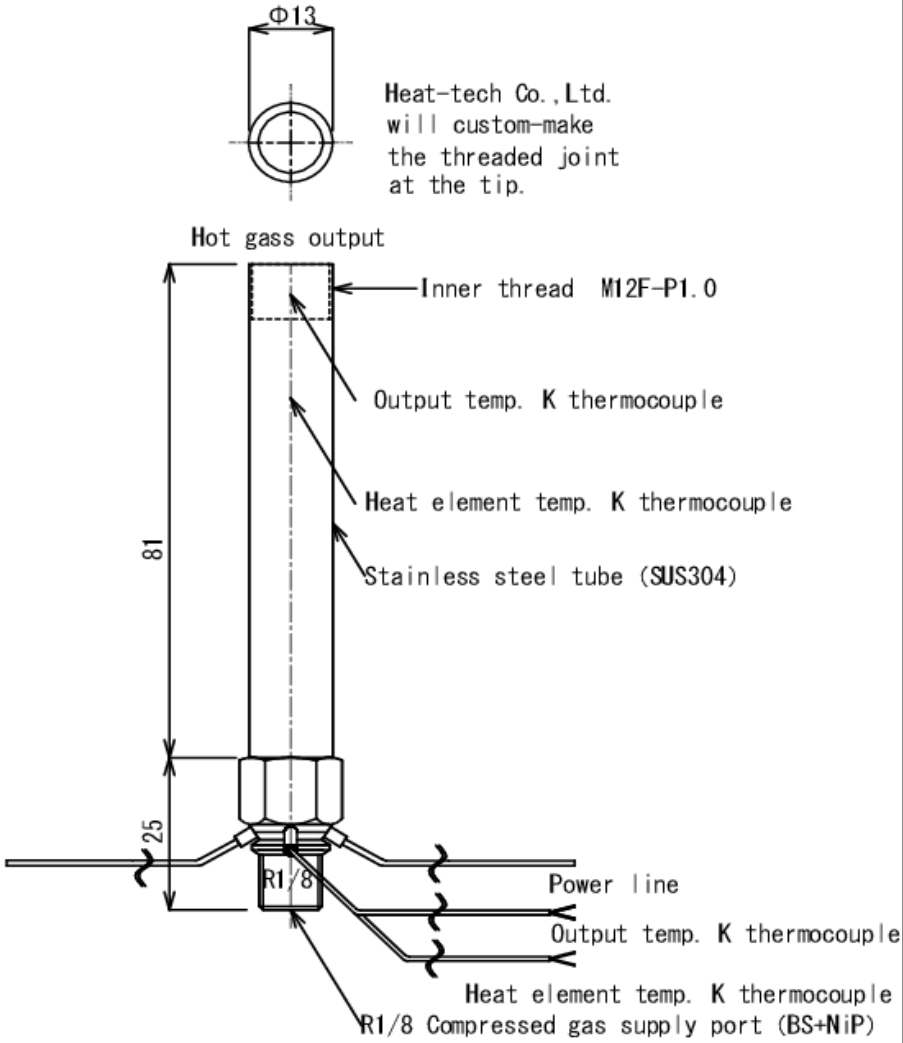
【Optional addition】
/2K Output & heat element temp.
/P□m Specify Power Line
/K□m Specify Thermocouple line
/K(FR) flexible robot cable
K thermocouple

Wattage	45kW
Voltage	Three-phase 220V
D/#	ABH-95-28AX3/220V-45kW/K/
Model	High temperatur Parallel large size Air Blow Heater

Date	Drawing number
2023.03.30	ABH-AU-E2

Heat-tech Co.,Ltd.

M type
Threading injection



【Specify at the ordering】
□V Specify Voltage

【Optional addition】
/K Output temp. K thermocouple
/2K Output temp. K thermocouple
& heat element temp. K thermocouple
/P□m Specify Power Line
/K□m Specify Thermocouple line

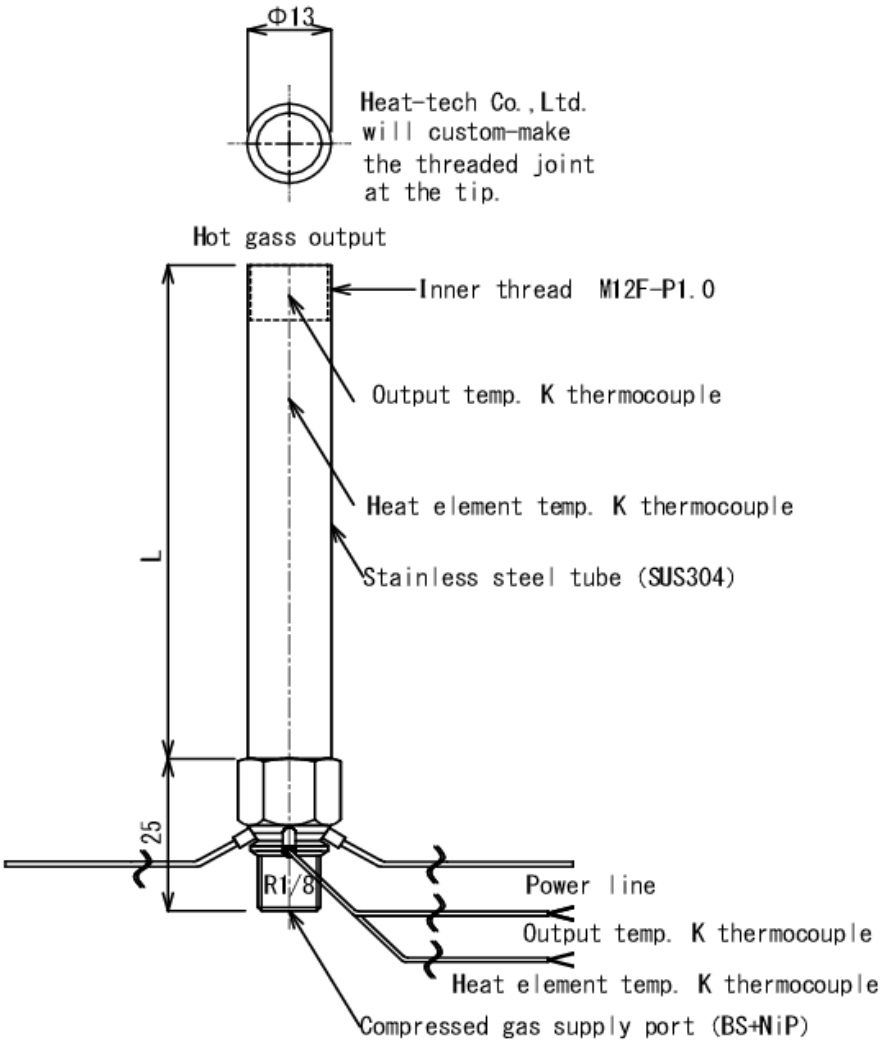
【Notes】
①Pressure resistance 0.4MPa
②Remove oil mist,hydration from the supply gas.
③When heated without supplying cold gas,
the heater will burn out.

Wattage	50w
Voltage	100v, 110v, 120v
D/#	ABH-HR-13AM/□V-50W/L81/option
Model	For super breeze Air Blow Heater Heat resistant type

Date	Drawing number
2023.03.30	ABH-HR-E1

Heat-tech Co.,Ltd.

M type
Threading injection



【Specify at the ordering】
- □V Specify Voltage
- □W Specify Wattage
- L□ Specify Base Length

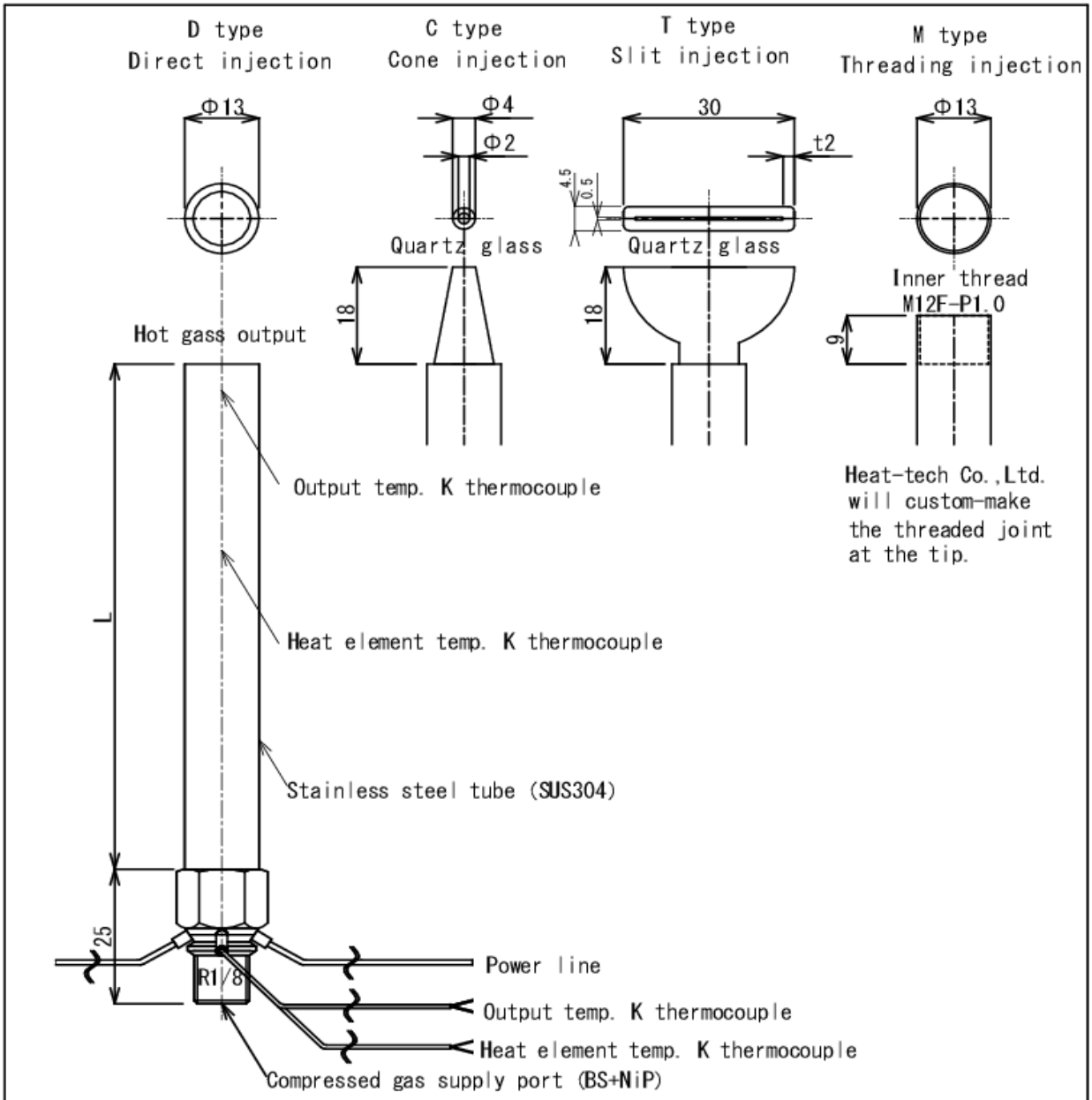
【Optional addition】
- /K Output temp. K thermocouple
- /2K Output temp. K thermocouple & heat element temp. K thermocouple
- /P□m Specify Power Line
- /K□m Specify Thermocouple line

【Notes】
①Pressure resistance 0.4MPa
②Remove oil mist, hydration from the supply gas.
③When heated without supplying cold gas, the heater will burn out.

Length	50mm	66mm	103mm
Wattage	50W	100W	200W
Voltage	12V, 24V		24V
D/#	ABH-HR-13AM/□V-□W/L□/option		
Model	DC power Air Blow Heater Heat resistant type		

Date	Drawing number
2023.03.30	ABH-HR-E2

Heat-tech Co.,Ltd.



【Specify at the ordering】
A□ Specify tip shape(D,C,T,M)
□V Specify Voltage
□W Specify Wattage
L□ Specify Base Length

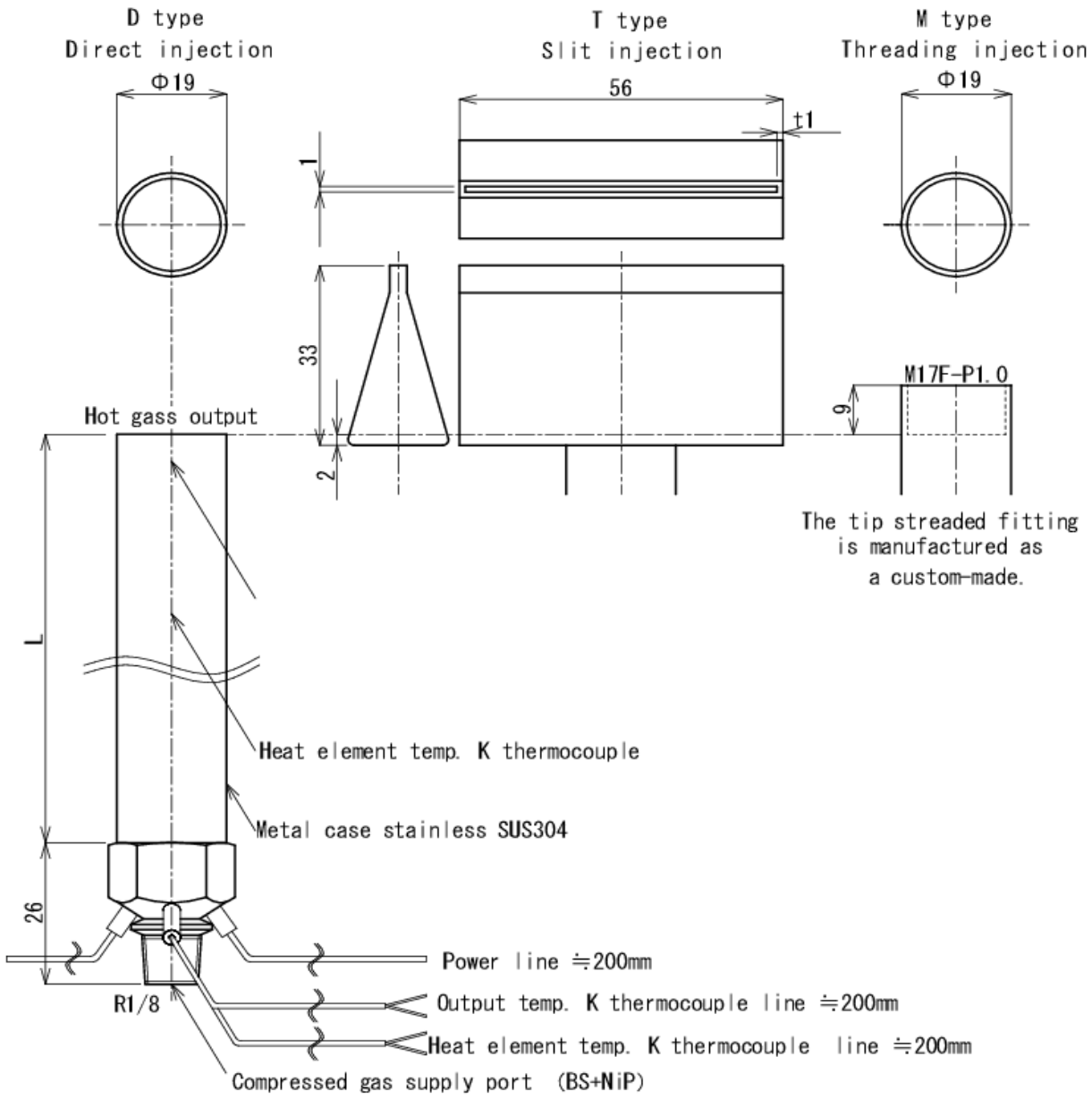
【Optional addition】
/K Output temp. K thermocouple
/2K Output temp. K thermocouple
& heat element temp. K thermocouple
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①The pressure resistance :0.3MPa.
②The supply air and gas, please remove drain.
③If user heat Without supplying cold air and gas, the heater burns.

Length	57mm			94mm		
Wattage	100W 350W	150W 450W	200W	500W 650W	850W	1000W
Voltage	100V 200V	110V 220V	120V 230V	240V	200V 230V	220V 240V
D/#	ABH-HR-13A□/□V-□W/L□/option					
Model	Air Blow Heater Heat resistant type					

Date	Drawing number
2023.03.30	ABH-HR-E3

Heat-tech Co.,Ltd.



【Specify at the ordering】
□V Specify Voltage
□W Specify Wattage
□S Specify tip shap (D、T、M)
L□ Specify Base Length

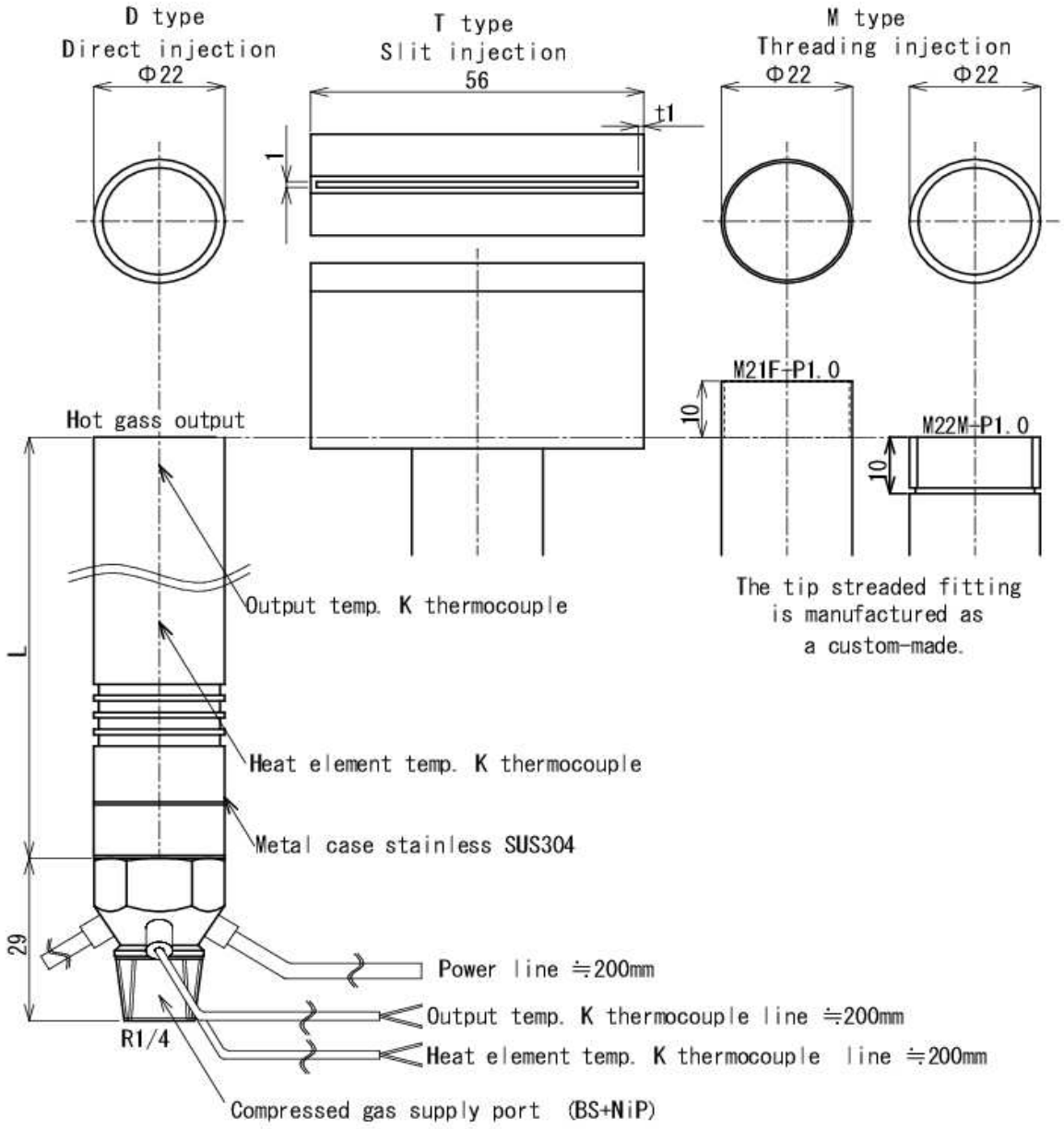
【Optional addition】
/K Output temp. K thermocouple
/2K Output & heat element temp.
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①The pressure resistance :0.3MPa.
②The supply air and gas, please remove drain.
③If user heat Without supplying cold air and gas, the heater burns.

Length (L)	138mm	155mm	
Wattage	2kw	2.8kw	3.4kw
Voltage	100v, 200v, 220v	200v	220v
Temp.	25℃～1050℃		
D/#	ABH-HR-19A□/□V-□W/L□/Option		
Model	High temperatur Air BloW Heater Heat resistant type		

Date	Drawing number
2023.03.30	ABH-HR-E4

Heat-tech Co.,Ltd.



【Specify at the ordering】
□V Specify Voltage
□W Specify Wattage
□S Specify tip shap (D、T、M)
L□ Specify Base Length

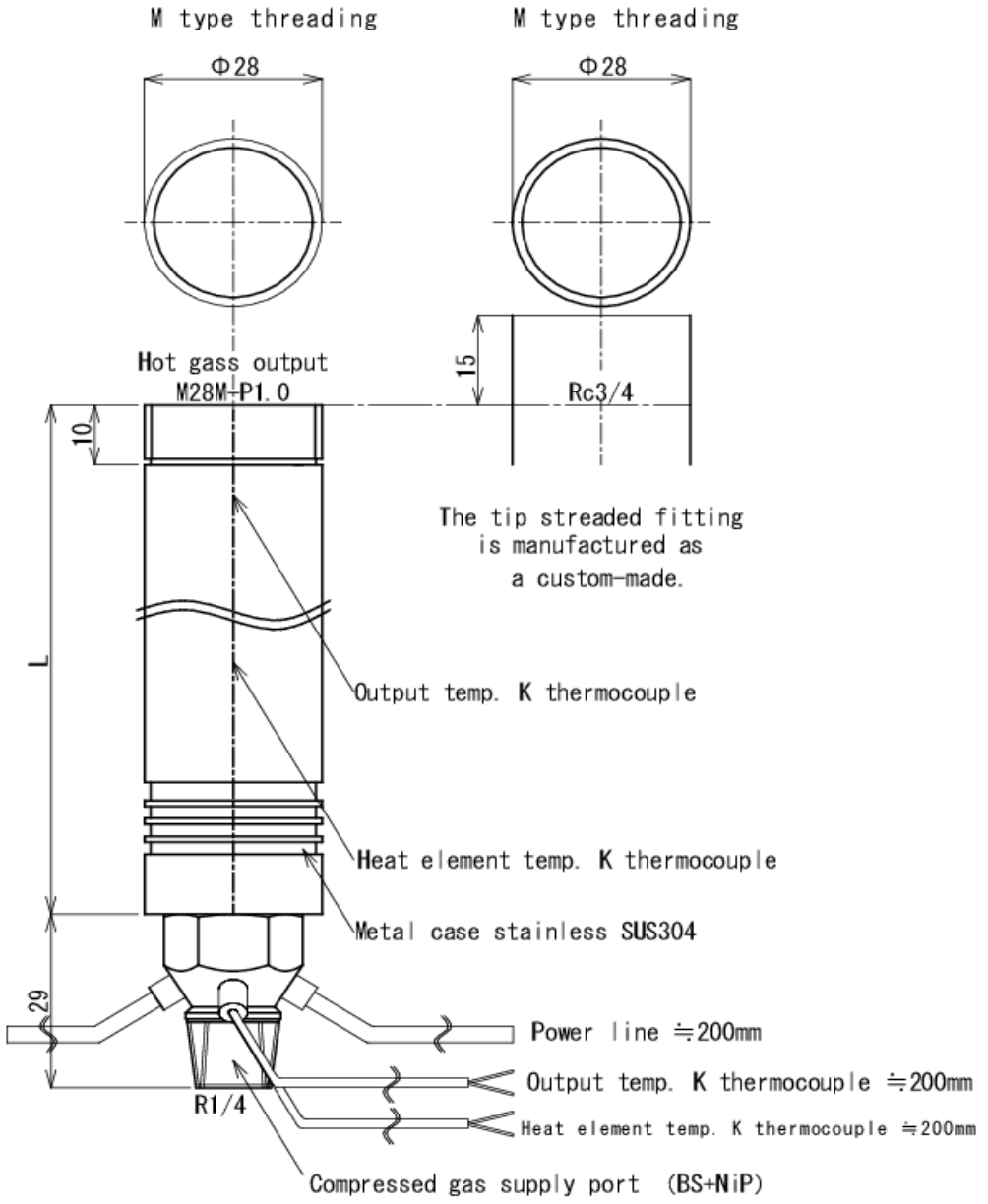
【Optional addition】
/K Output temp. K thermocouple
/2K Output & heat element temp.
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①The pressure resistance :0.3MPa.
②The supply air and gas, please remove drain.
③If user heat Without supplying cold air and gas, the heater burns.

Length (L)		210mm	
Wattage	4.1kw	5kw	6kw
Voltage	200v	220v	240v
Temp.	25℃～1050℃		
D/#	ABH-HR-22A□/□V-□W/L□/K/P□m/K□m		
Model	High temperatur Air BloW Heater Heat resistant type		

Date	Drawing number
2023.03.30	ABH-HR-E5

Heat-tech Co.,Ltd.



【Specify at the ordering】
□V Specify Voltage
□W Specify Wattage

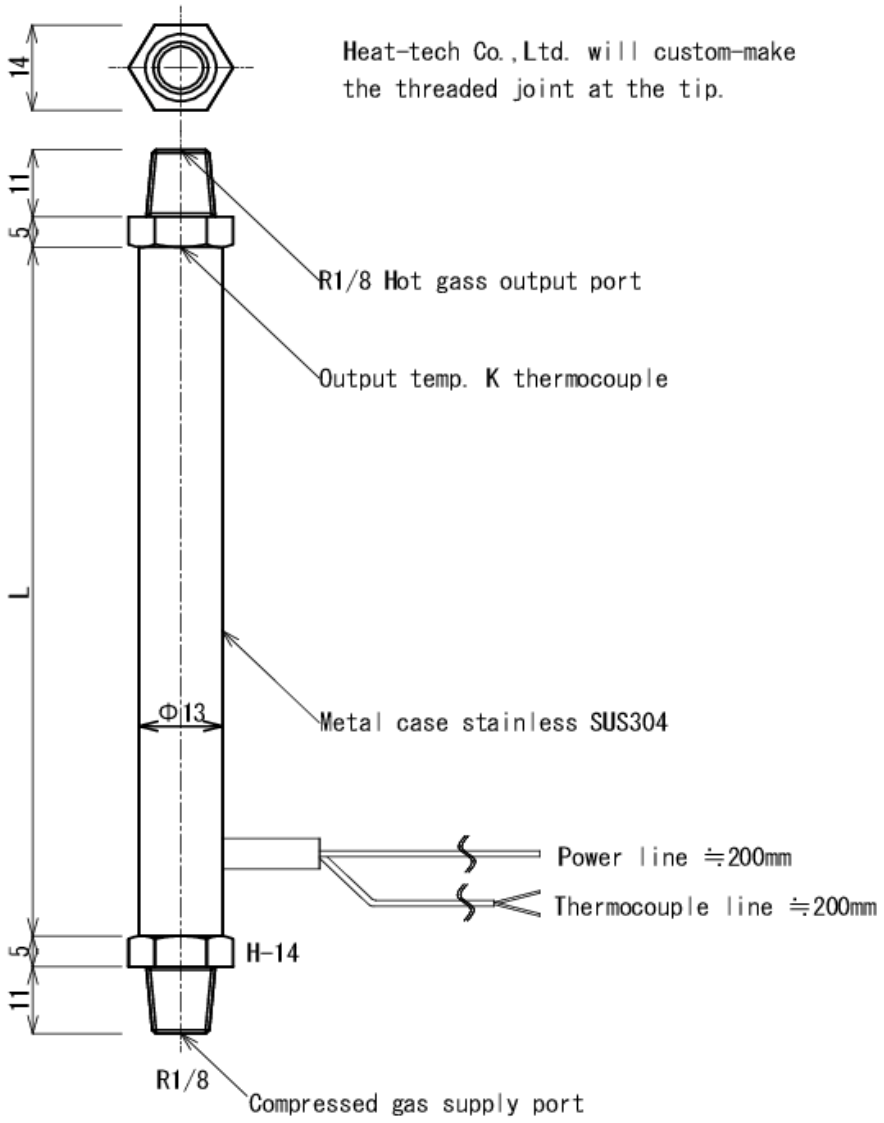
【Optional addition】
/K Output temp. K thermocouple
/2K Output & heat element temp.
/P□m Specify Power Line
/K□m Specify Thermocouple line
/K(FR) flexible robot cable
K thermocouple

【Notes】
①The pressure resistance :0.3MPa.
②The supply air and gas, please remove drain.
③If user heat Without supplying cold air and gas, the heater burns.

Length (L)	240mm		
Wattage	6.3kW	7.6kW	9kW
Voltage	200V	220V	240V
Temp.	25℃～1050℃		
D/#	ABH-HR-28AM-□/□V-□W/L240/K		
Model	High temperatur Air BloW Heater Heat resistant type		

Date	Drawing number
2023.03.30	ABH-HR-E6

Heat-tech Co.,Ltd.



【Specify at the ordering】
□V Specify Voltage
□W Specify Wattage
L□ Specify Base Length

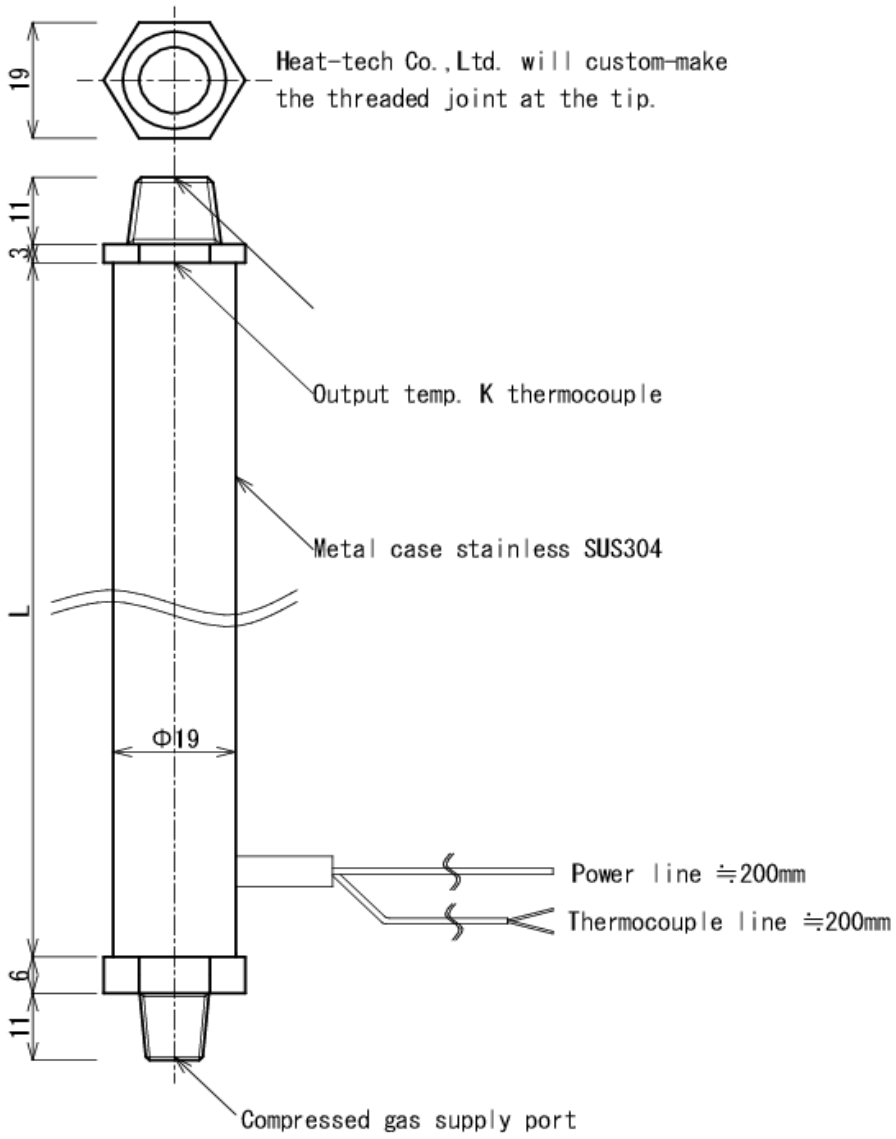
【Optional addition】
/K Output temp. K thermocouple
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①The pressure resistance :0.3MPa.
②The supply air and gas, please remove drain.
③If user heat Without supplying cold air and gas, the heater burns.

Length (L)	113mm	153mm
Wattage	100W	150W
Voltage	DC24V, AC100V, AC110V, AC120V	
D/#	DGH-13NM/□V-□W//L□/	
Model	Double Glass tube Air Blow Heater	

Date	Drawing number
2023.03.30	DGH-E1

Heat-tech Co.,Ltd.



【Specify at the ordering】
□V Specify Voltage
□W Specify Wattage

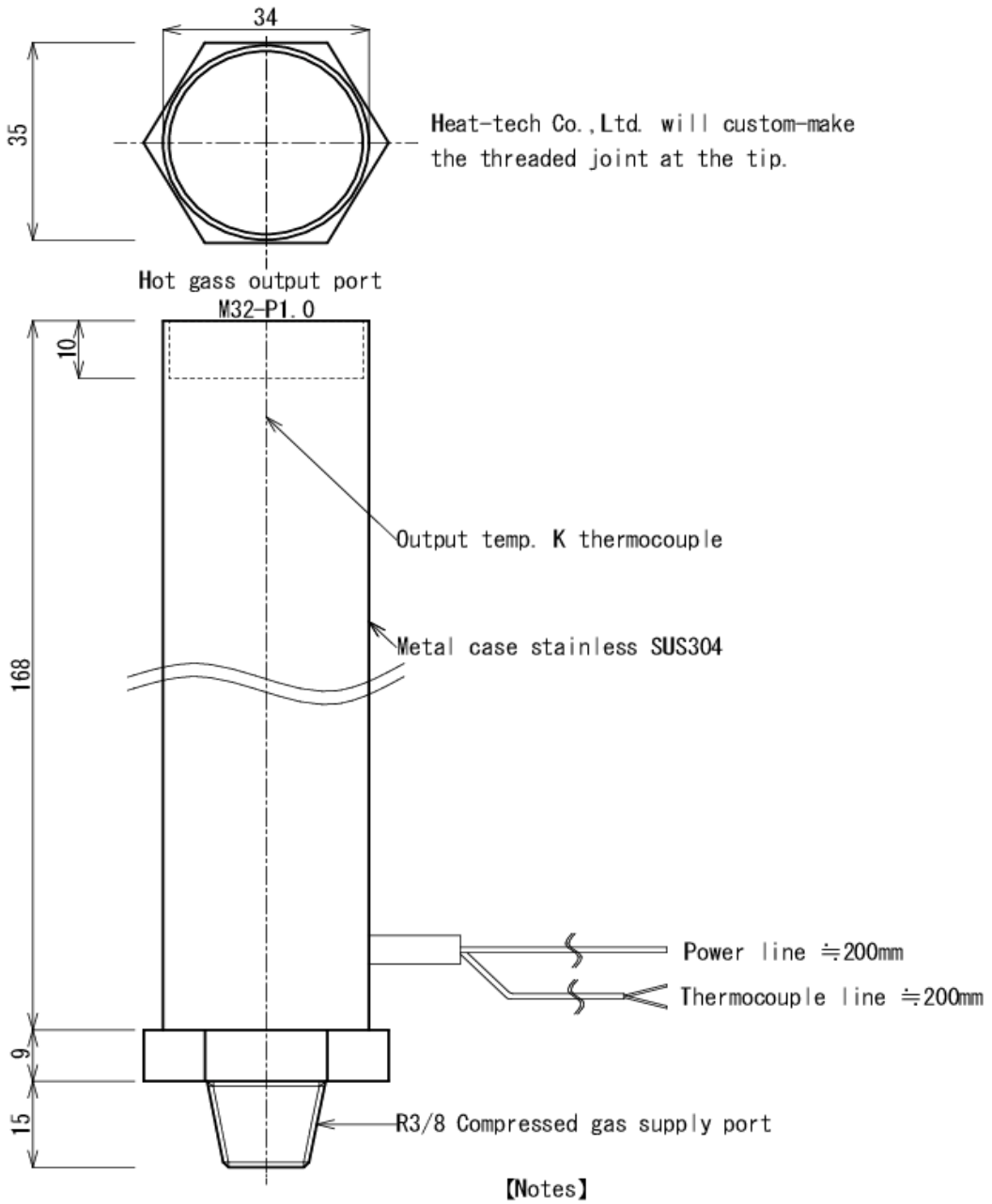
【Optional addition】
/K Output temp. K thermocouple
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①The pressure resistance :0.3MPa.
②The supply air and gas, please remove drain.
③If user heat Without supplying cold air and gas, the heater burns.

Length (L)	168mm		
Wattage	150W,250W,300W	250W,300W	250W,300W
Voltage	100V	200V	220V
D/#	DGH-19NM/□V-□W/L168/		
Model	Double Glass tube Air Blow Heater		

Date	Drawing number
2023.03.30	DGH-E2

Heat-tech Co.,Ltd.



【Specify at the ordering】
□V Specify Voltage
□W Specify Wattage

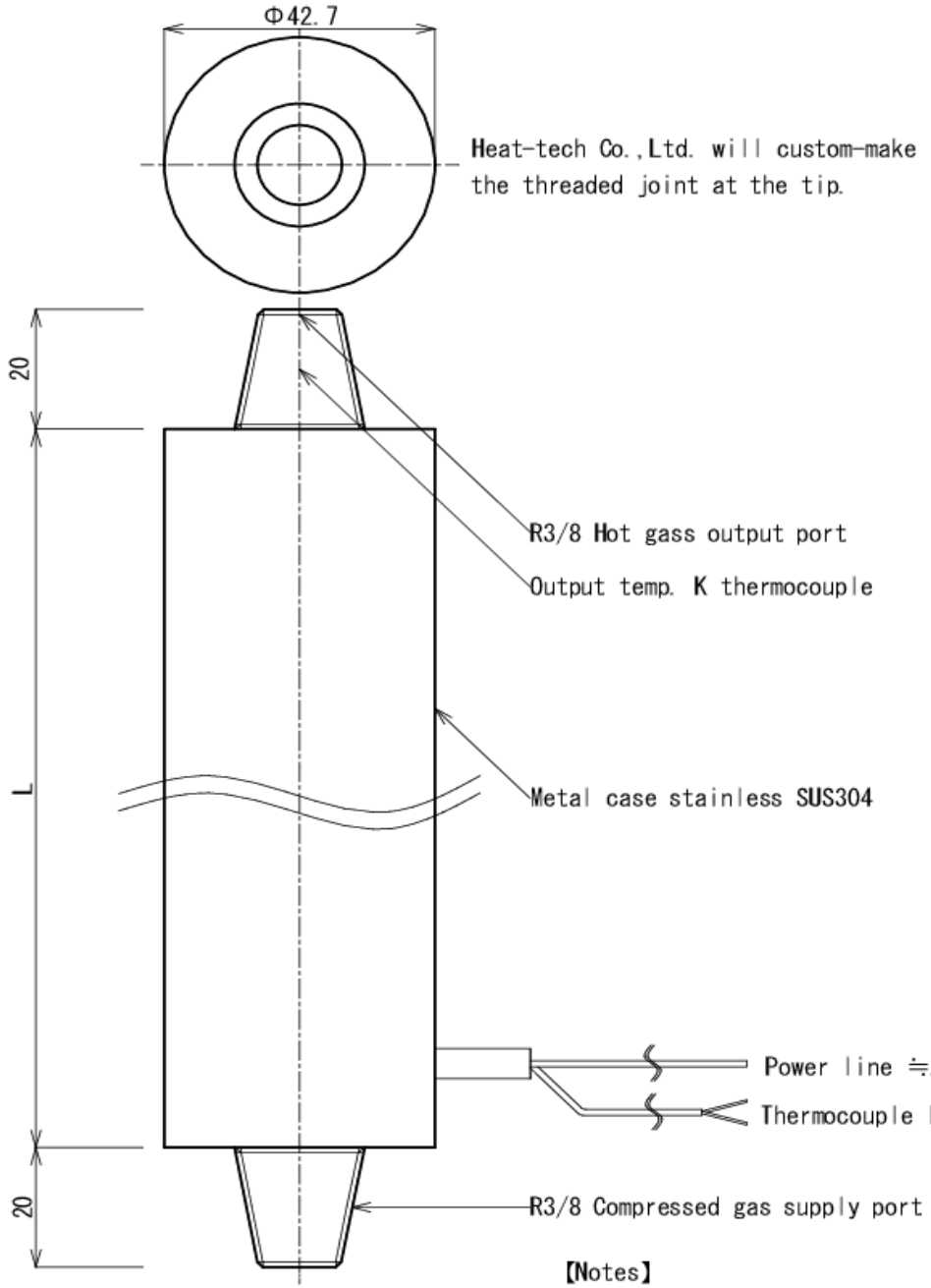
【Optional addition】
/K Output temp. K thermocouple
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①The pressure resistance :0.3MPa.
②The supply air and gas, please remove drain.
③If user heat Without supplying cold air and gas, the heater burns.

Length (L)	300mm
Wattage	1kW
Voltage	200V 220V 230V 240V
D/#	DGH-34NM/□V-□W/L300/
Model	Double Glass tube Air Blow Heater

Date	Drawing number
2023.03.30	DGH-E3

Heat-tech Co.,Ltd.



【Specify at the ordering】
□V Specify Voltage
□W Specify Wattage
L□ Specify Base Length

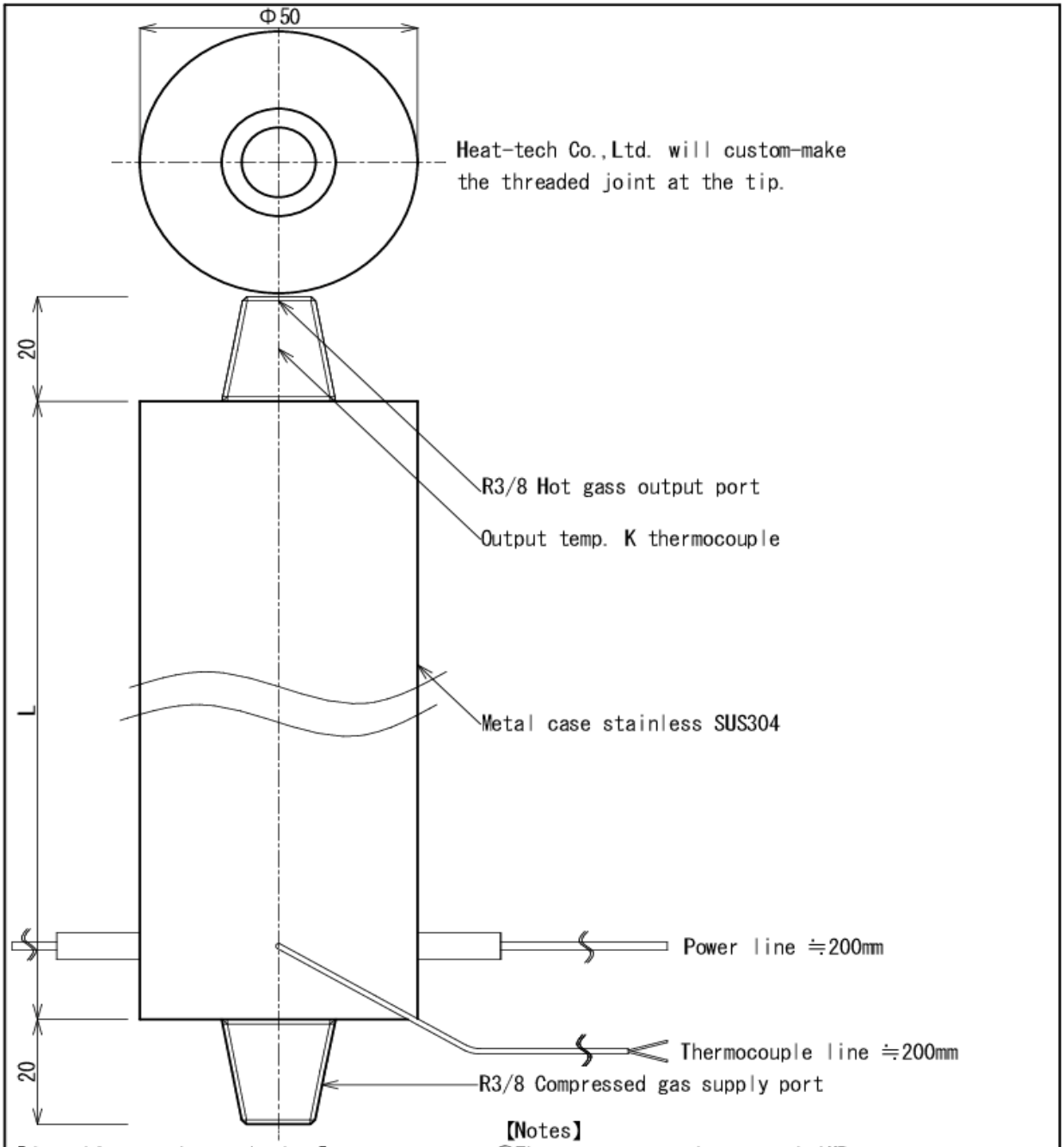
【Optional addition】
/K Output temp. K thermocouple
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①The pressure resistance :0.3MPa.
②The supply air and gas, please remove drain.
③If user heat Without supplying cold air and gas, the heater burns.

Length (L)	385mm	455mm	550mm	680mm
Wattage	1.5kW	2kW	3kW	4kW
Voltage	200V	220V	230V	240V
D/#	DGH-43NM/□V-□W//L□/			
Model	Double Glass tube Air Blow Heater			

Date	Drawing number
2023.03.30	DGH-E4

Heat-tech Co.,Ltd.



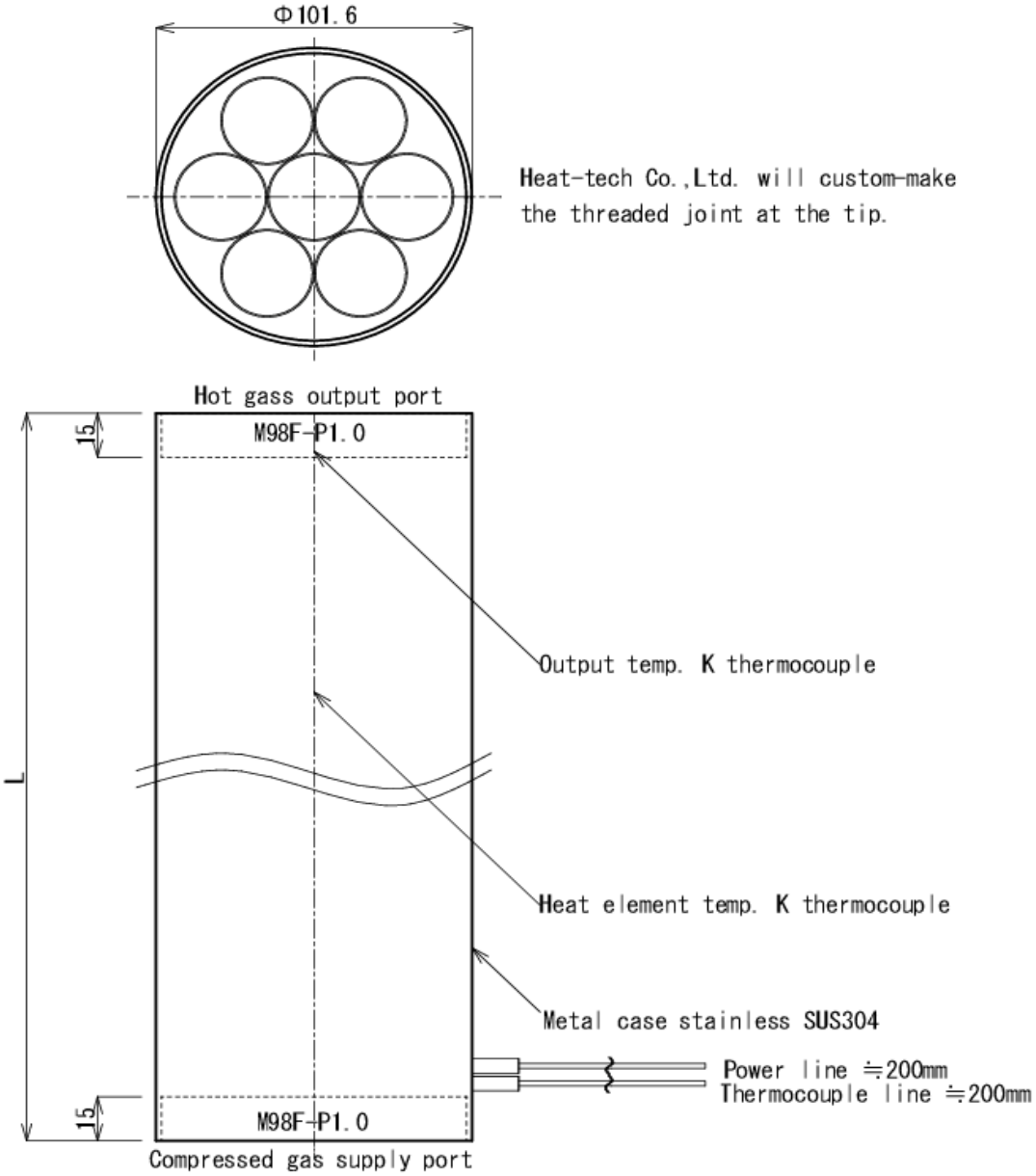
【Specify at the ordering】
□V Specify Voltage
□W Specify Wattage
L□ Specify Base Length

【Optional addition】
/K Output temp. K thermocouple
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①The pressure resistance :0.3MPa.
②The supply air and gas, please remove drain.
③If user heat Without supplying cold air and gas, the heater burns.

Length (L)	550mm	680mm
Wattage	3kW	4kW
Voltage	200V 220V 230V 240V	
D/#	DGH-50NM/□V-□W/L□/	
Model	Double Glass tube Air Blow Heater	

Date	Drawing number	
2023.03.30	DGH-E5	Heat-tech Co.,Ltd.



【Specify at the ordering】
□V Specify Voltage
□W Specify Wattage
L□ Specify Base Length

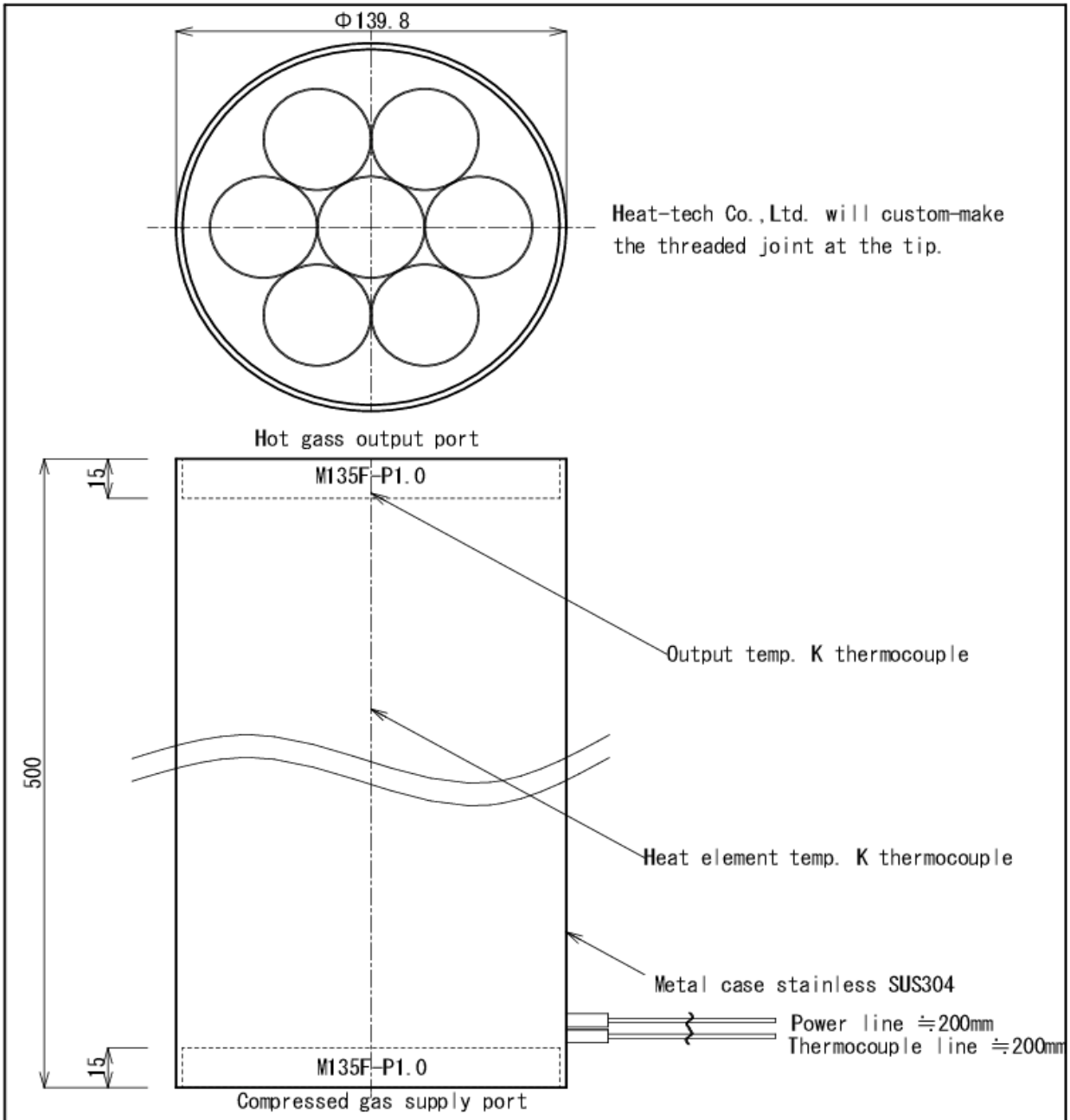
【Optional addition】
/K Output temp. K thermocouple
/2K Output & heat element temp.
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①The pressure resistance :0.3MPa.
②The supply air and gas, please remove drain.
③If user heat Without supplying cold air and gas, the heater burns.

Length (L)	300mm	430mm	680mm
Wattage	3kW	6kW	12kW
Voltage	200V 220V 230V 240V		
D/#	DGH-102x6NM/□V-□W/L□/		
Model	Double Glass tube Air Blow Heater		

Date	Drawing number
2023.03.30	DGH-E6

Heat-tech Co.,Ltd.



【Specify at the ordering】
□V Specify Voltage
□W Specify Wattage
L□ Specify Base Length

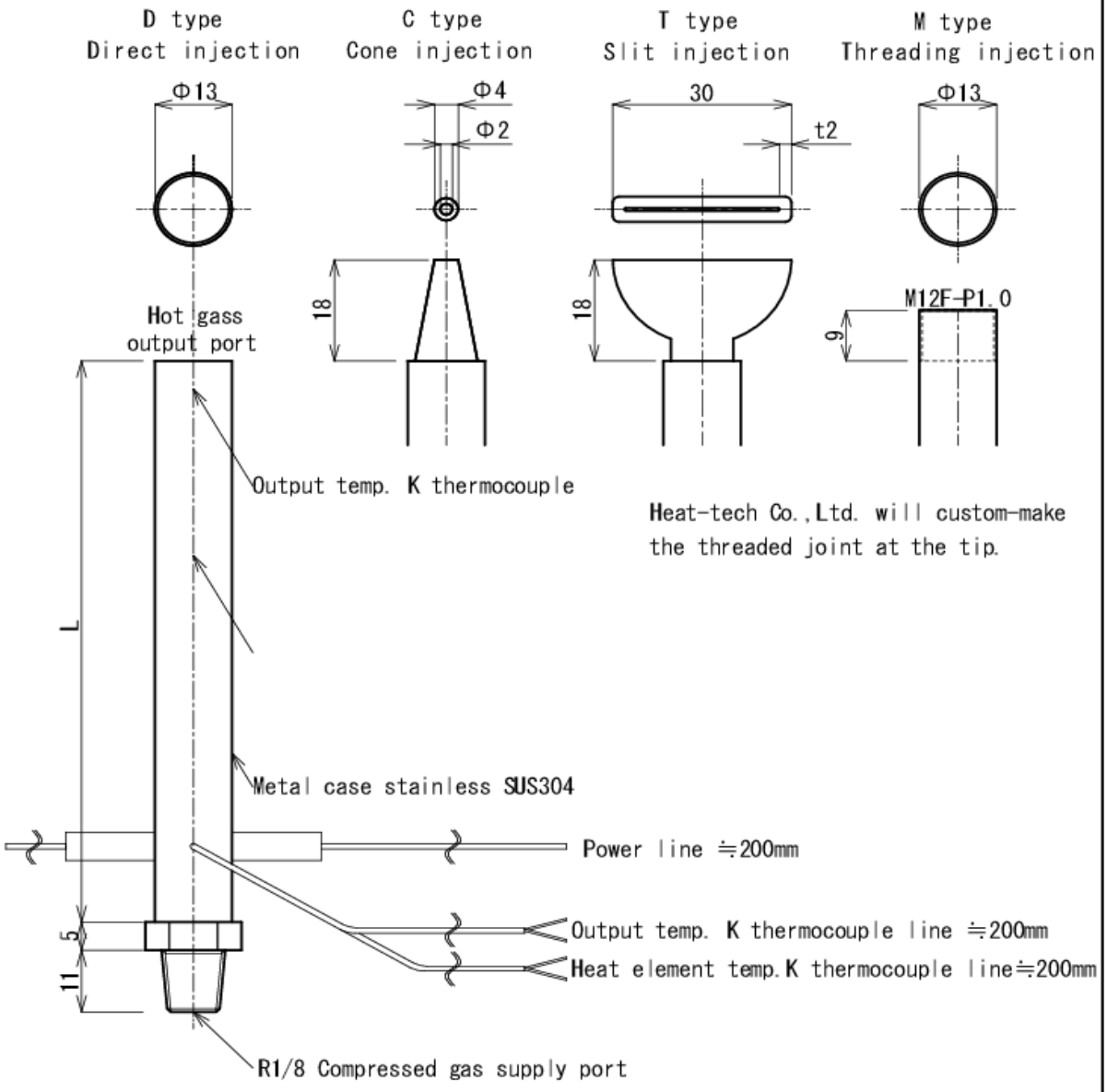
【Optional addition】
/K Output temp. K thermocouple
/2K Output & heat element temp.
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①The pressure resistance :0.3MPa.
②The supply air and gas, please remove drain.
③If user heat Without supplying cold air and gas, the heater burns.

Length (L)	500mm			
Wattage	12kW			
Voltage	200V	220V	230V	240V
D/#	DGH-140x6NM/□V-□W/L500/			
Model	Double Glass tube Air Blow Heater			

Date	Drawing number
2023.03.30	DGH-E7

Heat-tech Co.,Ltd.



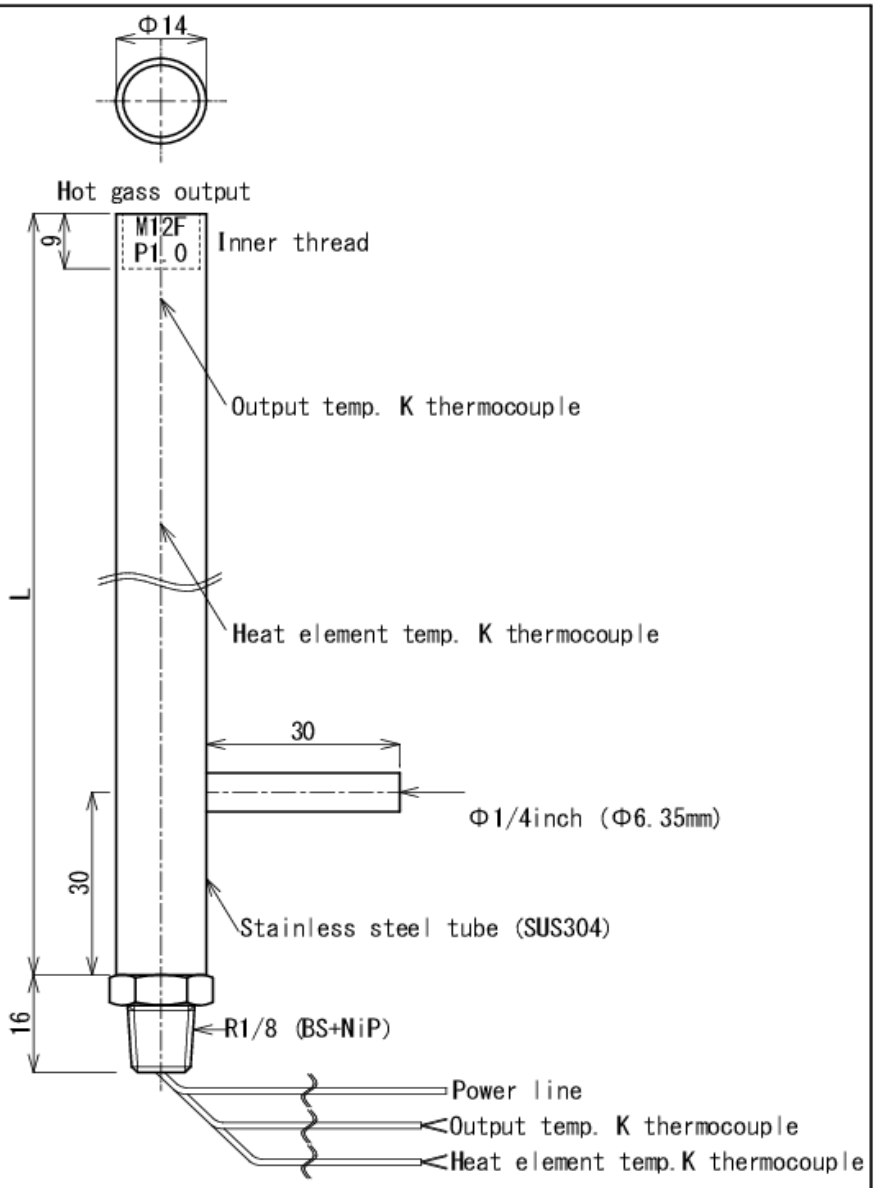
【Specify at the ordering】
□V Specify Voltage
□W Specify Wattage

【Optional addition】
/K Output temp. K thermocouple
/2K Output & heat element temp.
/P□m Specify Power Line
/K□m Specify Thermocouple line

【Notes】
①The pressure resistance :0.3MPa.
②The supply air and gas, please remove drain.
③If user heat Without supplying cold air and gas, the heater burns.

Length (L)	50mm	102mm	173mm
Wattage	85W	350W	800W
Voltage	12V	50V	100V
D/#	PTH-13N□/□v-□w/L□/		
Model	Platinum heating element Air Blow Heater		

Date	Drawing number	
2023.03.30	PTH-E1	Heat-tech Co.,Ltd.



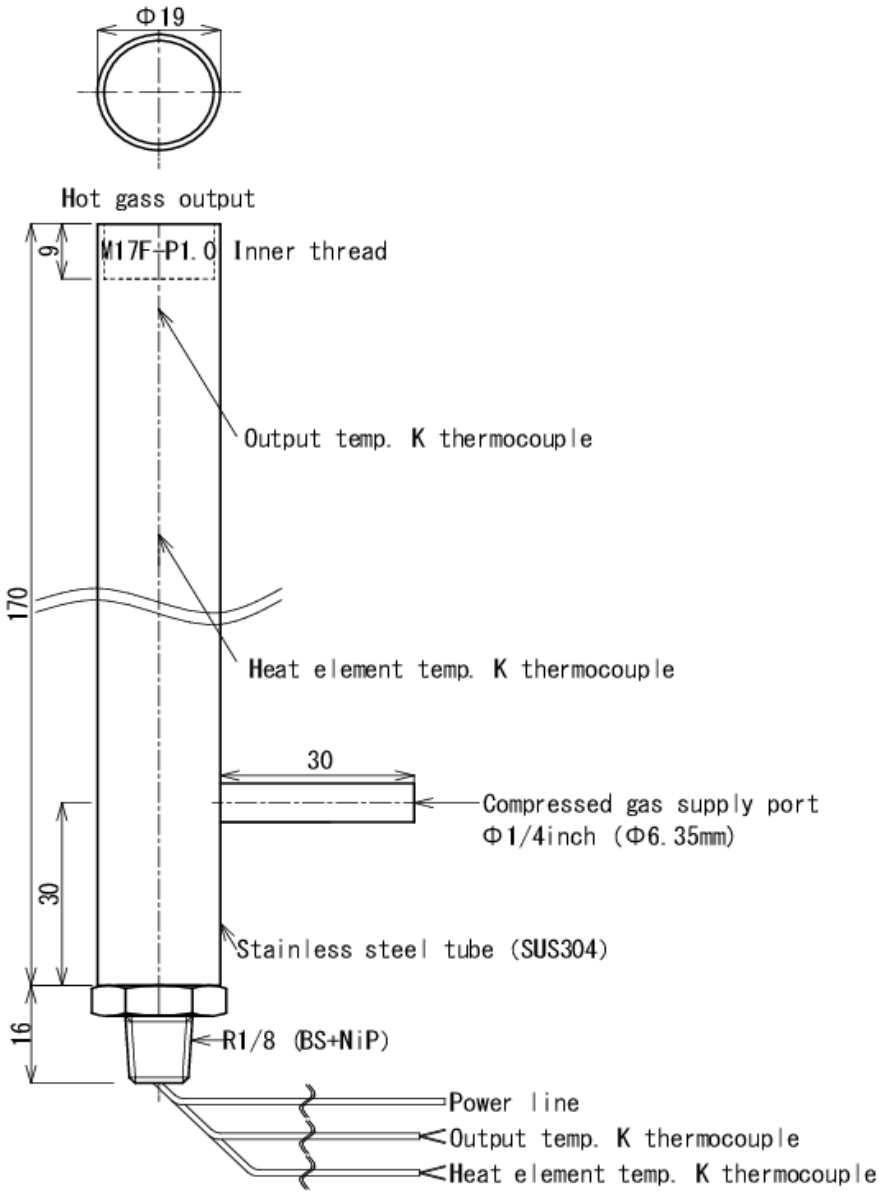
【Notes】
①Pressure resistance 0.3MPa
②Remove oil mist,hydration from the supply gas.
③When heated without supplying cold gas, the heater will burn out.

【Specify at the ordering】
□V Specify Voltage
□W Specify Wattage
L□ Specify Base Length
【Optional addition】
/K Output temp. K thermocouple
/2K Output temp. K thermocouple & heat element temp. K thermocouple
/P□m Specify Power Line
/K□m Specify Thermocouple line

Length	125mm	125mm	170mm		225mm
Wattage	100W 200W 350W	200W 350W 440W	650W 800W 50L/min or less		1000W 1200W 75L/min or less
Voltage	100V 110V 120V	200V 220V 240V	100V 110V 120V	200V 220V 240V	200V 220V 240V
D/#	VAH-14N/□V-□W/L□/option				
Model	Vacuum correspondence Air Blow Heater				

Date	Drawing number
2023.03.30	VAH-E1

Heat-tech Co.,Ltd.



【Specify at the ordering】
- □V Specify Voltage
- □W Specify Wattage
- L□ Specify Base Length

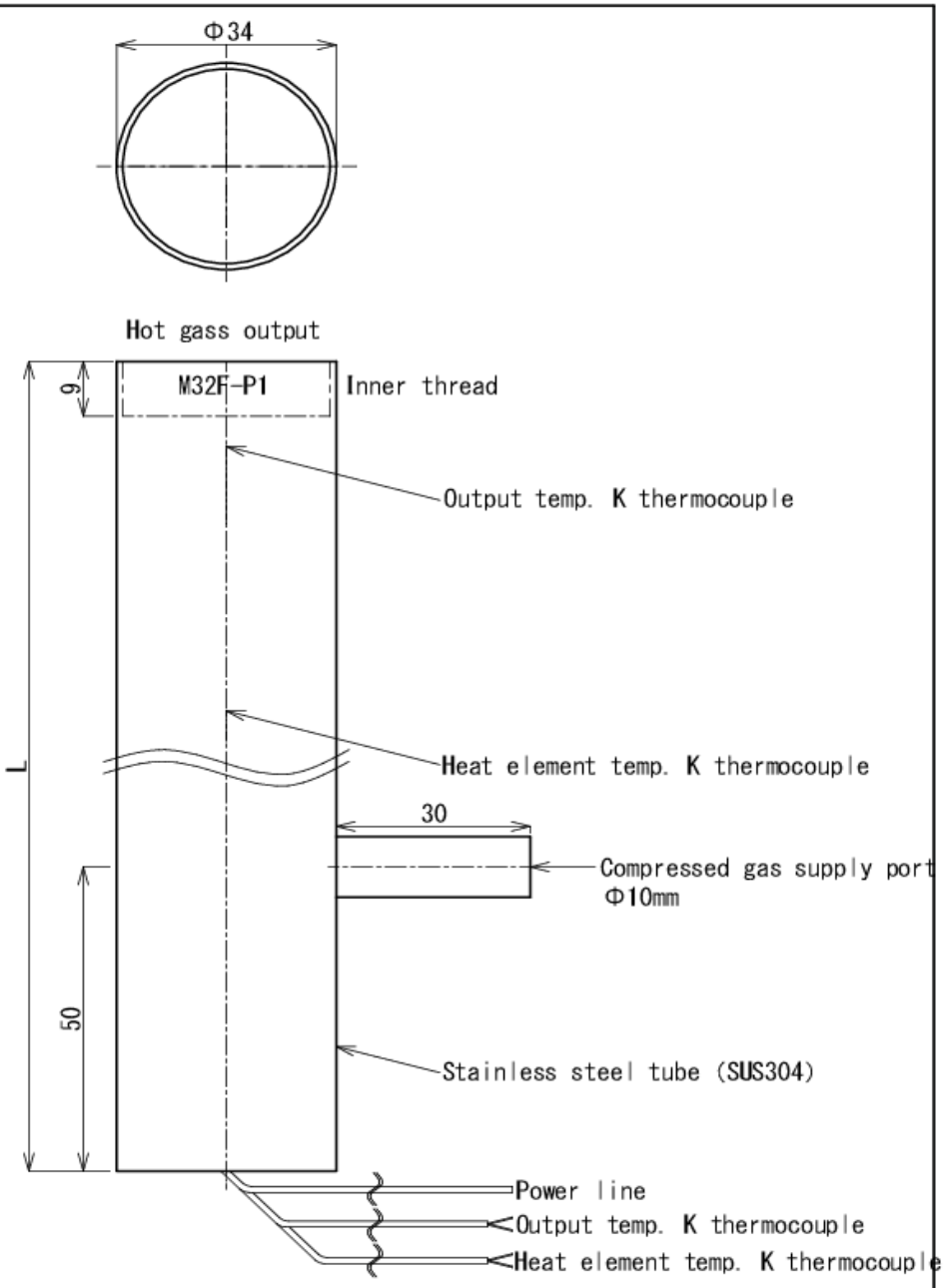
【Optional addition】
- /K Output temp. K thermocouple
- /2K Output temp. K thermocouple & heat element temp. K thermocouple
- /P□m Specify Power Line
- /K□m Specify Thermocouple line

【Notes】
①Pressure resistance 0.3MPa
②Remove oil mist, hydration from the supply gas.
③When heated without supplying cold gas, the heater will burn out.

Length	170mm	
Wattage	650W 800W	1kW 1.2kW 1.6kW
Voltage	100V ～ 240V	200V ～ 240V
D/#	VAH-19N/□V-□W/L□/option	
Model	Vacuum correspondence Air Blow Heater	

Date	Drawing number
2023.03.30	VAH-E2

Heat-tech Co.,Ltd.



【Specify at the ordering】
- □V Specify Voltage
- □W Specify Wattage
- L□ Specify Base Length

【Optional addition】
- /K Output temp. K thermocouple
- /2K Output temp. K thermocouple & heat element temp. K thermocouple
- /P□m Specify Power Line
- /K□m Specify Thermocouple line

【Notes】
①Pressure resistance 0.3MPa
②Remove oil mist, hydration from the supply gas.
③When heated without supplying cold gas, the heater will burn out.

Length	245mm	315mm	465mm
Wattage	2kW	3kW	5kW
Voltage	200V 220V 230V 240V		
D/#	VAH-34N/□V-□W/L□/option		
Model	Vacuum correspondence Air Blow Heater		

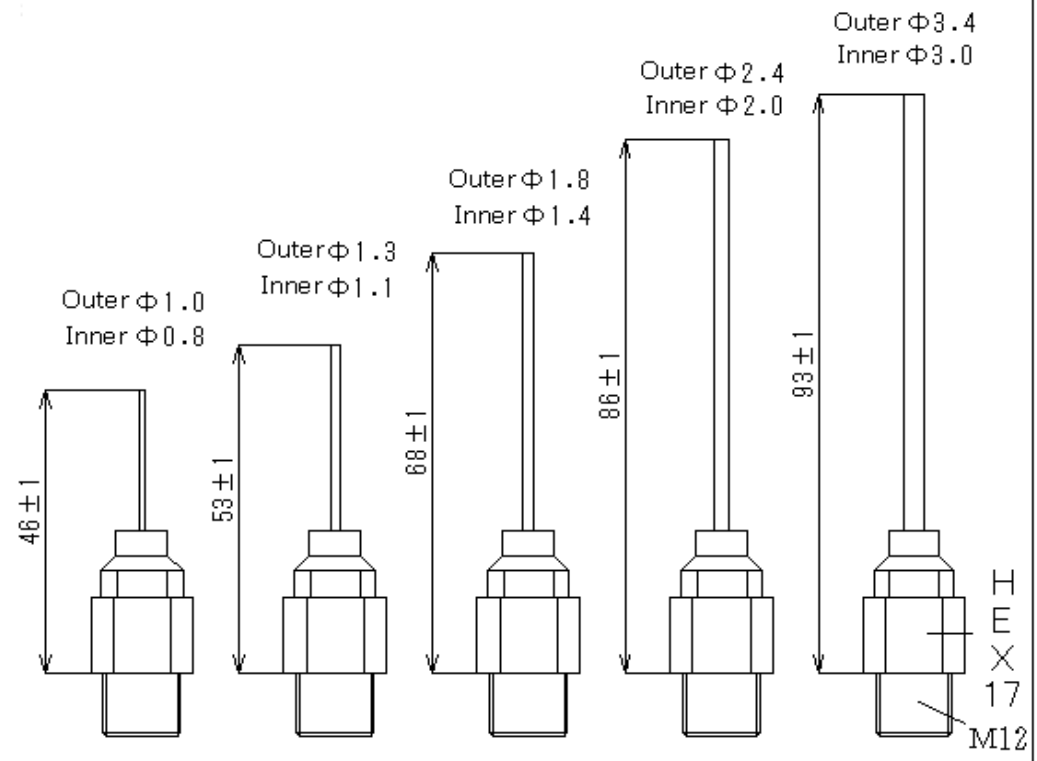
Date	Drawing number	
2023.03.30	VAH-E3	Heat-tech Co.,Ltd.

Heat-tech

Air Blow Heater Needle Nozzle

**It's most suitable for the pinpoint heating difficult so far.
Even outside diameter Φ 1.0-6.0 prepared the rich line-up.
Please use it for device heating on the printed circuit board
and minute processing of arts and crafts.**

Material	Brass
Service temperature	Max. 100℃

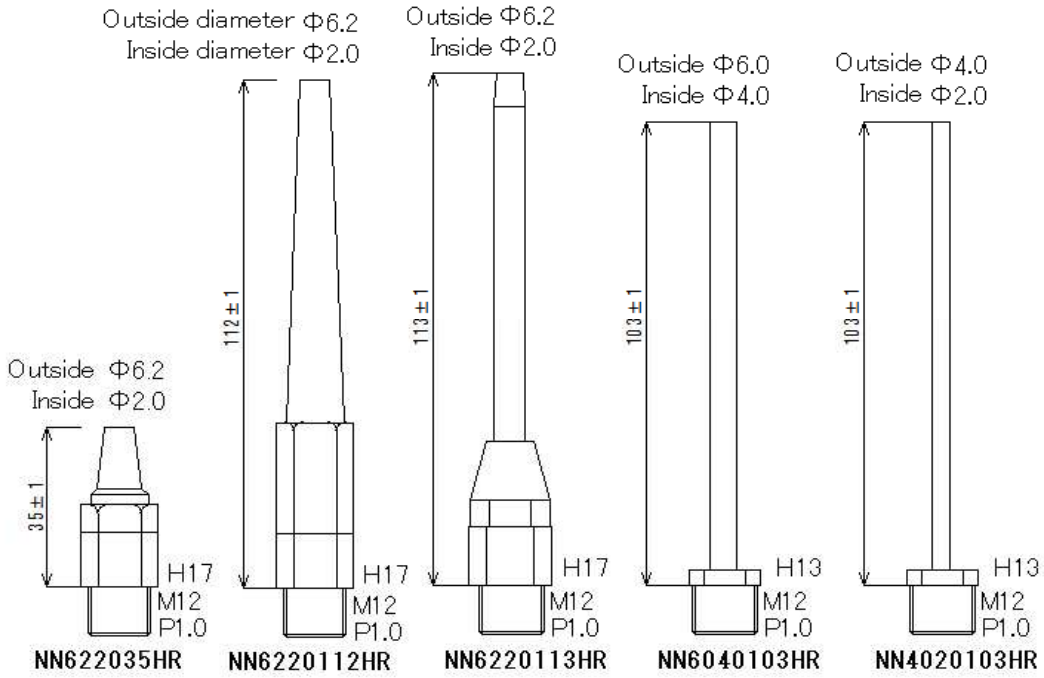


NN100846 NN131153 NN181468 NN242086 NN343093

(Needle Nozzle with Adapter)

【 High rigidity type】

D/#	Adapter	Nozzle
NN622035HR	Steel chrome plating	Steel chrome plating
NN6220112HR	Brass chrome plating	Brass chrome plating
NN6220113HR	Brass chrome plating	Brass chrome plating
NN6040103HR	SUS304	SUS304
NN4020103HR	SUS304	SUS304

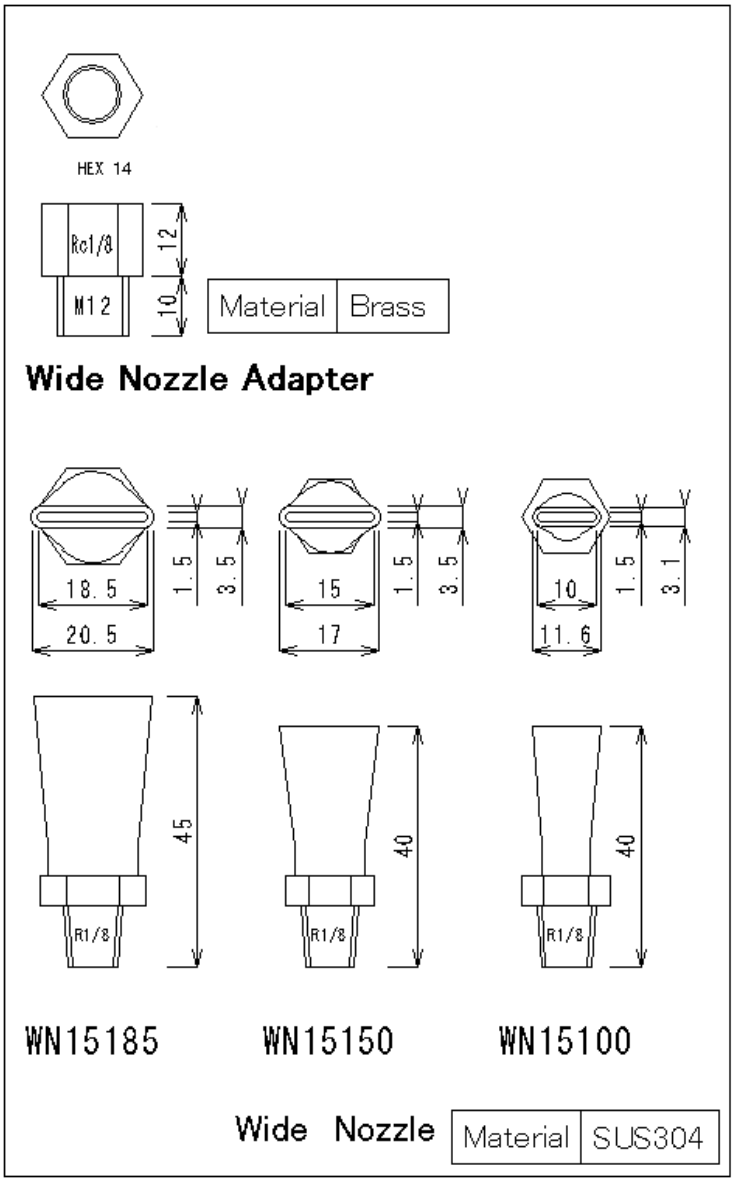


		D/#	NN (Outside diameter) (Inside diameter) (length) HR
		Name	ABH-13AM needle nozzle high rigidity type
Draw.	2021/08/18	Y・Shimoda	Heat-tech

Heat-tech

Air Blow Heater Wide Nozzle

**It's most suitable for heating of filamentous work difficult so far.
The width of the balloon are 10mm, 15mm and 18.5mm types.
Moreover, it is possible to use it as a spatula of air.**

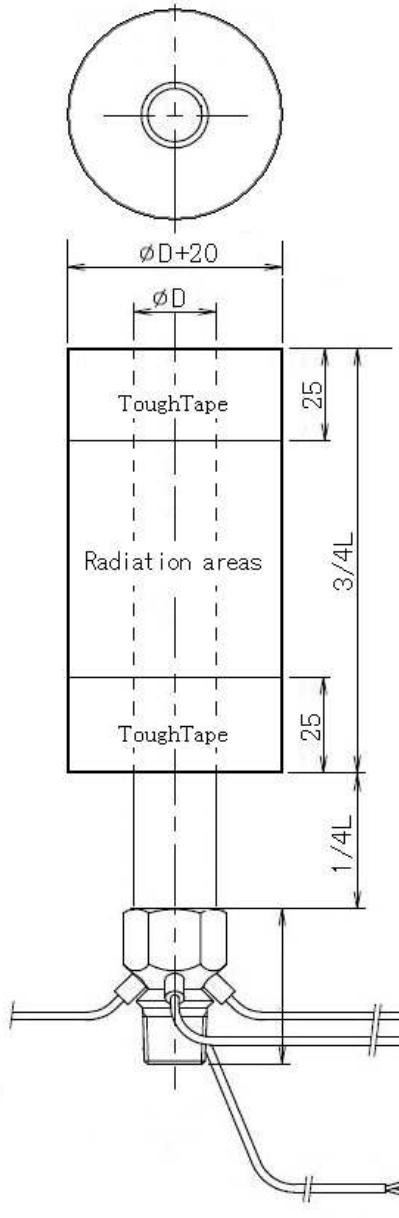


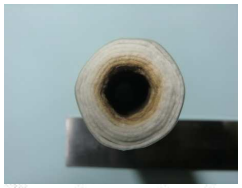
Air Blow Heater Protect Tube

Custom-designed will produce the protection tube according to the outside diameter and the length. Ceramic paper of heatproof 1250℃ was used.

It becomes dangerous prevention in the Miss touch for a short time that though it is felt it is hot a little because heat is radiated for the thermal storage prevention.

* When protector tube is installed, radiation is oppressed, so heating efficiency rises a little.

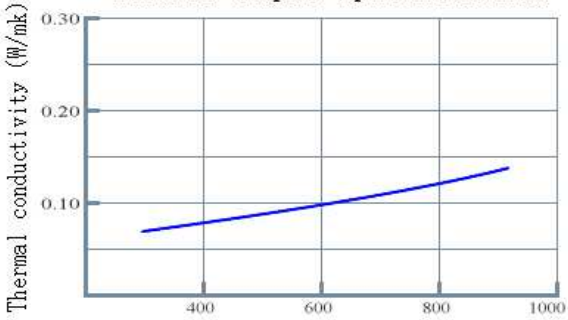




Ceramic paper is a heat-resistant paper which does not contain asbestos which is made by making a ceramic fiber raw cotton from which most of shots (unfibrillated particles) have been removed as main raw material and adding a small amount of organic binder.

Since ceramic paper uses some organic binder, smoke and smell are generated in the early stage of heating, but it is impossible to perform smoke-free treatment with heat treatment beforehand like boards. (Since strength decreases after binder disappears)

Ceramic Paper Specification



The average temperature inside the Protect Tube

Upper temperature limit 1250℃

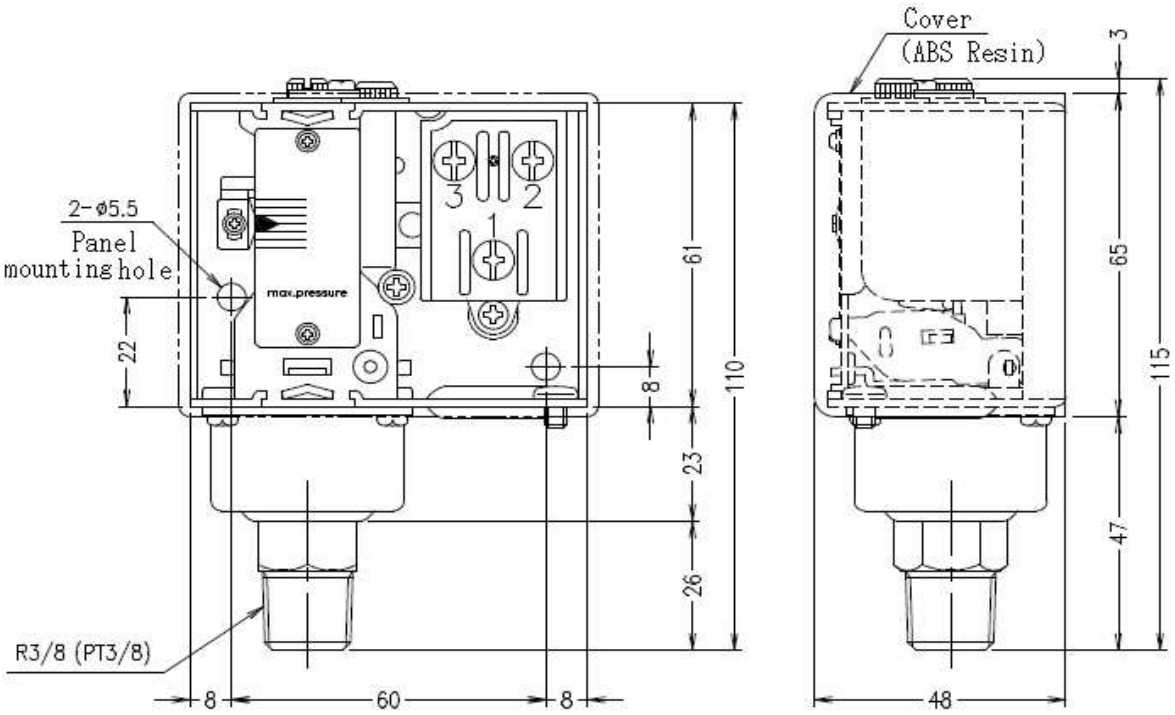
Density 250kg/m3

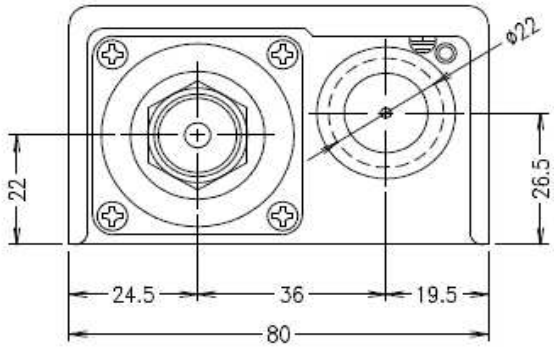
Tape	PEEK:Poly Ether Ether Ketone
Material	Almina Ceramic Paper
Model	Air Blow Heater Protect Tube

Date	2010 04/05	Approval	Y.Shimoda	Drawing	Y.Shimoda

Heat-tech

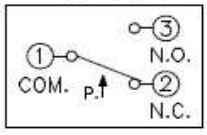
Air-pressure confirmation sensor





Contact Specification

1ab (1C) (S.P.D.T.)



①-③ Pressure up on

①-② Pressure down on

Switching capacitance rating		
Volt	(A.C) A	(D.C) A
24 (v)		3
48		1.5
110	10	0.5
220	10	0.25
440	5	

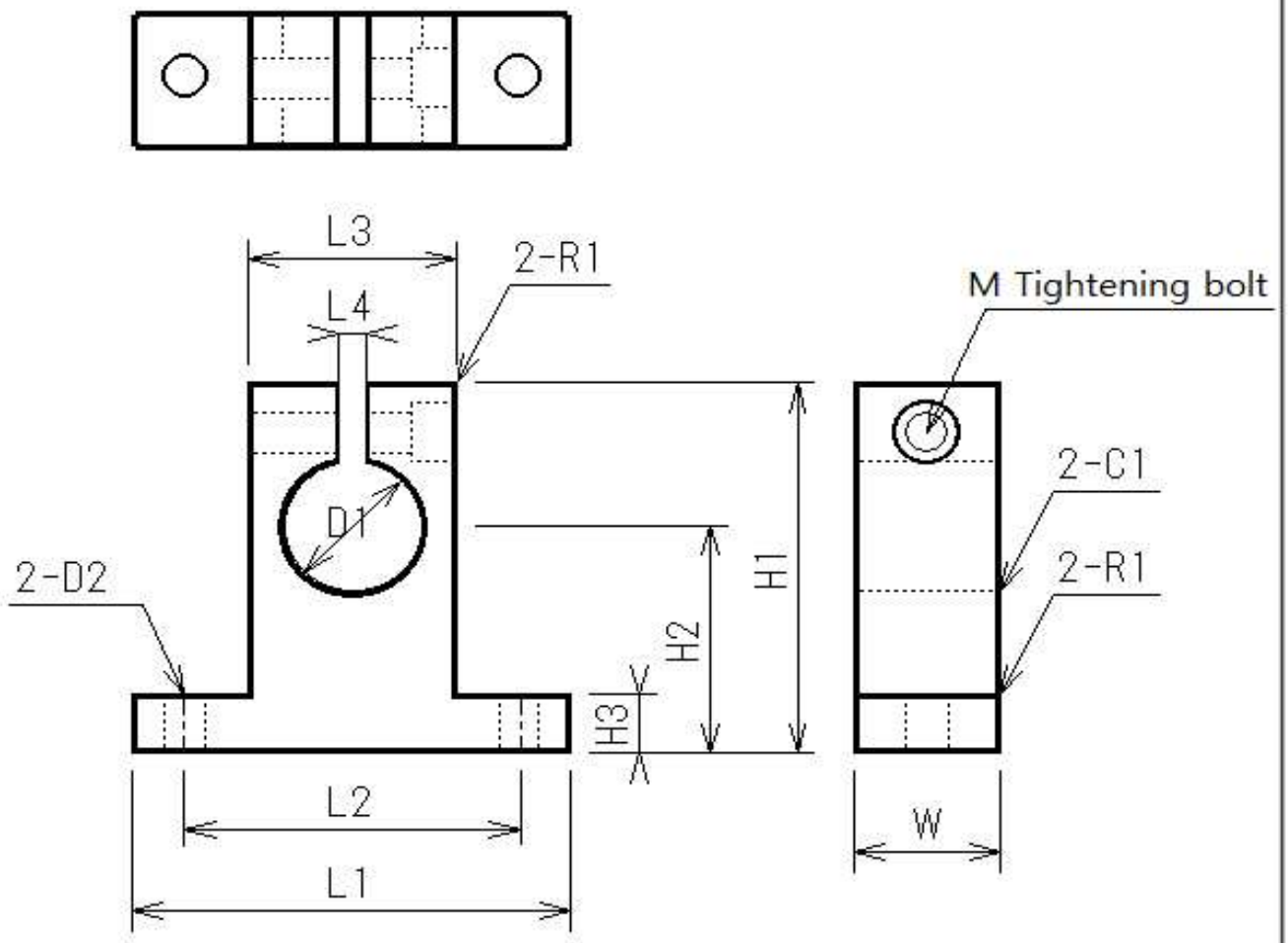
Press. Adjustment range (MPa)		Hysteresis ON-OFF (MPa)		Max. Press. (MPa)
High	Low	Min.	Max.	Proof Press.
0	0.3	0.02	0.06	1.5

D/#	PS-7
Model	Air-pressure. confirmation sensor

Date	2011 04/09	Approval	Y.Shimoda	Drawing	Y.Shimoda

Heat-tech

T-type Mounting bracket

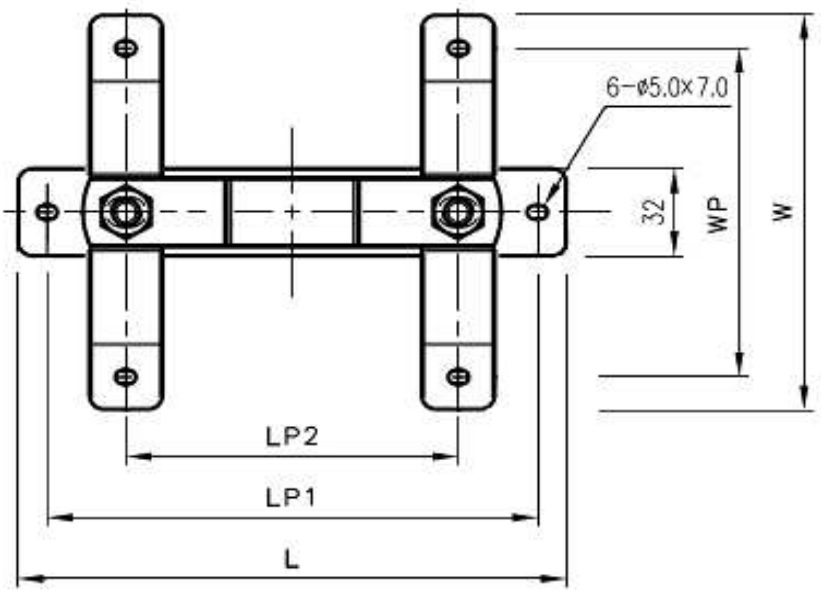


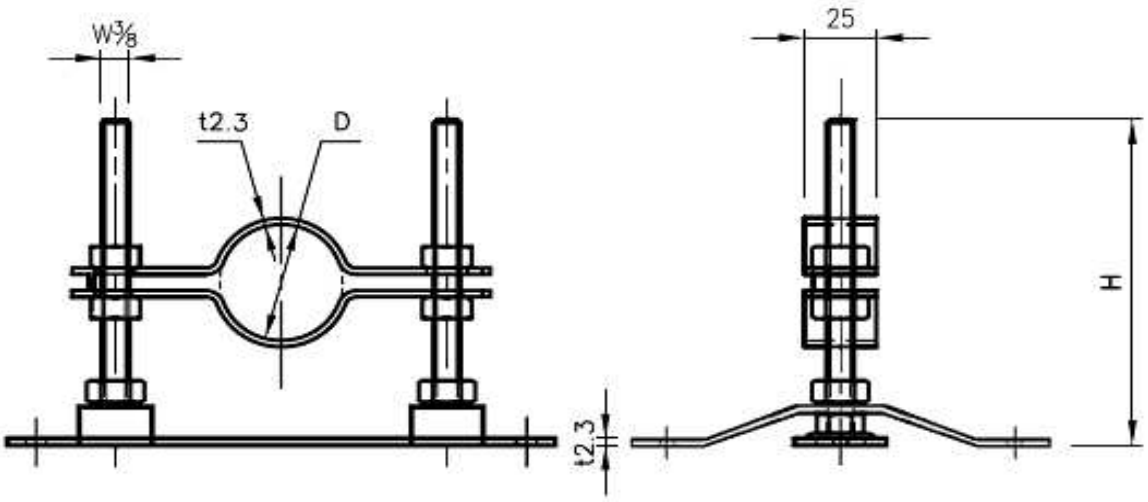
D/#	D1	D2	L1	L2	L3	L4	H1	H2	H3	W	M	HPH	ABH
TS-1	Φ6	Φ5.5	42	32	18	2	32.8	20	6	14	M4		4D
TS-2	Φ8	Φ5.5	42	32	18	2	32.8	20	6	14	M4	12/18	8□
TS-3	Φ13	Φ5.5	42	32	20	2	37.5	23	6	14	M4		13A
TS-4	Φ19	Φ5.5	48	38	25	2	44	27	8	16	M4		19N/A
TS-5	Φ22	Φ6.6	60	45	30	2	51	31	10	20	M5		22N/A
TS-6	Φ28	Φ6.6	70	56	8	2	60	35	12	24	M6		28A
TS-7	Φ30	Φ9	84	64	44	2	70	42	12	28	M6	30/35	

Material	Anodized
Model	TS-□
Name	T-type stand

Date	2019/2/5	Drawing	Y.Shimoda	Heat-tech

H-type Mounting bracket





D/#	D	H	L	LP1	LP2	W	WP	HPH	ABH	DGH
HS-4	Φ16.5-22.0	120	138	118	63	150	125		19N/A	19N
HS-5	Φ22.0-28.5	120	138	118	63	150	125		22N/A	22N
HS-6	Φ28.5-34.0	120	138	118	63	150	125	35	34N	34N
HS-7	Φ37.2-42.7	150	190	170	115	150	125		43N	43N
HS-8	Φ43.0-48.6	150	190	170	115	150	125	60	50X6	45H
HS-9	Φ54.5-60.5	150	190	170	115	150	125	120/160	61X6	

Finish	Galvanized
Material	SPHC
Model	HS-□
Name	H-type stand

Date	2016/1/23	Drawing	Y.Shimoda	Heat-tech

Heat-tech

【 Ultraviolet rays sterilization and strong ozone deodorant 】
Volatile organic compound remove.
■Solvent smell of the ethanol removed in chemical factory.
■Removal of painting smell in body after car body is painted
■Resolution removal of solvent smell of Nail Salon ethanol.
■Prevention of sick house syndrome
and multiple chemical sensitivity.
Formaldehyde, Ammonia, acetaldehyde, toluene, xylene, thinners, ethyl benzene, lower fatty acid, to remove and disassemble.

MPC controls mass flow.

The corrections of pressure, the temperature, the specific gravity of the gas, and the second side backing pressure, etc. are unnecessary.

An electric connection and the piping connection are consolidated in the back and the installation working efficiency is improved.

Even the set value attainment is 1 Sec.

【 Thermo-controller 】
The overshoot prevention
function is provided, and it is the
best for a weak product to
Some model control heating and cooling!
Depth is only 60mm.
The front side is a protective construction of IP66.

【 Solid State Relay 】
With zero cross function for exchange single-phase power supplies.
Combined with thermo-controller .

【 Toughtape 】
PEEK resin with the world's first chemical-resistant tape heat insulation protection.
PEEK resin has high heat resistance, chemical resistance, abrasion wear resistance, excellent mechanical properties, barrier properties and radiation resistance, high purity, in addition to electrical insulation, has excellent hydrolysis resistance, low water absorption rate from a low penetration rate and to exert a material is ideal as a base film for high-performance tape.

Heat-tech

Specification list of Heater controllers

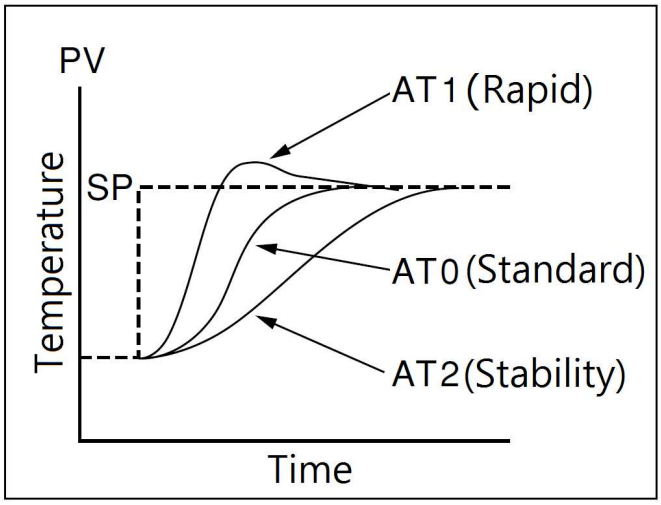
Heater & Cooler controller functions list

◎ Standard ○ Options X No-applicable

Series Mode		HCA	AHC3	ACC	HCV	HCF	HCS	HHC2	SSC
Conformity									
Air Blow Heater	ABH･DGH･VAH	◎	◎	×	◎	◎	◎	◎	◎
Air Blow Cooler	ABC	×	○	◎	×	×	×	×	×
Halogen Heater	HPH･HLH･HRH	×	×	×	◎	◎	◎	◎	◎
Far-infrared Heater	FPH･FLH･PHX	◎	×	×	◎	◎	◎	◎	◎
Temperature setting									
Temperature Controller-Thermocouple Input Specification		◎	◎	◎	×	○	○	○	◎
Temperature controller-Radiation thermometer input specification		○	○	○	×	◎	○	○	◎
Manual dial		×	×	×	◎	×	◎	◎	×
Digital setting		×	×	×	×	×	×	×	◎
Flow control									
Digital flow meter		○	◎	○	×	×	×	×	×
Mass flow meter		×	○	○	×	×	×	×	×
Manual valve		○	◎	○	×	×	×	×	×
Pressure gauge		×	○	○	×	×	×	×	×
Stop valve		×	○	○	×	×	×	×	×
Stop valve off delay timer		×	○	○	×	×	×	×	×
Heating control									
Feedback heating control		◎	◎	×	×	◎	○	◎	◎
Overheating prevention control		○	○	×	×	○	○	○	○
Preheating control		×	○	×	×	○	○	○	○
High-low control		×	○	×	×	○	○	○	○
One shot heating		×	○	×	×	×	×	○	◎
Stairs control		×	×	×	×	×	×	×	◎
Trapezoid / Square heating		×	×	×	×	×	×	×	◎
Sine curve heating		×	×	×	×	×	×	×	◎
Data logging		×	×	×	×	×	×	×	◎
Multiple heater control		○	○	×	×	×	×	○	○
Communication									
Remote control function		×	○	○	×	○	○	○	○
Analog communication function		×	○	○	×	○	○	○	○
RS-485 communication		○	○	○	×	○	○	○	○
IOT function		×	○	○	×	×	○	○	○
Alarm									
Heater burnout alarm		○	◎	×	○	○	○	◎	◎
Heater overheat alarm		○	○	×	×	×	×	○	○
Cooling air shortage alarm		×	○	×	×	×	×	○	○
Cooling water shortage alarm		×	○	×	×	×	×	○	○
Gas flow shortage alarm		○	○	○	×	×	×	○	○
Low gas pressure alarm		○	○	○	×	×	×	○	○
Cooling fan stop alarm		×	○	×	×	×	×	○	○
Additional									
Front protection rail		○	○	○	○	○	○	○	○
Rear protection rail		○	○	○	○	○	○	○	○
Handle		○	○	○	○	○	○	○	○
AC power supply for cooling fan		○	○	×	○	○	○	○	○
DC power supply for cooling fan and radiation thermometer		○	○	×	○	○	○	○	○
Radiation thermometer (Pyrometer)		○	○	○	×	○	○	○	○
Flexible stand for radiation thermometer		○	○	○	×	○	○	○	○
Power cable		○	○	○	○	○	○	○	○

Heat-tech

Thermocontroller built-in heater controller HCA series



HCA has a built-in high-performance thermocontroller, handling is easy.
By overheating zero setting, providing a stable heating.

[Specifications]

Model	Voltage	Current	Control	Supervisor function
HCA-AC100-240V-15A	AC100～240V	15A	1pcs	None
HCA-AC100-240V-30A	AC100～240V	30A	1pcs	None
HCASV-AC100-240V-15A	AC100～240V	15A	1pcs	Built-in
HCASV-AC100-240V-30A	AC100～240V	30A	1pcs	Built-in
HCAW-AC100-240V-15A	AC100～240V	15A	2pcs	None
HCAW-AC100-240V-30A	AC100～240V	30A	2pcs	None

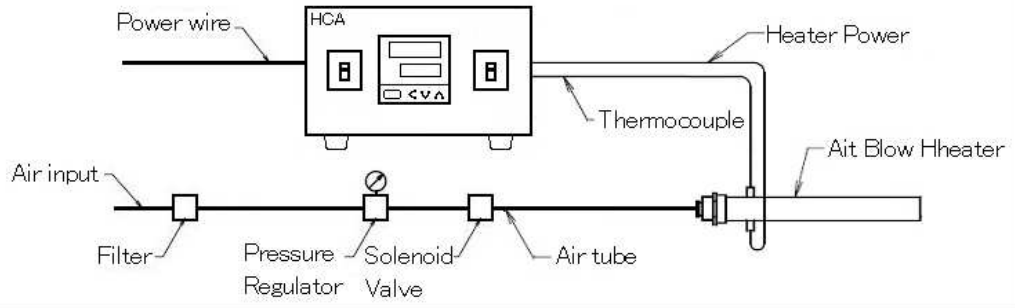
Option

BO	With heater burnout detection and display.
PS	Air Blow Heater and terminal cooling air pressure shortage alarm
FPR	Front Protection Rail
RPR	Rear Protection Rail
LH	Lifting Handle
RS-485	RS-485 Communication

【 Options 】
Front Protection Rail・Rear Protection Rail・Lifting Handle

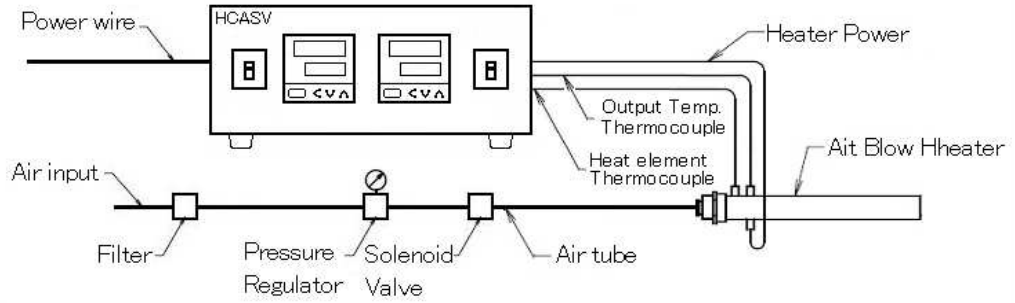
Heat-tech

[HCA Example : Air Blow Heater control]

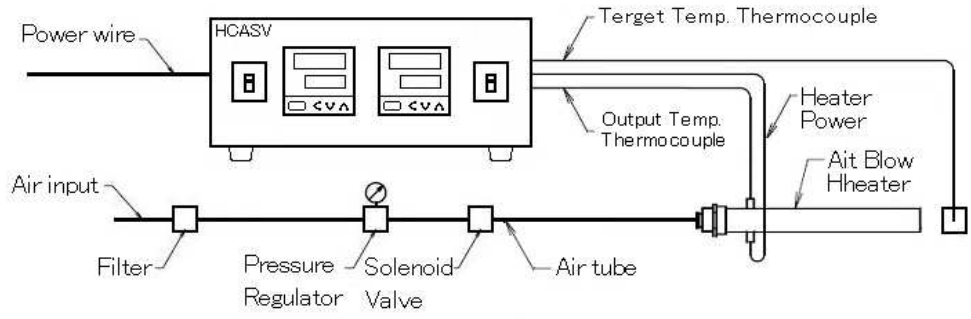


Heat-tech

[HCASV Example : Air Blow Heater overheat control]

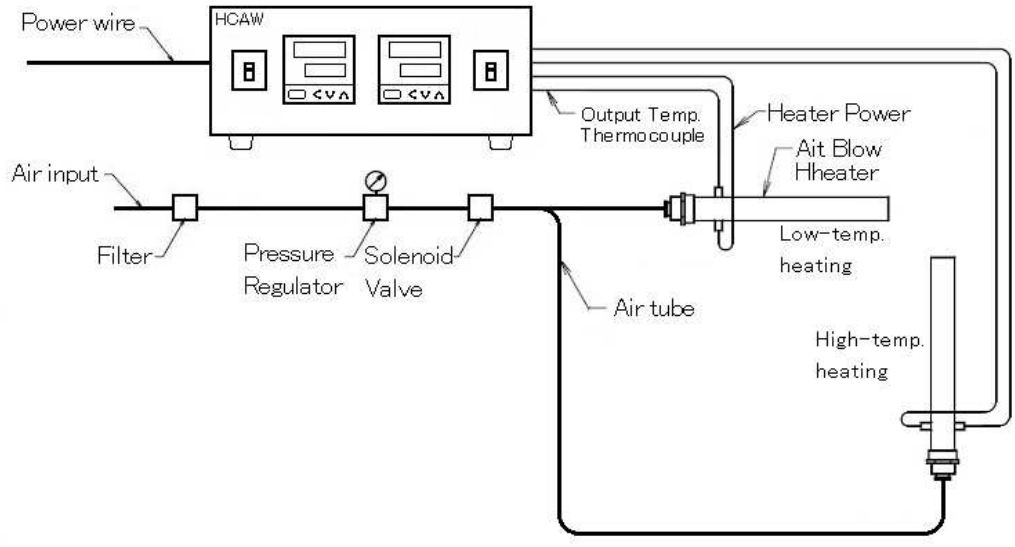


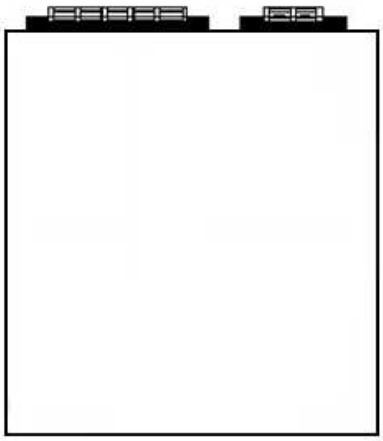
[HCASV Example : Air Blow Heatre Target heat conrol]

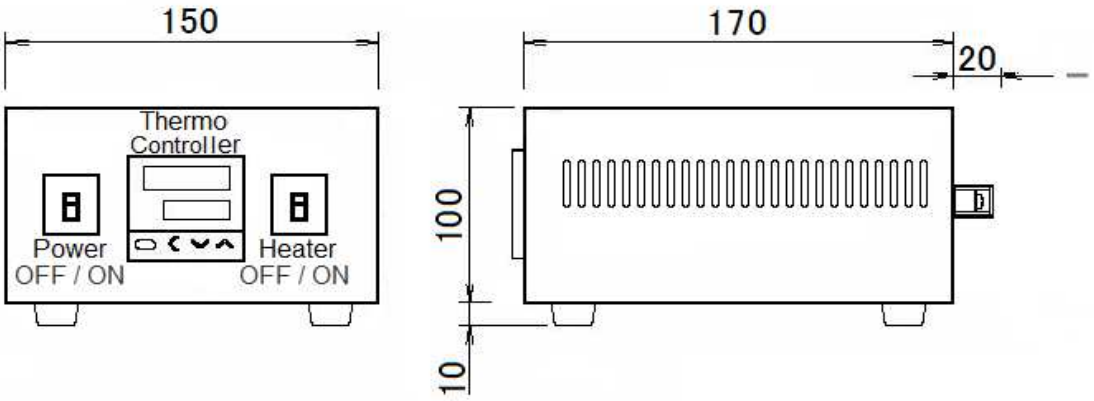


Heat-tech

[HCAW Example : Air Blow Heater 2 heaters control]







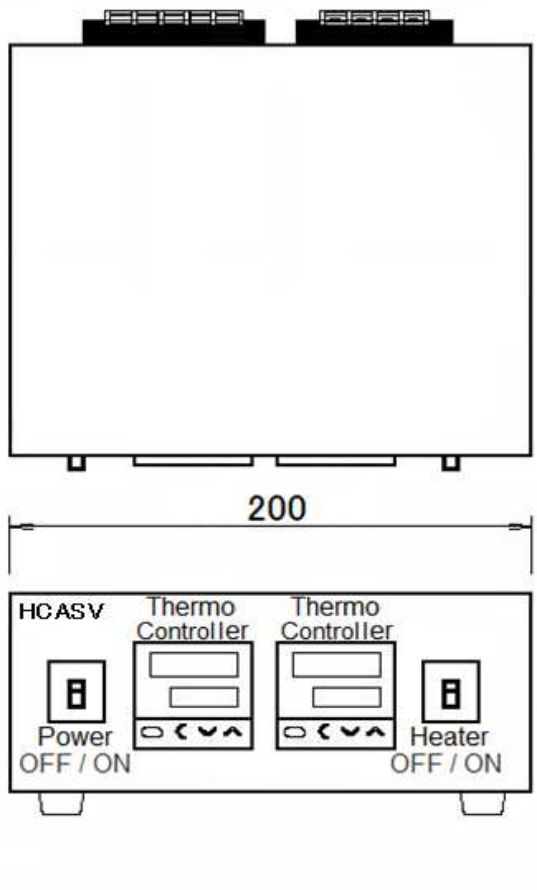
Option

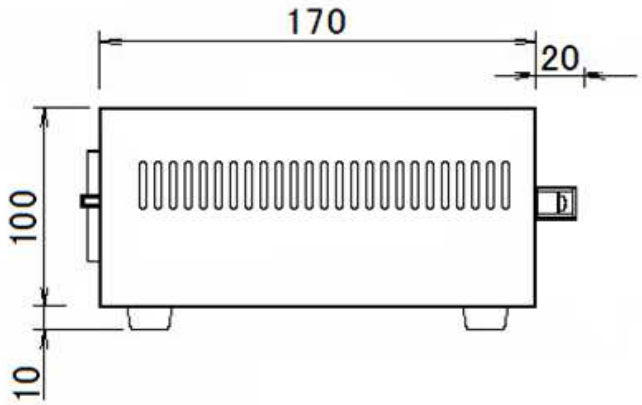
BO	With heater burnout detection and display.
PS	Air Blow Heater and terminal cooling air pressure shortage alarm
FPR	Front Protection Rail
RPR	Rear Protection Rail
LH	Lifting Handle
RS-485	RS-485 Communication

Control method	Time division PID control
Voltage	AC100V~240V
Current	15A / 30A
Dimention	Width 150 x height 110 x depth 205 mm
D/#	HCA-AC100V~240V-□A/(Options)
Model	Thermocontroller built-in Heater Controller

Date	2016/5/3	Draw	Y.Shimoda

Heat-tech Co.,Ltd.



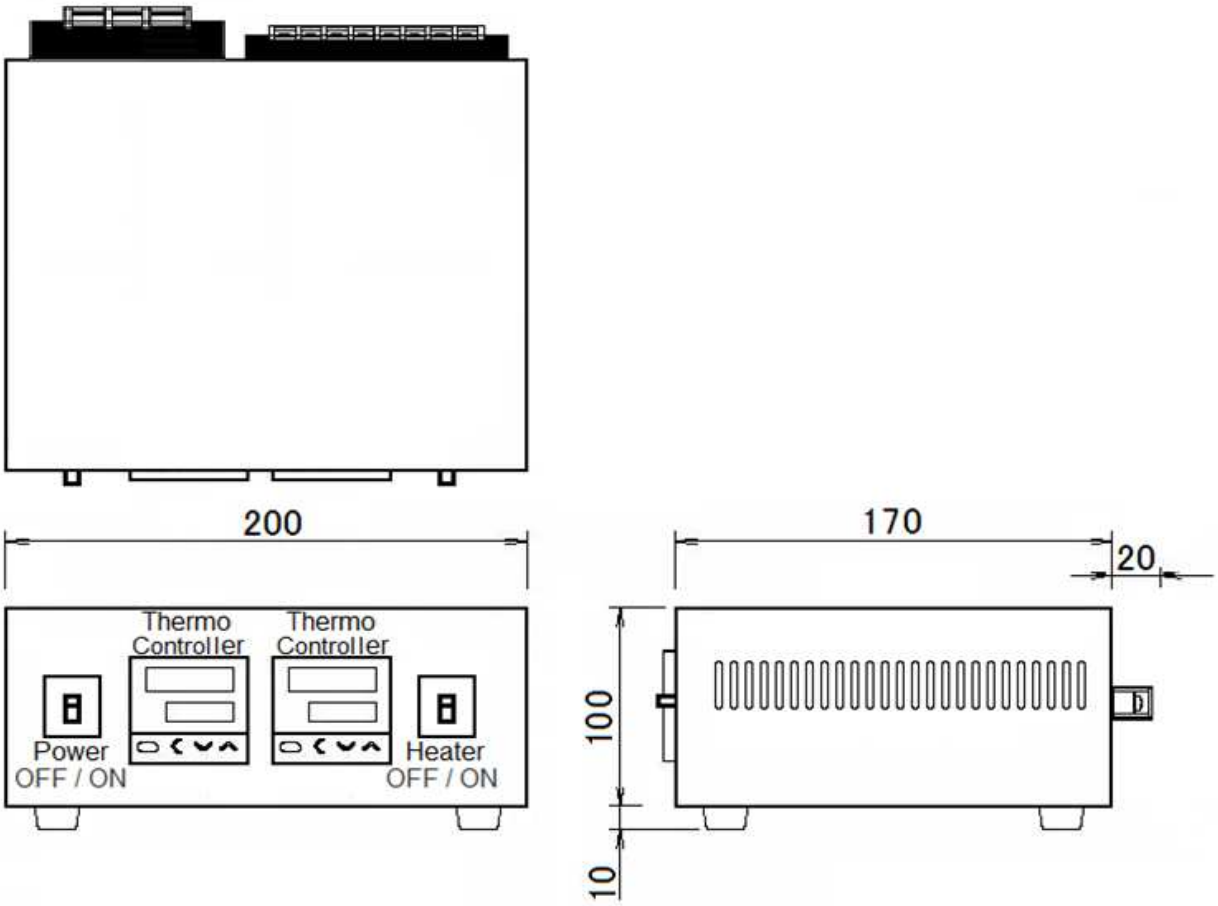


Option

BO	With heater burnout detection and display.
PS	Air Blow Heater and terminal cooling air pressure shortage alarm
FPR	Front Protection Rail
RPR	Rear Protection Rail
LH	Lifting Handle
RS-485	RS-485 Communication

Control method	Time division PID control
Voltage	AC100V~240V
Current	15A / 30A
Dimention	Width 200 x height 110 x depth 205 mm
D/#	HCASV-AC100V~240V-□A/(Options)
Model	Thermocontroller built-in Heater Controller

Date	2016/5/3	Draw	Y.Shimoda	Heat-tech Co.,Ltd.



Option

BO	With heater burnout detection and display.
PS	Air Blow Heater and terminal cooling air pressure shortage alarm
FPR	Front Protection Rail
RPR	Rear Protection Rail
LH	Lifting Handle
RS-485	RS-485 Communication

Control method	Time division PID control
Voltage	AC100V~240V
Current	15A / 30A
Dimention	Width 200 x height 110 x depth 205 mm
D/#	HCAW-AC100V~240V-□A/(Options)
Model	Thermocontroller built-in Heater Controller

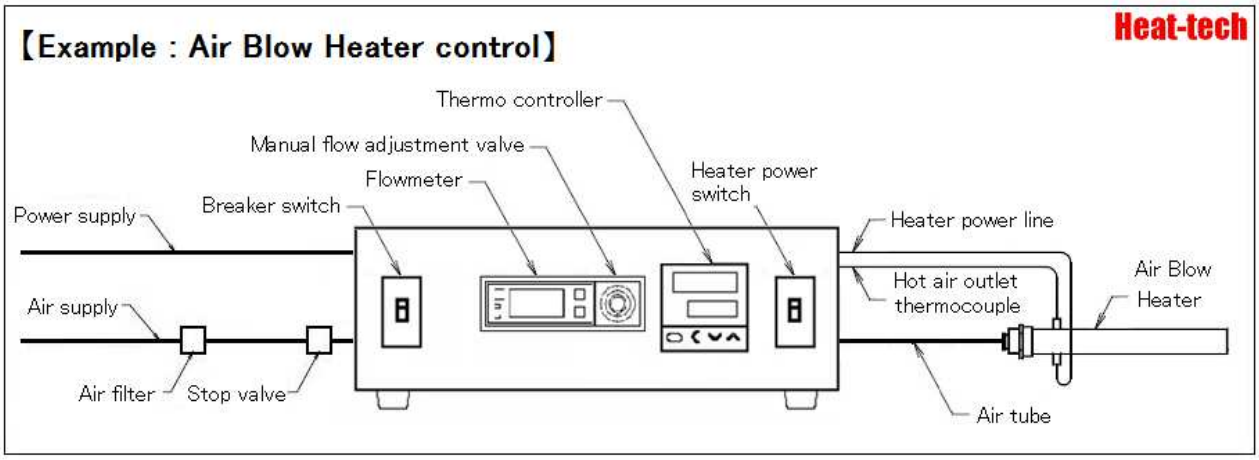
Date	2016/5/3	Draw	Y.Shimoda

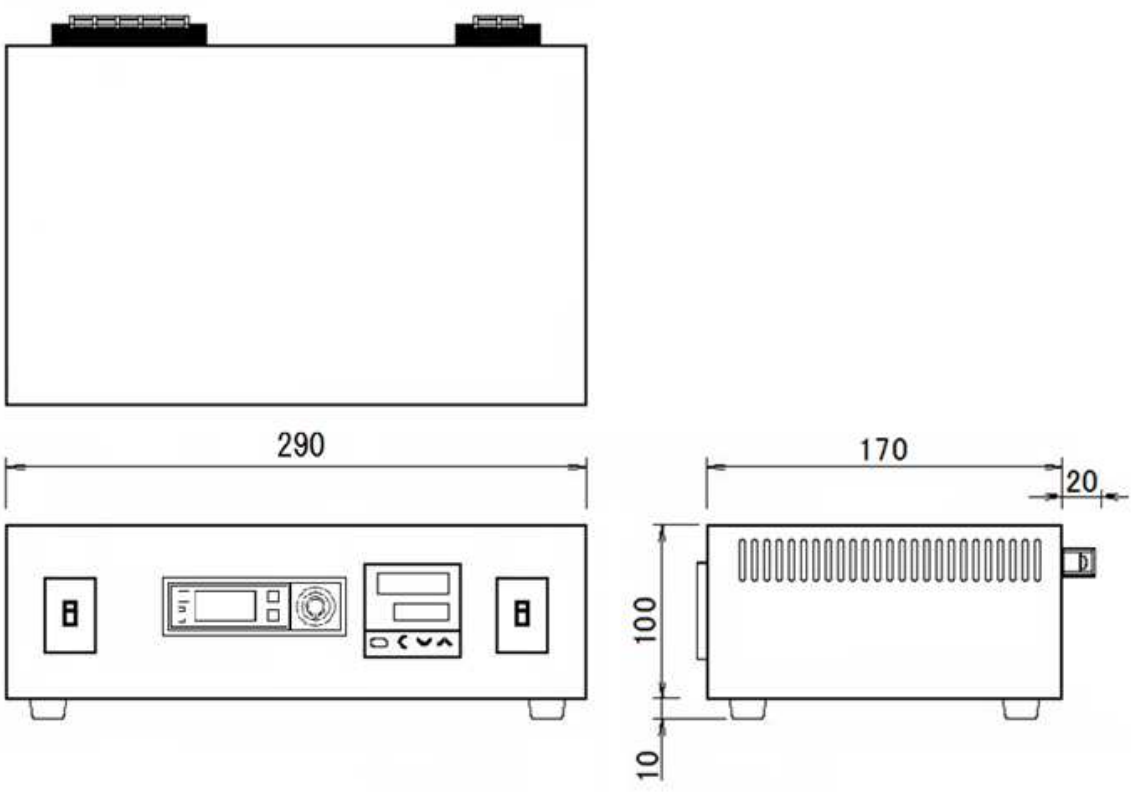
Heat-tech Co.,Ltd.

Heat-tech

Thermocontroller & Flow control type HCAFM

Temperature control and flow control of the Air Blow Heater can be performed.
By overheating zero setting, providing a stable heating.
The flow control valve can adjust the flow rate.
The built-in no-gas heating prevention function and prevents heat damage to the heater.
Since the main power switch and the heater power switch are separated, user can start the heating after the temperature setting.





Option

BO	With heater burnout detection and display.
PS	Air Blow Heater and terminal cooling air pressure shortage alarm
RS-485	RS-485 Communication
AirV	Air opening and closing valve
SV	Supervisor function for Over-heat protect or Target-heating
HL	High-Low Control for rapid-heating or preheating
TMR	The setting timer one-shot heating and mounting surface.
R&H	Front Protection Rail, Rear Protection Rail and Lifting Handle

[Note] When the to add a function, there is that the external dimensions changes.

Control	Time division PID control
Voltage	AC100V~240V
Current	15A / 30A / 50A / 100A / 150A
Flow rate	0 ~ 200L/min
Dimention	Width 290 x height 110 x depth 205 mm
D/#	HCAFM-□A-200L/(Option)
Model	Thermocontroller built-in Heater Controller

Date	2019/4/5	Draw	Y.Shimoda

Heat-tech Co.,Ltd.

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High-performance air blow heater controller AHC3 series

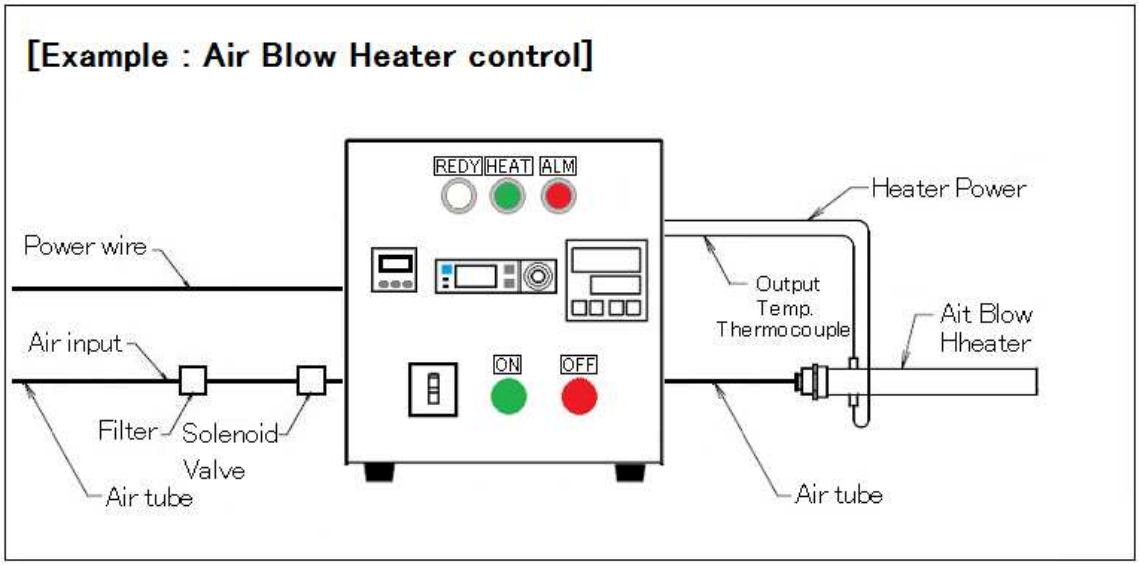
By overheating zero setting of the thermocontroller, it makes the stable hot-air heating.
At a flow rate management by the flow control valve with a float-type flow meter or mass flow controller, to ensure the reproducibility of the amount of heat supplied.

Color universal design type can be specified CUD as an option.
White, blue and yellow indicator lights, Blue and Yellow operation buttons.
The color scheme is easy for anyone to see.

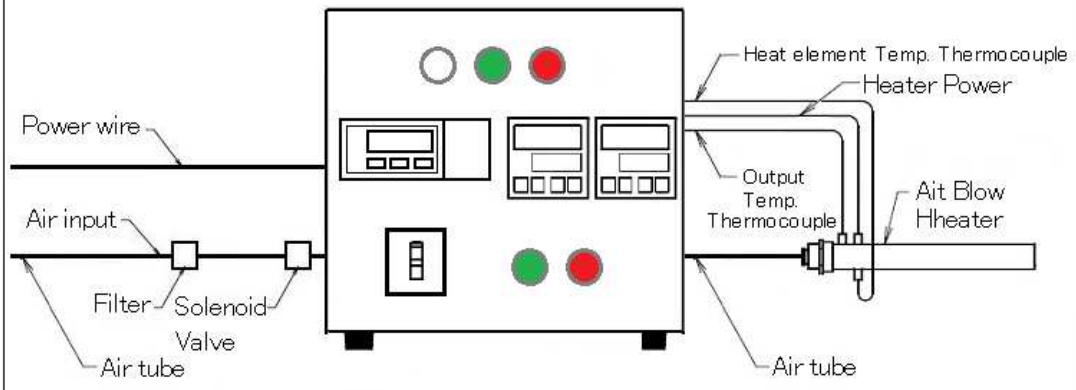
Thermocontroller on-board of the option selected, there is a thermocouple specification or a radiation thermometer specification.
In option selected, user can control of ON-OFF and the voltage is possible with the outside signal.
The IOT-function of the option selected, user can confirm data such as, the set temperature, heating temperature, operation time, operation number of times, heater exchange number of times.
Using a duplication sensor of the optional selected, a over temperature alarm management is possible.
Using a one-shot timer of the optional selected, an precision heating examination is possible.

AHC3 Basic Specifications Thermocontroller & digital flow meter

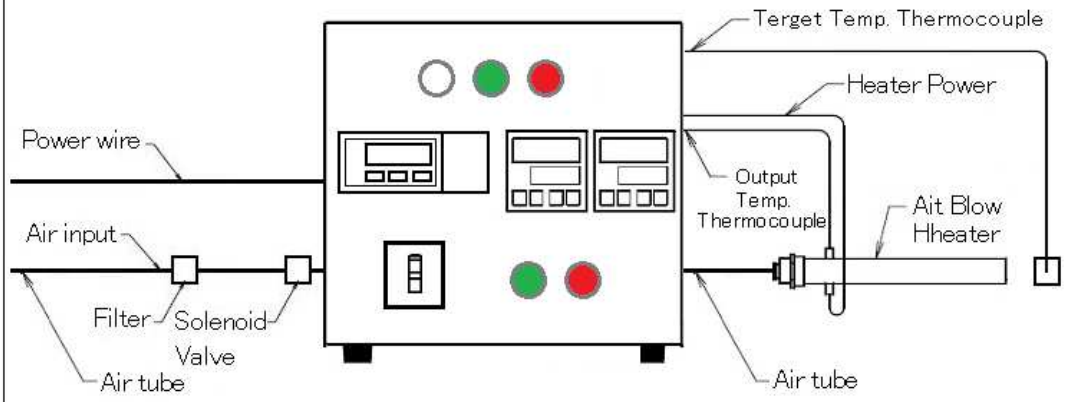
By overheating zero setting of the thermocontroller, it makes the stable hot-air heating.
At a flow rate management by the flow control valve with a digital flow meter, to ensure the reproducibility of the amount of heat supplied.
The built-in no-gas heating prevention function and prevents heat damage to the heater.



[Example : Air Blow Heater overheat control]



[Example : Air Blow Heater Target heat control]



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【 Model configuration list 】

Basic Model	Thermo Controller	Electric Current	Gasflow Quantity	Contents
AHC3				Airblow Heater Controller
	No symbol (standard)			Thermo-couple input
	TP			Pyrometer input
		15A		Control Electric current 15A
		30A		Control Electric current 30A
		50A		Control Electric current 50A
		100A		Control Electric current 100A
			200L	Gas control flow rate 200L/min
			1000L	Gas control flow rate 1000L/min

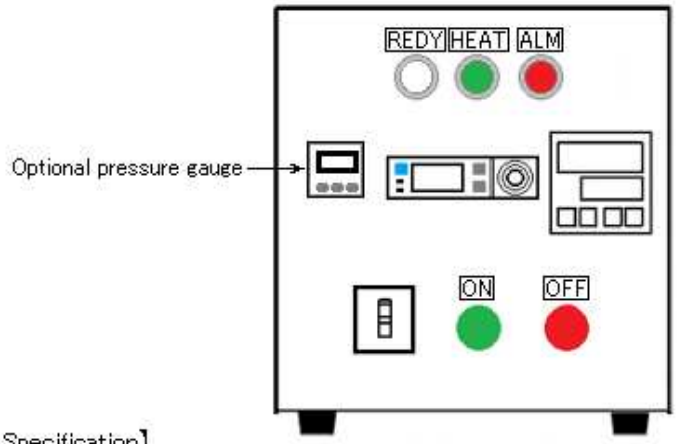
【 Basic Specifications】

Power voltage	Single-phase AC100V ～ 240V 50 / 60Hz
Control current	15A / 30A /50A / 100A
Thermocontroller	Surface mount thermocouple input type
Thermocontrol system	Time division PID control
Air flow meter	Thermal flow meter
Air flow rate setting	Manual control valve
Air flow rate (ℓ / min)	2～200 / 10～1000
Air input	Taper thread for pipes
Air output	Taper thread for pipes
Usage environment	Temperature 0 ～ 45 ℃ Humidity 10% to 95% (non-condensing)
External dimensions	Width 250 x height 250 x depth 250 mm

【Additional Specifications】

Abbreviation	Contents
CUD	Color universal design type white-blue-yellow indicator light and operation switch.
PG	Surface-mounted pressure gauge
RC1	Heating start or stop in the signal from outside
SV	Over-heat Alarm. (For ABH/DGH□v-□w/□□/+2S type)
HL	High-Low Control for rapid-heating or preheating
TMR1	Mounting surface.-For one-shot heating
AirV	Air opening and closing valve
OFDT	Air closing valve, heating stop after the cooling timer 5 minutes
RSP	Specified thermocontroller temp. in 4-20mA
MON	The temperature of the hot air is output to the outside as a 4-20mA signal.
MON	The flow rate of the supply gas is output to the outside as a 4-20mA signal.
MON	The pressure of the supply gas is output to the outside as a 4-20mA signal.
RS485	RS-485 Communication
IOT	IOT function
BO	With heater burnout detection and display. With current limiter.
AP	Air Blow Heater and terminal cooling air pressure shortage alarm
FPR	Front Protection Rail
RPR	Rear Protection Rail
TP	Thermo controller : Pyrometer input
PM	Pyrometer mounted surface.
FX570	Flexible Stand for Pyrometer
Pyrometer	Pyrometer to choice of applications, and then fitted adjusted to the heater controller.
Power Cable	Manufacture the specification of the power cable.
+α	If user need a function other than the above, please contact us.

[Note] When the to add a function, there is that the external dimensions changes.



【Basic Specification】

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[Note]
When the to add a function, there is that the external dimensions changes.

D/#	AHC3-□/□A-□L/Add. Spec.
Model	High-performance Air Blow Heater controller

Date	2022/5/12	Draw	YShimoda	Heat-tech Co.,Ltd.

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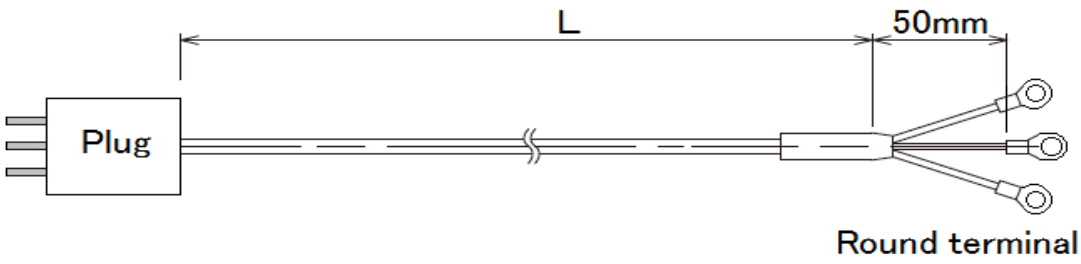
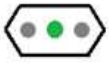
Power Cable for Heater Controller

Manufacture the specification of the power cable.



Type A	Type B	Type C	Type D	Type E	Type F
					
Type G	**Type H**	**Type I**	**Type J**	**Type L**	
					

VOLT	NEMA	15 AMPERE Receptacle	15 AMPERE Plug	20 AMPERE Receptacle	20 AMPERE Plug	30 AMPERE Receptacle	30 AMPERE Plug
125 V	L1	 L1-15R	 L1-15P				
250 V	L2			 L2-20R	 L2-20P		
125 V	L5	 L5-15R	 L5-15P	 L5-20R	 L5-20P	 L5-30R	 L5-30P
250 V	L6	 L6-15R	 L6-15P	 L6-20R	 L6-20P	 L6-30R	 L6-30P
277V, A.C.	L7	 L7-15R	 L7-15P	 L7-20R	 L7-20P	 L7-30R	 L7-30P
480 V	L8			 L8-20R	 L8-20P	 L8-30R	 L8-30P
600 V	L9			 L9-20R	 L9-20P	L9-30R	L9-30P

When the plug or the connector which the upper figure does not have are necessary, we will manufacture as much as possible.

<< Quotation model specification method >>
(Heater controller model) – (Plug shape) – (Cable length)
<< Quotation example >>
HCA-AC100/220V-15A-TypeA-5m

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