

HIGH-BLOW NOZZLE

MANUAL

● Be sure to read before use.

- ◆ Thank you for purchasing the High Blow Nozzle.
- ◆ Check the nameplate on the main unit to make sure that the model, part number and accessories are

《List of fixing brackets with slit length of 401 mm or more》 ※* Fixing brackets with slit length of 400 mm or less are optional.

Type of INLET	fixing bracket for head upper	fixing bracket for inlet upper	fixing bracket for head lower	fixing bracket for inlet lower
S1 type (SIDE 1inlet)	1pc	1pc	1pc	1pc
S2type (SIDE 2inlet)	—	2pcs	—	2pcs
Utype (Upper inlet)	2 pcs	—	2pcs	—
F type (Front inlet)	2pcs	—	2pcs	—

※ A hexagon bolt for mounting and an S washer are attached to the tip fixing bracket.

1. Precautions for Use

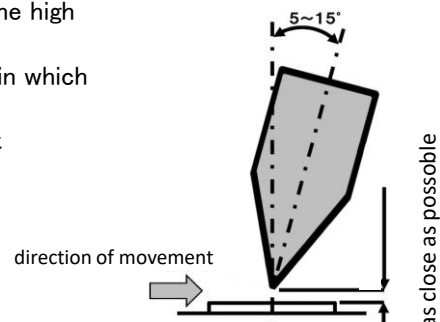
Please be sure to observe the precautions for using the high blow nozzle.

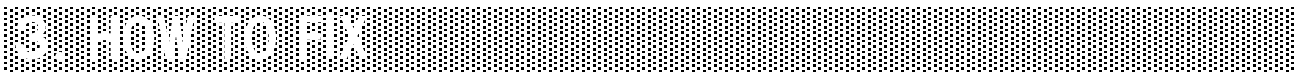
- ① When using the high blow nozzle, be sure to fully understand the performance of the blower and hot air generator, and use each method with due consideration.
- ② Never let any fluid other than air, steam, or water (only liquid type available) pass through this product.
- ③ This product is an aluminum product. Handle it with care, as it may be damaged or deformed if shocked. In particular, the tip of the slit has an acute angle, so be careful not to drop it during transportation or mounting.
- ④ When discharging hot air, be sure to fully understand the surrounding environment and take measures against burns and environmental measures by installing a heat insulating cover.
- ⑤ The heat resistant temperature of this product is approximately 250° C or less. If it is used at a temperature higher than that, deformation due to heat and air leakage will occur.
- ⑥ The maximum efficient air supply is determined by the model of this product, the number of air supply ports, and the slit area (see catalog). If it is used outside this range, the left and right wind speeds may fluctuate, and uniform air is not discharged, resulting in poor performance. Be sure to use within the effective maximum supply air volume.
- ⑦ The maximum withstand pressure of this product is 2 kgf/cm² or less. If you use it with a pressure higher than this, there is a risk of explosion, etc., so please strictly observe the maximum withstand pressure.
- ⑧ This product is an aluminum product, so never flow a fluid containing corrosiveness.
- ⑨ Packing is used for the joint of this product. It may be deteriorated by heat, so be sure to check it regularly.

2. EFFECTIVE USE

Please refer to the following as an effective installation method of the high blow nozzle when draining and drying with hot air.

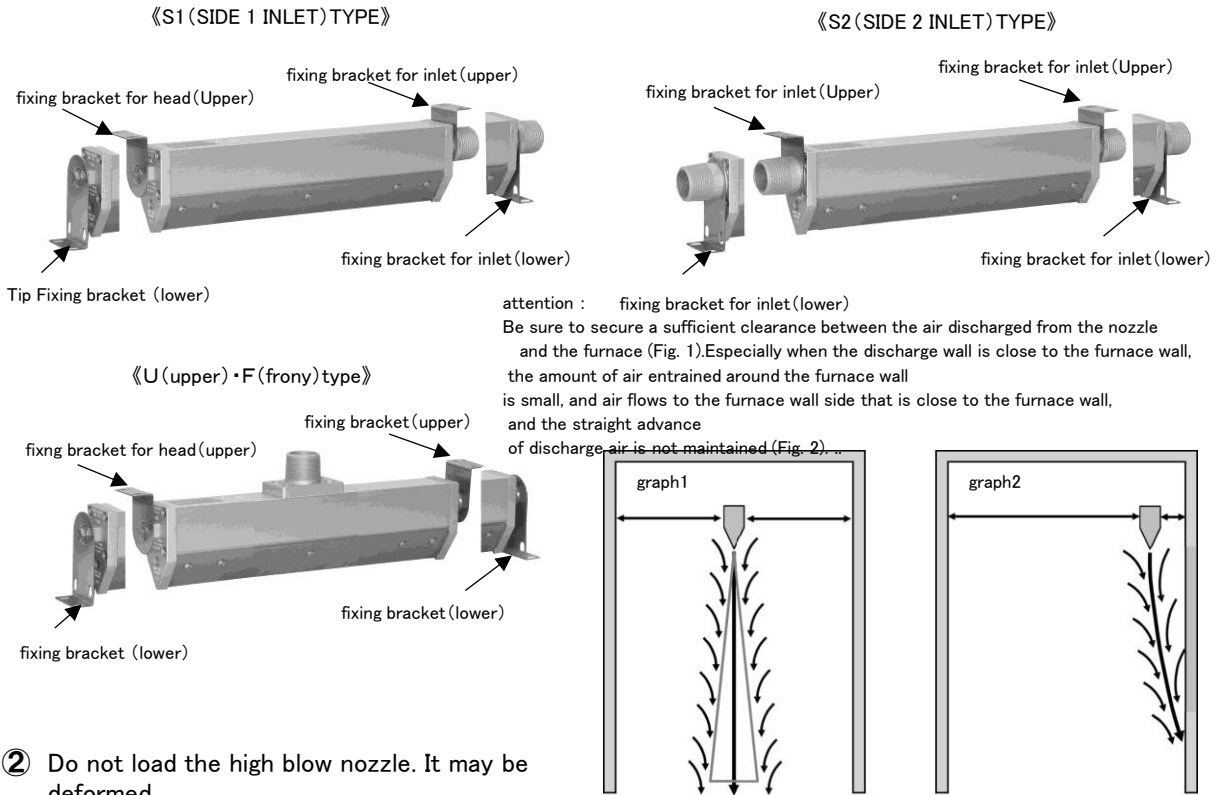
- ① Install at an angle of 5° to 15° with respect to the direction in which the object is being conveyed.
- ② Make the distance between the high blow nozzle and the target as close as possible.





The high blow nozzle with a slit length of 401 mm or more is equipped with a fixture as standard (400 mm or less is an option). Since the fixing metal fittings differ depending on the shape of the nozzle supply port, fix it with the method that matches the shape of the supply port.

- ① Use either the upper fixing bracket or the lower fixing bracket (standard equipment for slit lengths of 401 mm or more). Also, when changing the blowout angle for the S1 type (1 port on the side), maintain the blowout angle with steel pipe piping that uses the screw part of the air supply port, instead of holding only the tip fixing bracket. In addition, since the tip fixing bracket cannot be attached to the S2 type (2 ports on the side), be sure to maintain the blowing angle with steel pipe piping that uses the threads on the air supply ports on both sides.



- ② Do not load the high blow nozzle. It may be deformed.
- ③ This product is an aluminum product. When screwing the main body into steel pipes, do not hang a pipe wrench on the main body and tighten it properly to secure it firmly.
- ④ When fixing the high blow nozzle, consider the weight of the high blow nozzle and do not drop it due to vibration.
- ⑤ When using hot air through the nozzle, the fixing bracket also becomes hot, so take sufficient measures to prevent heat from the fixed part and the surrounding area. The high blow nozzle itself also expands thermally, so make sure to consider the length of expansion and install it with a gap (see table below).

【Reference value of expansion length due to heat】

Hot air temperature	Slit length	Expansion length
100°C	500mm	1mm
100°C	1000mm	2mm
200°C	500mm	3mm
200°C	1000mm	4mm

- ⑥ When installing the high blow nozzle, make sure that it does not come into contact with the target work. If a work such as an iron plate collides, the slit part of the high blow nozzle will be damaged. Also, when hot air is discharged, the surface of the high blow nozzle also becomes hot, which may cause a fire if flammable workpieces come into contact with it.

4. PIPING

The air supply port of the high blow nozzle is an external screw (nipple) of 15A, 25A, 40A, 50A. Use the same size inner screw (socket) for piping. In addition, flexible hose piping can be supported by using the optional hose connection socket.

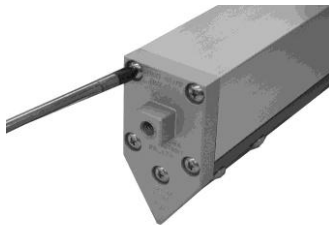
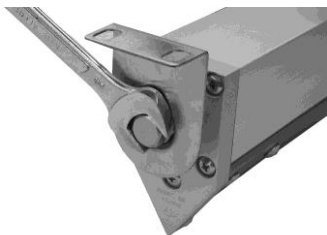
- ① Tighten the connections securely and make sure there are no air leaks.
- ② To prevent the weight of the connected steel pipes from being applied to the high blow nozzle and the fixing bracket, hold the steel pipes firmly with other fixing methods. If a load is applied to the high blow nozzle, it may cause damage or deformation.
- ③ When piping through hot air, the piping becomes hot, so take sufficient consideration of the surrounding environment and take measures against burns and environmental measures such as heat insulation construction and cover installation. Also, be careful not to affect the high blow nozzle as the steel pipes that supply hot air will also expand thermally.
- ④ When using a flexible hose for piping, consider the pressure of the air source and select a flexible hose with sufficient pressure resistance. Especially when using a high-pressure blower (such as a vortex blower), in addition to the pressure, the temperature may rise due to the heat of compression.

5. HOW TO ADJUST THE SLIT

The slit width of the high blow nozzle can be changed by adjusting the tip slit.

【How to adjust slit width】

- ① Remove the fixing bracket for head.
- ② Loosen the screw on the head and the inlet cap.
- ③ Loosen the slit fixing screw and adjust the slit width.



【Slit width adjustment range and maximum area per air supply port】

model	Slit width adjustment range	Maximum area per air supply port (slit length x slit width)			
		per 1 inlet	per 2 inlets	per 3 inlets	per 4 inlets
15AL	0.5~2.0mm	205mm ²	410mm ²	—	—
25AL	0.5~2.0mm	510mm ²	1020mm ²	1530mm ²	—
40AL	1.0~3.0mm	1230mm ²	2460mm ²	3690mm ²	4500mm ²
50AL	1.0~5.0mm	1950mm ²	3900mm ²	5850mm ²	7800mm ²

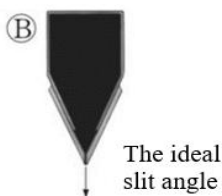
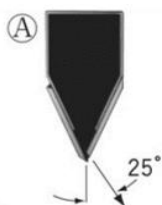
Note: If the maximum slit area is adjusted beyond the table above, the left and right wind speed will vary.

《caution》

1. Depending on the performance of the blower, adjusting the slit to increase the discharge air speed may reduce the air volume and discharge air speed. Please refer to the performance curve in the catalog and adjust within the capacity range of the blower.
2. When loosening the screws, be careful not to let each part come off and fall.
3. Packing is attached to the tip cap and inlet cap. Be careful not to damage the packing when making adjustments. Damaged packing may cause air leakage.
4. After adjustment, securely tighten each loosened screw.

Adjustable for left and right blowout

※Applicable Models: Only 50AL



●When shipped, the ideal slit angle is set to reduce air entrainment around the ②.

●Only 50AL Model When the chamber is fixed, the direction of air blown from the slit can be set to ① right blowout or ③ left blowout by adjusting the mounting direction of the slit.

6. High blow nozzle cleaning

By disassembling the high blow nozzle, you can clean the dust and dirt accumulated inside.

- ① When cleaning, remove the Hi-Blow nozzle from the fixed location before performing cleaning. At this time, be careful not to drop the high blow nozzle.
- ② When cleaning, remove each screw of the high blow nozzle and disassemble it. Also, pull out the inner rectifier grid slowly.
- ③ Clean each disassembled part with a soft brush. If the product has been washed with water, wipe it off with a cloth, etc. and dry it completely before reassembling.

※ When hot air is supplied to the high blow nozzle, symptoms similar to cracks may be seen on the surface of the high blow nozzle, but this is due to the difference in expansion coefficient between the anodic oxide coating applied on the surface and the aluminum alloy material. Fine cracks can be visually confirmed, and there is no problem with the performance of the high blow nozzle.

7. High blow nozzle liquid specification and installation precautions

The high blow nozzle liquid specification (ordered product) can discharge liquid such as water.

- ① The high blow nozzle liquid specification has an alumite treatment on the inner surface, but consider the corrosiveness of the main body when supplying the liquid.
 - ② The maximum withstand pressure of this product is 2 kgf/cm² or less. If you use it with a pressure higher than this, there is a risk of explosion, etc., so please strictly observe the maximum withstand pressure.
 - ③ Make sure that the piping does not leak. Also, when connecting with a PVC pipe, a potential difference will occur due to the flow of water and pinholes etc. will occur due to electrolytic corrosion, so be sure to perform ground wiring.
- When discharging a liquid containing a large amount of chemical components, corrosion or electrolytic
- ④ corrosion (generation of pinholes) may occur suddenly. Therefore, when using such a liquid, consider the high blow nozzle as a consumable item.
 - ⑤ With the high blow nozzle liquid specification, the chamber and slit are bonded, so the slit width cannot be adjusted or disassembled. If it is disassembled, the packing cannot be used and water leakage will occur even if it is reassembled.

8. Precautions for suction nozzle

The suction nozzle (ordered product) can suck in water, dust, dust, etc. that have been blown and scattered in the atmosphere. Also, by collecting hot air, it can be used for environmental measures.

- ① If you want to inhale water, dust, dust, etc., please prepare a dedicated blower (water-resistant type, dust-proof type, etc.).
- ② We recommend installing a filter at the inlet of the blower for suction.
- ③ If you want to suck in dust and dirt with the suction nozzle, clean the inside of the nozzle regularly.



KANSAI ELECTRIC HEAT CORP

4-18 TAKAIDANISHI 5 CHOME

HIGASHIOSAKA CITY OSAKA

577-8566

TEL 81-6 6-6785-6001 FAX 81-6-6785-6002

HP

www.kansaidennetsu.co.jp