



Expert on Industrial Ventilation Systems



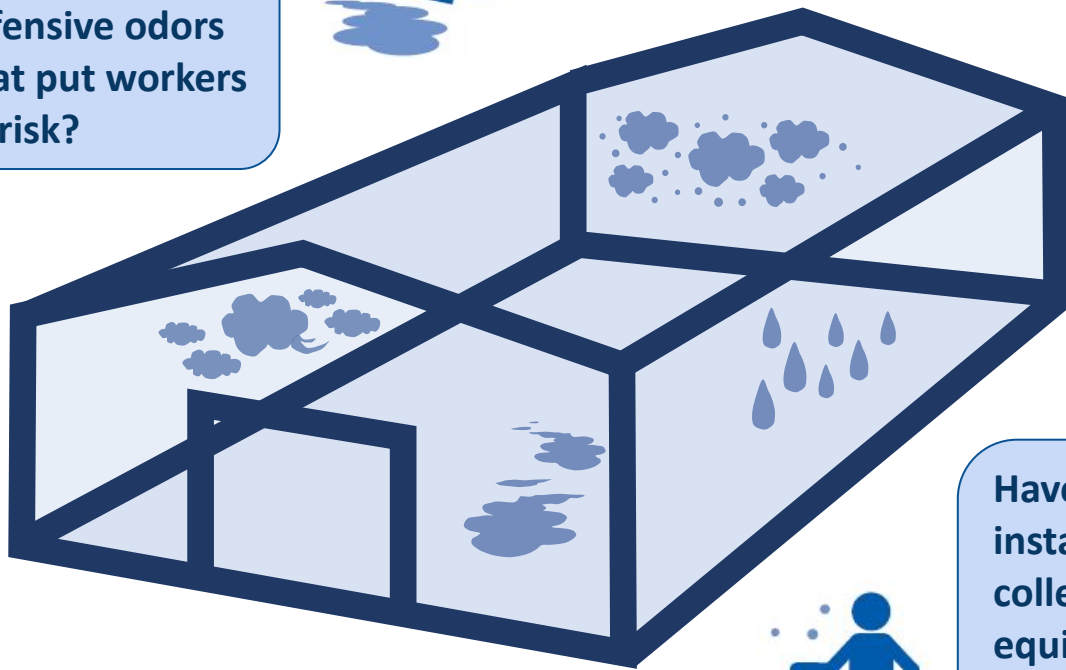
# Do you have these troubles at your workplace?

Are products being damaged due to dust particles?

Is cleaning the workplace a hassle?

Have you not done your periodic checkup and maintenance on your ventilation system?

Do you have offensive odors that put workers at risk?



Have you installed dust collecting equipment, but it is not being effective?



Is it hard to work during the summer due to accumulating heat and humidity?



Is machinery malfunctioning from dust and oil vapor, lowering your work efficiency?



Do you have difficulty collecting dust due to having multiple ventilation requirements?

# Yoshida Industry

## Expert on Industrial Ventilation Systems

- Improvement of the workplace environment will lead to a healthy environment for workers as well as efficient manufacturing and better product quality. However, there is no one-size-fits-all solution. Solutions for problems in the work environment are specific to each facility and their needs.
- Yoshida Industry provides industrial ventilation systems that purifies the air in the workplace. We are an expert in a diverse range of industries, providing clients with application-specific, high-quality solutions to their air and environmental technology issues, such as extracting, dedusting, conveying, purifying and flue gas. Using our expertise, we estimate, design, fabricate, and install customized air pollution control systems that are tailored to each specific need.
- **All in one**  
With our systematic consultation, the ventilation system can be much **more** affordable with **less** consultation-installation time.
- **Free consultation**  
We offer on-site inspection and consultation for free, and provide suitable solutions.
- **Quick and prompt response on 24/7**  
We offer prompt customer support for troubleshooting and maintenance.

# Our Works

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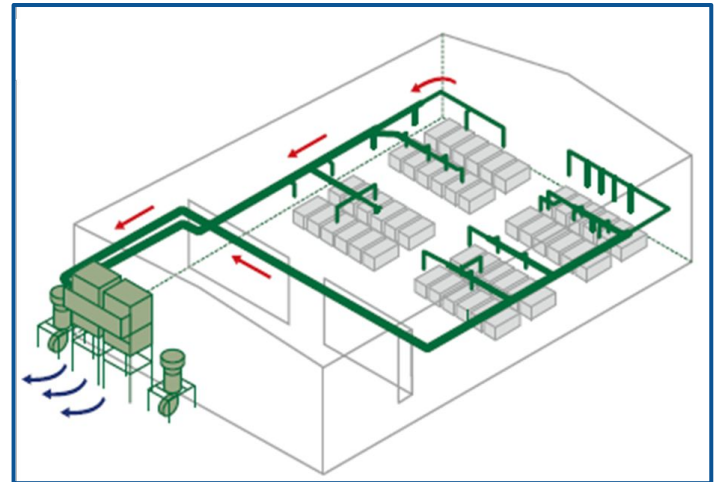
- 1) **Local Exhaust Ventilation System** - page 4
  - Dust (woodworking, metal grinding dust, rice bran, etc.)
  - Organic solvents (toluene, thinners, methyl ethyl ketone, etc.)
  - Vapor, fume
  - Regulated chemical substances (asbestos, chlorine, cadmium, cyanide, hydrogen fluoride, hydrogen sulfide, etc.)

Ventilation systems are required by law in facilities using regulated chemical substances.
  
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Regular inspection and record are required by law in order to maintain the function of the ventilation system and the quality of the workplace environment.

# Complete Industrial Ventilation System - Dust, Vapor, Fume Control

- We design and install a high-performance and efficient ventilation system
- We incorporate customer requests for duct placement and easy maintenance



## Before

A considerable amount of dust was generated in the facility. Because the capacity of the existing duct collectors was insufficient, air quality was low and it required a mask and glasses. Furthermore, dust collectors were installed on the 2nd floor, so the disposal of collected dust required a significant amount of work.



## After

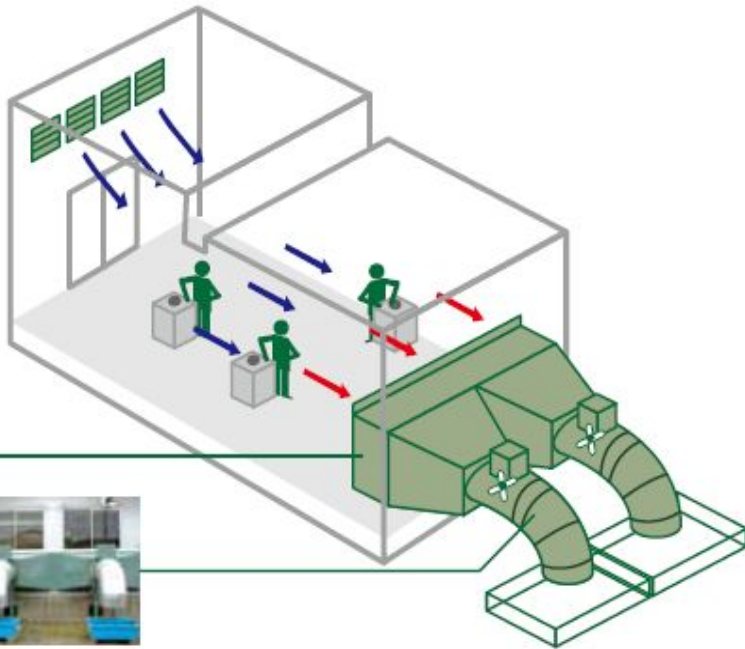
With an improved dust collection capacity, custom-designed duct layout, and suitable dust collector placement, there was significant improvement in air quality and work efficiency. Noise issues were also resolved.



# Push-Pull Ventilation/Paint Booth



**Push Hood**  
Sends filtered clean air into the room.



**Push-pull ventilation system** consists of the push jet and the pull exhaust which creates air flow within the room, removing floating particles and organic solvents.



**Pull Hood**



**Exhaust duct**

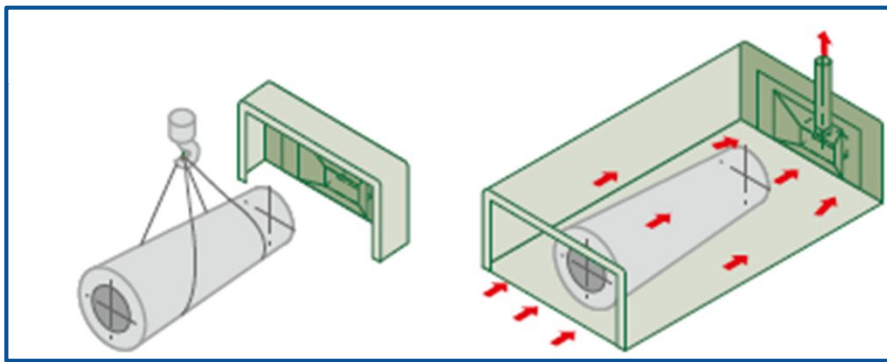
In the case where industrial fans cannot provide enough ventilation, push-pull ventilation might be an option.



Push-pull ventilation is effective when a ventilation hood cannot be installed near the source or if there are multiple ventilation requirements in one place. It can provide efficient and cost effective control in conjunction with local exhaust and can be used for dust and weld fume collector or for paint booth.

# Retractable Local Exhaust Ventilation

Transform one section of your workplace into an efficient local ventilation system or paint booth. We design a custom-made booth for limited space or for large objects. It is much more affordable than having a space specifically designed for those purposes. It requires much less installation time and will not affect your work.



- **Collapsible**
- **Customizable**
- **Affordable**



Retracted

- A retractable booth with a dust collector setup to process large objects.
- The booth has a folding system with wheels which moves on rails.



Expanded

# Retractable Paint Booth

One of our most popular products is this retractable paint booth system. The booth is retractable so that it can be expanded only when the paint booth is used.

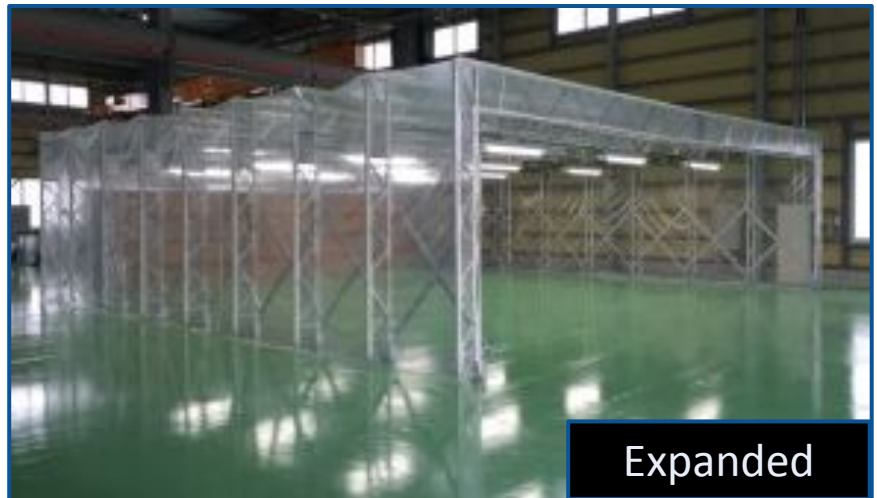
Booth expansion can be motorized or manual.

## Retractable paint booth for large objects



### Before

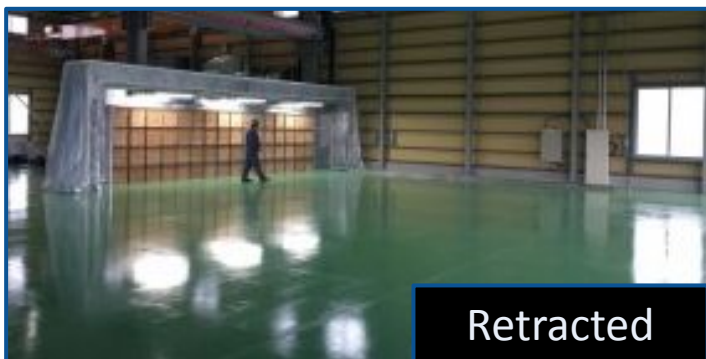
A part of facility was used for spray painting on large steel materials, but with the existing exhaust fans it did not function as ventilated paint booth.



Expanded

### After

With our folding paint booth with high-power exhaust fans, there will be enough exhausting power from anywhere within the paint booth. The booth itself is retracted when you place large materials using cranes. For this facility, the booth was equipped with wheels on a rail only on one side to maximize the floor space.



Retracted



# Retractable Paint Booth

Our paint booth removes floating mist containing organic solvents, which are harmful to the human body. Paint mist particles may adhere to the products, resulting in product defects, therefore, the paint booth is essential for painting facility.

## Asymmetrical retractable paint booth



Retracted



Expanded

In the case of a painting booth for industrial trucks, we proposed this asymmetrical paint booth to place it along the wall to utilize all available space. With one of the rails placed above the wall, it functions as a closed paint booth but with floor space along the wall to be used.



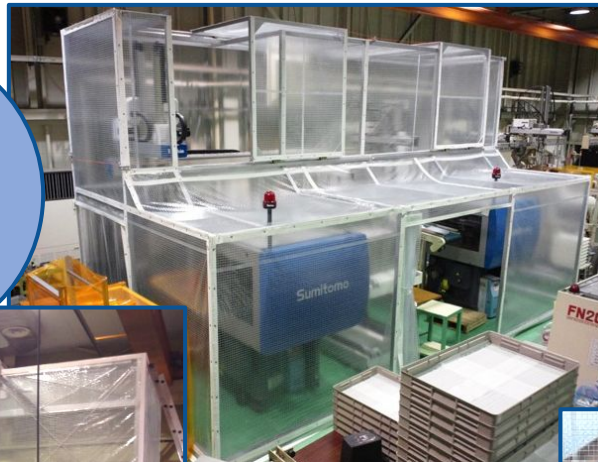
Exhaust fans and vent

Customer satisfaction is our top priority. Using our expertise, we propose the best possible solutions for your unique situations.

# Custom-made Vinyl Cleanroom

- **Custom-made** cleanroom tailored for your space and needs - It can cover partially within the facility, with customized shape and size.
- **High performance** - It offers the same high-quality air purification environment as the built-in cleanroom.
- **Compact and affordable** - It can create a high-performance cleanroom with minimal space, time and money.

Partial cleanroom within the facility



Small cleanroom for a portable wagon



A part of the factory was converted into a cleanroom to protect products from the floating particles, such as metal grinding dust and mist. The quality of the products has been improved.



# Custom-made Vinyl Cleanroom

4-story high  
cleanroom  
for a satellite  
ordered by  
JAXA



Expanded



Retracted

## Large cleanroom for a satellite

Partially destroyed by the earthquake, the existing facility could no longer function as a cleanroom. As the schedule for launching an artificial satellite was set several years in advance, restarting operations was an urgent matter. We completed the construction of a large cleanroom in a short period of 1.5 months, achieved a cleanliness class that exceeded the requirements, and were able to contribute to the satellite launch, which was later awarded by JAXA.

## Movable cleanroom

When transporting satellites within a factory, it was necessary to maintain the clean environment. To solve this issue, we created this movable cleanroom large enough to accommodate a satellite (7x7x10m), which is retractable when not in use and has achieved cleanliness class 10,000.

# Portable Cleanroom 'TSUBAME AIR CLEAN'

## TSUBAME AIR CLEAN TENT

### Following CDC guideline

- Vent through HEPA filter
- More than 12 ventilation / hour
- Pressure difference  $\geq 2.5\text{Pa}$

### Durable membrane (F-06032)

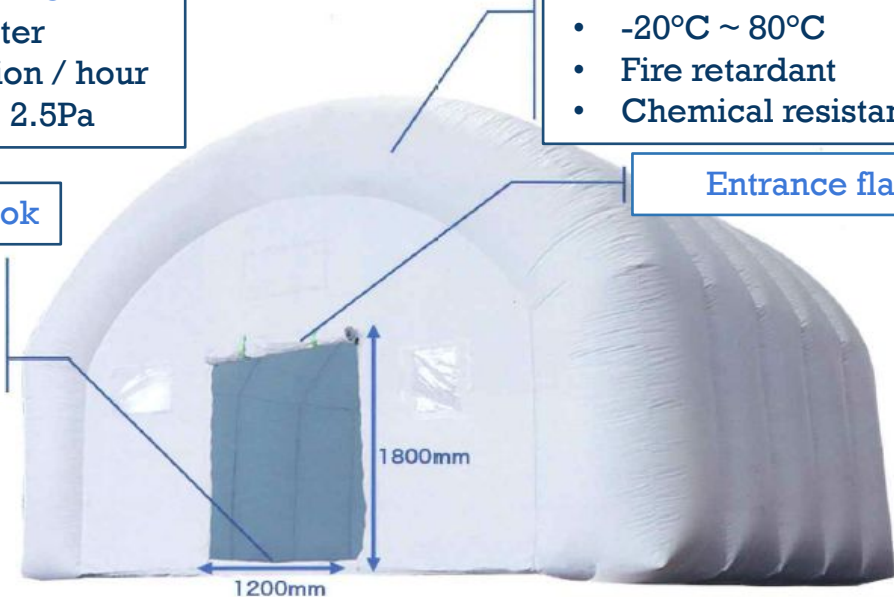
- $-20^{\circ}\text{C} \sim 80^{\circ}\text{C}$
- Fire retardant
- Chemical resistant

With a lamp hanging hook

### Entrance width: 120cm

- Wide enough for a wheelchair

Electrical outlet  
(up to 1300 W)  
within a tent



- Portable positive/negative pressure tent, inflatable with electric air pump, with 'high efficiency particulate air (HEPA) filter'
- HEPA filter - can remove more than 99.9% of dust, pollen, mold, bacteria, virus, and any airborne particles with a size of 0.1 microns ( $\mu\text{m}$ )
- Usages: Field hospital, testing clinic, patient isolation, evacuation shelter

### TENT

Structure	Double membrane
Material	Polyester with PVC film coating
Color	White/silver
Tensile strength	508 N/3cm with closed shelter
Wind pressure resistance	9.8 Kpa
Hanging load	Less than 10kg
Other features	Electric air pump: 100 V, 40 W (57 VA), can inflate in 10-15 min

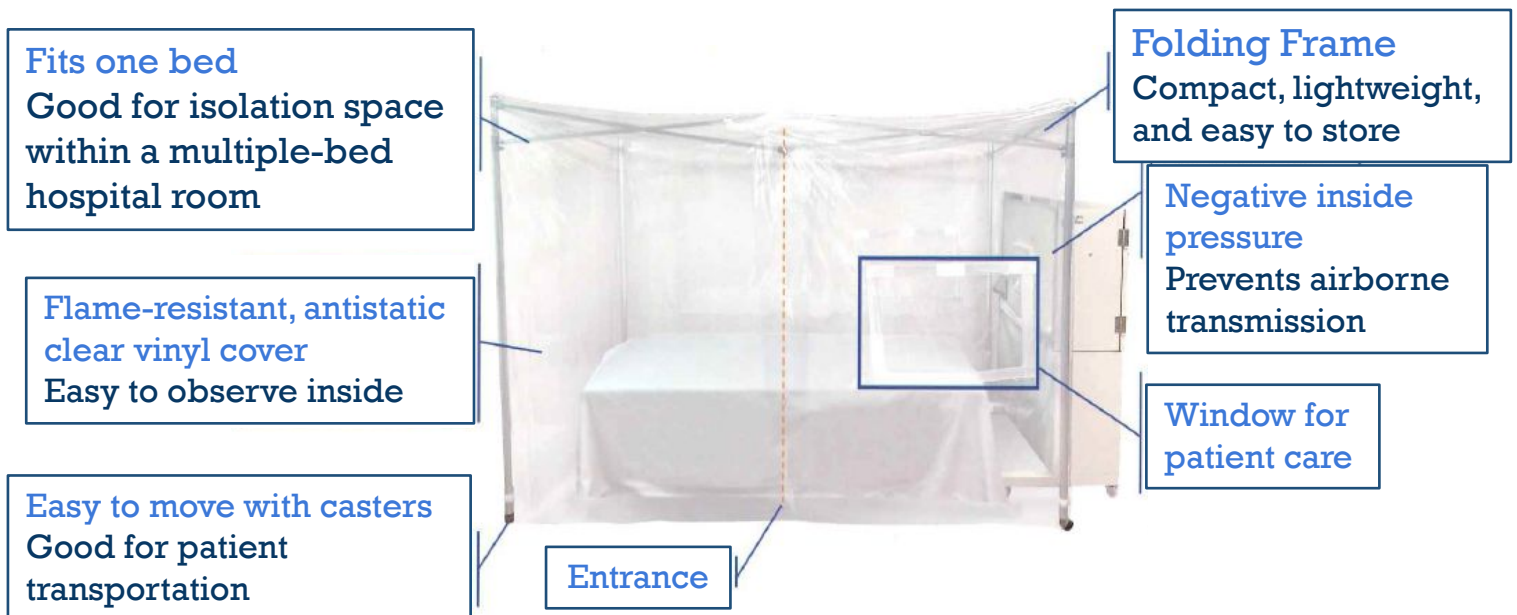


# Portable Cleanroom 'TSUBAME AIR CLEAN'

## HEPA FILTERING SYSTEM

Structure	Bactericidal HEPA air filter (TACT001-OX, waterproof)
Function	Positive/negative pressure
Filter efficiency	99.9% removal of particles with a size of 0.1 $\mu\text{m}$ with 17 $\text{m}^3/\text{min}$ flow
Power consumption	100 V, 155 W (221 VA)
Air flow/Static pressure	Maximum air flow 23 $\text{m}^3/\text{min}$ , maximum static pressure 815 pa
Other features	An electrical outlet (up to 1300 W)

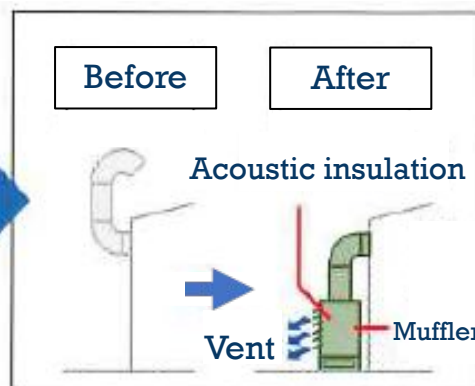
## TSUBAME AIR CLEAN ROOM



- Portable positive/negative pressure unit and folding clear vinyl cover with casters
- Usages: Isolation space within the room, transportation of patients

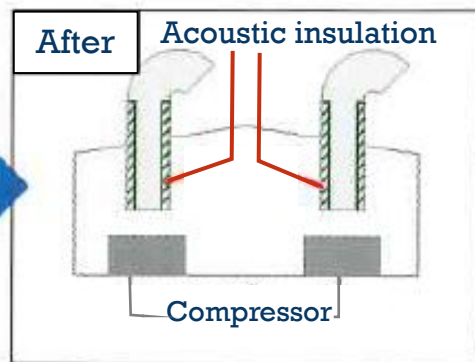
# Consultation for Industrial Noise Compliance and Maintenance

We offer inspection and consultation for industrial noise compliance . We provide the right solutions for your facility with expert sound level management.



## Noise issues of the dust collector

The placement of a muffler and acoustic insulation reduced exhaust noise by more than 15 dB at the source (80dB), and by more than 10 dB at the exhaust vent.



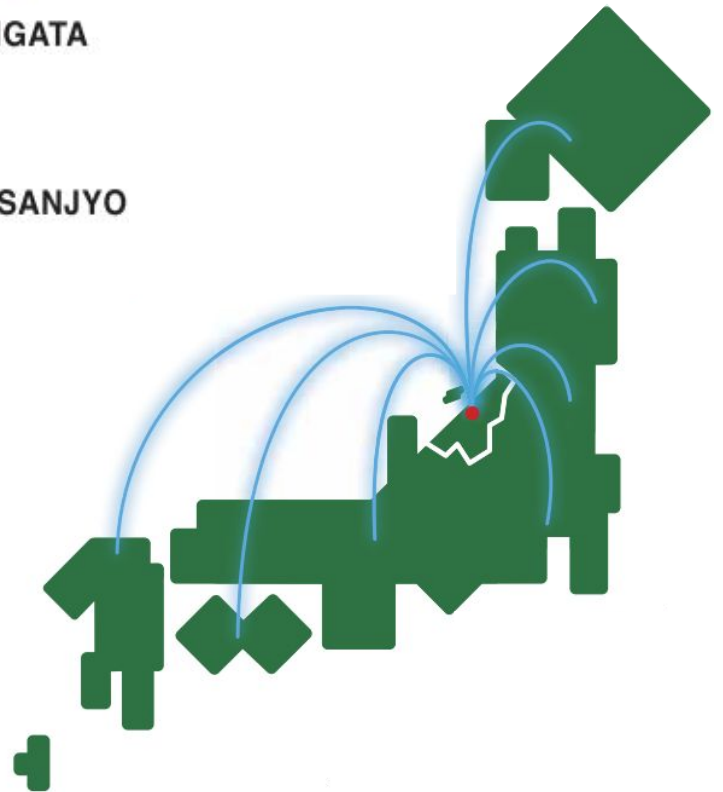
## Noise issues of the fans in the compressor room

Acoustic insulation placed within the exhaust ducts reduced noise by more than 20 dB at the source (91dB), and by more than 10 dB at the exhaust port.

We conduct inspections and maintenance and help prepare documentation.



# Inquiries



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- We are open to any questions and commissions. Feel free to contact us.
- We offer on-site inspection and consultation for free, anywhere within the country!





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