

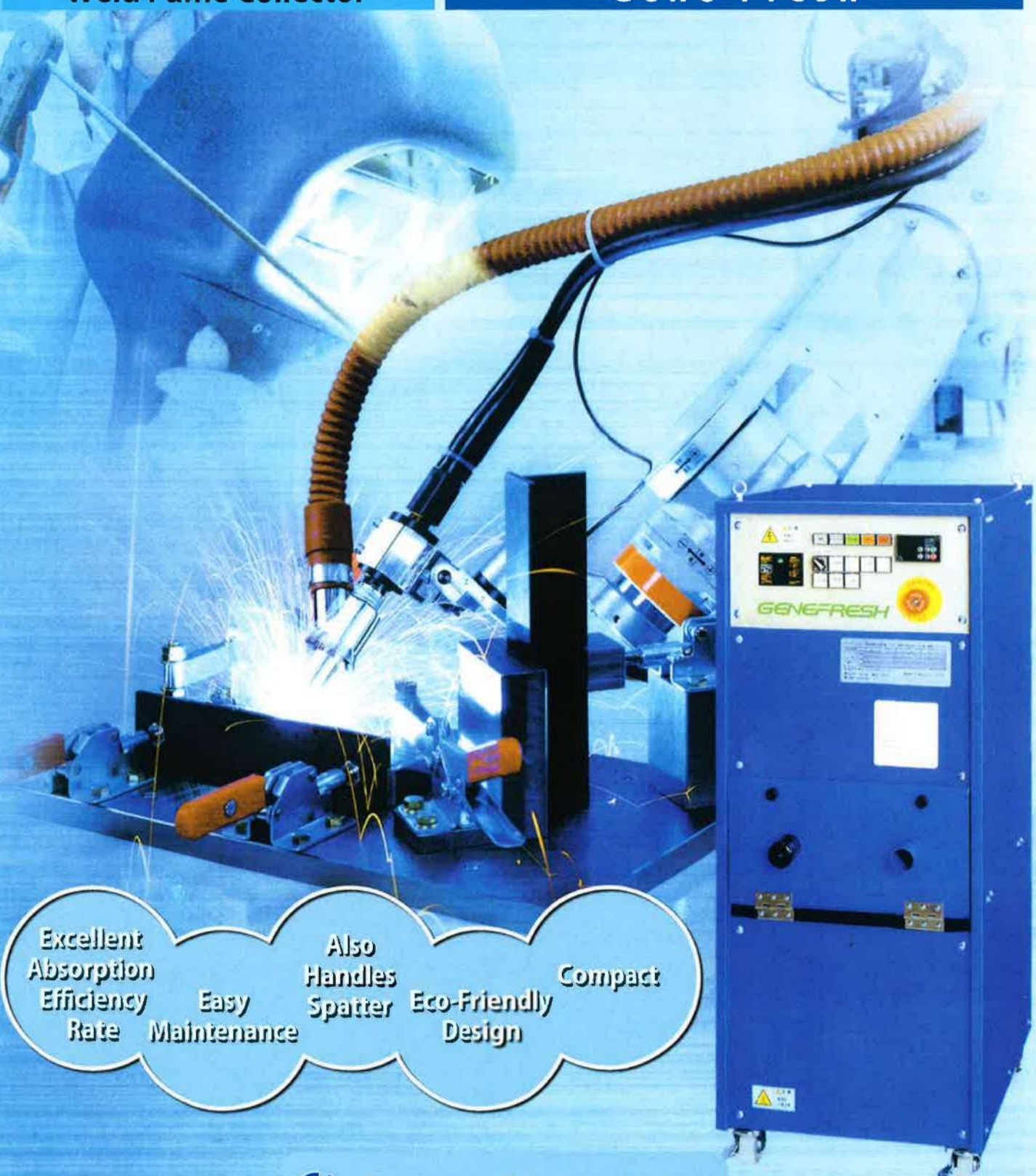
Counteraction at the Source

Highly efficient weld fume absorption.  
Perfect for welding robots.

# GENEFRESH

Weld Fume Collector

Gene Fresh



Excellent  
Absorption  
Efficiency  
Rate

Easy  
Maintenance

Also  
Handles  
Spatter

Eco-Friendly  
Design

Compact



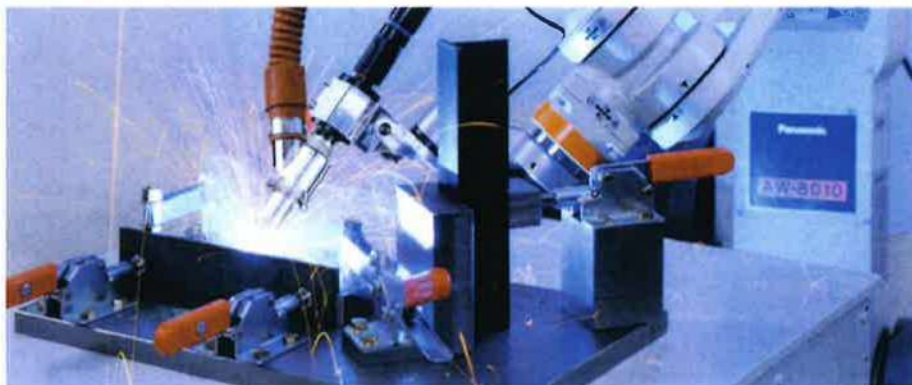
Matsumoto Industry Co. Ltd.



# Protects your workshop from dirt and keeps air quality from worsening. Effective at improving welding work environment.

## Absorption of Harmful Welding Fumes

Gene Fresh improves the air quality of your welding work environment by preventing the spread of welding fumes and absorbs them at the source. Especially in work environments where the amount of robot welding has increased, the air quality declines quite significantly. This is even more so for workshops where welding fumes have accumulated and blackened the surroundings. Gene Fresh is also effective at improving the work environment in these types of places.



## Your Workshop Will Not Get Dirty

Since welding fumes are absorbed at close proximity before they spread throughout the workshop, your workplace will not get dirty. Do you ever sometimes feel that your workshop looks smoky due to the spread of fumes or that your work platforms, machines, and floors look dirty due to the accumulation of dust? Not allowing the spread of welding fumes not only protects the health of your workers, but also keeps your workshop from getting dirty. By keeping your work place clean, you can introduce visitors to your work place via inspections and expect to contribute to the health and stability of your workers. Lastly, Gene Fresh is also useful for preventing the influence of welding dust on your equipment. You can expect to see results in quality control and production as well.

### For Welding Robots



Intake Nozzle

Welding fumes are sucked up through the intake nozzle which is attached to the welding torch. The fumes are engulfed as soon as they are generated and will not spread throughout your workplace.

#### ● Mechanical Structure

##### Main Unit

TVKC-01/02/03/04

\*The number of intake ducts depends on the length of the connector hose.

##### Connector Hose

TVKH-05/10

##### Intake Nozzle

TVKT-01/02/03/04, other

##### Silicon Hose (Optional)

TVKX-31

\*Please use the silicon hose when attaching the nozzle to welding robots.



### For Handheld Welding



Intake Welding Mask

Welding fumes are absorbed through a duct in the forehead portion of the welding mask. Rising fumes are then able to be absorbed effectively.

#### ● Mechanical Structure

##### Main Unit

TVKC-02/04

\* Please use the high wind TVKC-02/04 model when using the intake welding mask.

##### Connector Hose

TVKH-05/10

##### Intake Welding Mask

TVKM-01





Gene Fresh is a dust collector that is a combination of a specialized intake nozzle and intake welding mask that collect and absorb welding fumes effectively at the source. Through an impact plate and a pre-filter, spatter and big dust particles are absorbed and over 99% of the remaining fumes are captured via the main filter. Fumes that have accumulated or attached to the surface of the main filter are automatically cleared away via a reverse cleaning system (a cleaning system that sweeps away fumes attached to the filter via compressed air) and are collected in a tray below the filter. Operation can be done manually or set up to be coupled together with a welding machine and to work automatically.



## Merit 1: Compact

There are four separate specifications of "Gene Fresh," but all of them have a width of 430 mm, a depth of 550 mm, and a height of 1080 mm. The main unit stands up vertically, so it can be set up in a small, space-saving place. In regard to its weight, the heaviest, with its monocoque structure, can weigh up to 86 kg and lighter versions are also implemented.

## Merit 2: Selectable Intake Features

As for absorption methods, there are 2 types available. You can choose either to connect an intake nozzle to a welding torch and/or to the welding mask. The main unit itself has two ducts.

## Merit 3: Eco-Friendly

Gene Fresh is inverter controlled so that suitable airflow is maintained which makes it economical.

## Merit 4: Easy Clean-Up

Fumes and dust that have accumulated in the filter are automatically cleared away by its reverse cleaning system.

## Merit 5: Low-Cost

Compared to previous products it is implemented at a lower cost.

### Main Unit



**[TVKC-01/02/03/04]**

\*Please view the back of the catalogue for the main unit's specifications.

### Connector Hose



- 5m  
[TVKH-05]
- 10m  
[TVKH-10]

### Intake Welding Mask



**[TVKM-01]**  
Light Hose 2m (Included)

### Intake Nozzle



- Fixed Type  
Attachment diameter 18.5φ  
[TVKT-01]  
Attachment diameter 20.0φ  
[TVKT-02]
- Rotational Type  
Attachment diameter 18.5φ  
[TVKT-03]  
Attachment diameter 20.0φ  
[TVKT-04]

2m Light Hose Included

- We can also make specialized nozzles for use with welding robots, work aspects, welding locations, etc. according to your needs.

\*Connector hose, intake welding mask, and intake nozzle are sold separately. To use Gene Fresh, in addition to the main unit and connector hose, you will need the intake welding mask and/or intake nozzle. At the time of purchase, please choose the combination that meets your needs.

## Specifications

Model	TVKC-01	TVKC-02	TVKC-03	TVKC-04	
Use Environment	Indoor				
Operation Switch Specifications	Standard	Standard	High-grade*	High-grade*	
Power Source	3-Phase AC 200V, 50/60Hz				
Modes of Operation	External input, interlocking and automation, as well as manual				
Fan	Maximum Output	0.85kW	1.9kW	0.85kW	1.9kW
	Maximum Discharge Pressure	-14.1kPa	-19.6kPa	-14.1kPa	-19.6kPa
	Maximum Air Capacity	2.5m <sup>3</sup> /min	4.0m <sup>3</sup> /min	2.5m <sup>3</sup> /min	4.0m <sup>3</sup> /min
Main Filter	Type	Compact Cartridge			
	Material	P.T.F.E Multi-pore laminate			
	Filter Area	1.6m <sup>2</sup>			
	Filter Efficiency	0.3 μ m, 99.94% Capture			
Spatter Extinguishing Method	Impact Plate and Pre-filter				
Filter Cleaning Method	Pulse Air/Blow Type (Reverse Cleaning System)				
Fume Tray Capacity	4.5L				
Number of Ducts	2 Ducts				
Main Unit Measurements (mm)	Width 430mm x Depth 550mm x Height 1080mm				
Mass (kg)	72	84	73	86	

\*High-grade: Equipment. An emergency stop button that isolates the circuit in the event of a fire during use, other instances, etc.

## Options

### ● Clamp Sensor

For use when interlocking with automatic welding machines.  
Easy to connect electrical signals from welders.

AC Use  
【TVKX-01】  
DC Use  
【TVKX-02】

### ● Mist Separator

Used to prevent filter deterioration and eliminate dust and moisture from the air used by the reverse cleaning system.

【TVKX-11】

### ● Hose Protector

For use when resistance to heat or melting is necessary. It may also be attached to the intake nozzle and intake welding mask when using the light hose.

【TVKX-21】

### ● Silicon Hose

For use with the intake nozzle when work conditions require resistance to heat or melting.

【TVKX-31】

### ● Metal Connector

For easy connection of electrical signal between robots, welding machines, etc.

【TVKX-41】



# Matsumoto Industry Co. Ltd.

Osu 1-44, Minato-ku, Nagoya City, 455-0801  
Tel.052.384.1731, Fax.052.384.1732  
Email: m-matsumoto@matsu-kou.jp

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Please note that the specifications of the products published in this catalogue as well as their appearance may be improved or modified without notice.

## Inquiries