

Business

Designing, manufacturing, and selling VOC treatment apparatus and systems
Using adsorbent such as activated carbon fibers and zeolite honeycombs.

Toyobo MC has pioneered the practical application of VOC treatment apparatus and systems using its own developed adsorbent (Activated carbon fiber, Zeolite honeycomb) to the world.

Over 1,500 units of VOC treatment apparatus were delivered in 40 years. It is widely used across various industries, contributing to the improvements in working environments, environmental conservation, and resource efficiency.



The purpose of VOC treatment apparatus and systems installation

1. Environmental protection and compliance with regulations

Reduction of greenhouse gas emissions through the decrease in VOC concentrations(levels) in air and wastewater

2. Reduction of manufacturing costs by effective (cyclical) use of resources

Recovery of VOCs (solvents) → reuse (recycling)

3. Sustainable development

SDGs, ESG investment, PRTR system, carbon neutral



Business

The world's only solution provider system

Toyobo MC is the world's only environmental apparatus manufacturer that consistently conducts the development VOC adsorbents, as well as the production of apparatus and systems.

We provide environmental solutions by thoroughly understanding customer problems (gas analysis and measurement), manufacturing optimal apparatus for development and design. We also provide installation and maintenance services with the cooperation of the Toyobo Group.

Affiliated company

● Construction and maintenance of air and water pollution control equipment

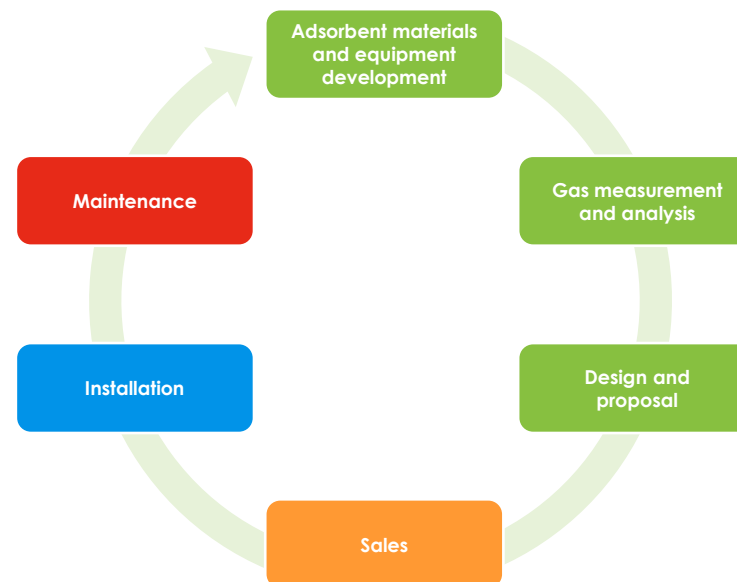
Toyobo Techno Service Co., Ltd.
5-3, Sonezakishinchi 2-chome, Kita-ku, Osaka 530-0002, Japan
TEL :06-6348-4181

● Construction and management of related works for air and water pollution control equipment

[Toyobo Engineering Co., Ltd.](#)
1- 16, Dojima 2-chome, Kita-ku, Osaka 530 0003, Japan
TEL. (06)6348-3935

● Manufacture, sales and construction of air conditioning filters

[TOYOBO KANKYO TECHNO CO., LTD.](#)
〒541-0056 2-4- 27 TF Building, Sakaisuji-Honmachi, Chuo-ku, Osaka
TEL. (06)6266-3121



Business

History

Year	Recruitment and Awards
1975	Launch of K-FILTER ◦ VOC Recovery Apparatus
1976	Launch of HONEYROTOR ◦ VOC Concentration Apparatus
1978	K-FILTER ◦ Wins Society of Textiles' Technology Award
1980	K-FILTER ◦ VOC Recovery Equipment Wins Chemical Engineering Society's Technology Award
1981	K-FILTER ◦ VOC Recovery Equipment Wins Environment Agency Environmental Award for Excellence
1981	K-FILTER ◦ VOC Recovery Equipment Wins Chemical Plant Award for Excellent Product
1982	K-FILTER ◦ VOC Recovery Equipment Wins Vaaler Prize (U.S.A.)
1982	K-FILTER ◦ VOC Recovery Equipment Wins Five Star Prize (U.S.A.)
1996	Start of sales of "K-MATROLL ◦ VOC deodorization Apparatus"
2001	"Zeolite honeycomb for HONEYROTOR ◦ VOC concentration apparatus" won the Japan Adsorption Society's' Technology Award '.
2006	"Zeolite honeycomb for HONEYROTOR ◦ VOC concentration apparatus" won the Osaka Institute of Technology's' Industrial Technology Award '.
2009	Launched sales of "K-FILTER ◦ VOC wastewater treatment apparatus."
2010	Launched sales of "solvent dehydration apparatus."
2012	K-FILTER ◦ VOC Wastewater Treatment Apparatus Wins Kinki Chemical Association 'Environmental Technology Award'
2013	Nitrogen Desorption K-FILTER ◦ VOC Recovery Apparatus Launched
2014	K-MATROLL ◦ VOC Concentration apparatus Launched
2019	Nitrogen Desorption K-FILTER ◦ VOC Recovery Apparatus Wins Kinki Chemical Association Environmental Technology Award
2020	Launch of HOLLOSEP MINI ◦
2020	Launch of "K-FILTER BLOCK ◦"

Frequently Asked Questions

Introduction of Apparatus

What are the advantages of recovering organic solvents?

If we can recover and reuse organic solvents, we can reduce the amount of newly purchased organic solvents. Compared to other methods, this also has the potential to reduce CO2 emissions.

We would like to install K-FILTER . but there is no water vapor on site. What should we do?

It is also possible to propose a small boiler that can supply the steam needed to operate the apparatus. Alternatively, we have the apparatus using nitrogen (N2) desorption method.

There is no space for installing the apparatus. What should we do?

We can accommodate various situations, such as installing on the roof of the factory or on a platform, depending on the customer's needs.

We don't know what countermeasures to take because we haven't been able to monitor the exhaust gas.

We can examine the airflow, temperature, composition and concentration of exhaust gases. Based on those information, we can suggest the best countermeasures for your situation.

We have already equipments from another company and would like to update it.

Please consult us. We will conduct interviews and assess the current situation. We will suggest the best apparatus system to meet your needs, including product compatibility and system modifications.

What items are required for the estimate?

If you could provide us with the temperature (and humidity in the case of gases), processing volume, concentration, and desired treatment efficiency of your company exhaust gas (or wastewater), we would be able to propose an apparatus system and provide the quotation.

Can we check the actual status of the treatment?

You can check the status of the simulated gas test at our Laboratories. We can also bring the test machine to your designated place and check the status of the actual gas treatment.

Can you treat substances not listed on the website?

We have been testing and researching many substances to build up our knowledge and results. For substances for which we do not have knowledge, we can conduct tests at our laboratory and make a decision on their indications.

We don't know the condition of exhaust gas (drainage), what should I do?

It is possible to understand the exhaust gas condition by hearing from your company staff and conducting on-site measurement. Based on the obtained results, we will design and propose an optimal apparatus system.

Frequently Asked Questions

About Maintenance

Is there a warranty period?

Each apparatus and system has its own warranty period. Please contact our staff.

Is there a maintenance system? Do you have a maintenance company?

Toyobo Techno Service Co., Ltd. offer maintenance service of the apparatus we supplied.

How about aftercare?

We will regularly contact with customers and ask questions, requests, maintenance, etc. Our company staff will promptly respond to them.

Frequently Asked Questions

About Product Information

I want to purify water.

Please consider our K-FILTER[®] VOC wastewater treatment apparatus.

It can remove VOCs such as 1,4-dioxane from groundwater and well water, and can remove VOCs from industrial wastewater.

I would like to recover the solvent and recycle it.

We have several lineup of K-FILTER[®] VOC recovery apparatus, nitrogen desorption type K-FILTER[®] VOC recovery apparatus, HONEYROTOR[®] VOC concentration apparatus + recovery system, etc., depending on customer's needs. Please take a look at our company website and consider it.

We will make the best system proposal according to your request.

Which is the cheapest apparatus?

We have a K-MATROLL[®] VOC deodorizer suitable for relatively small air volumes.

This apparatus adsorbs and concentrates VOCs in exhaust gas and economically oxidizes and decomposes (deodorizes) them.

It contributes to environmental improvement by deodorizing local exhaust gases such as printing, coating, painting and parts cleaning, as well as exhaust gases from laboratories.