

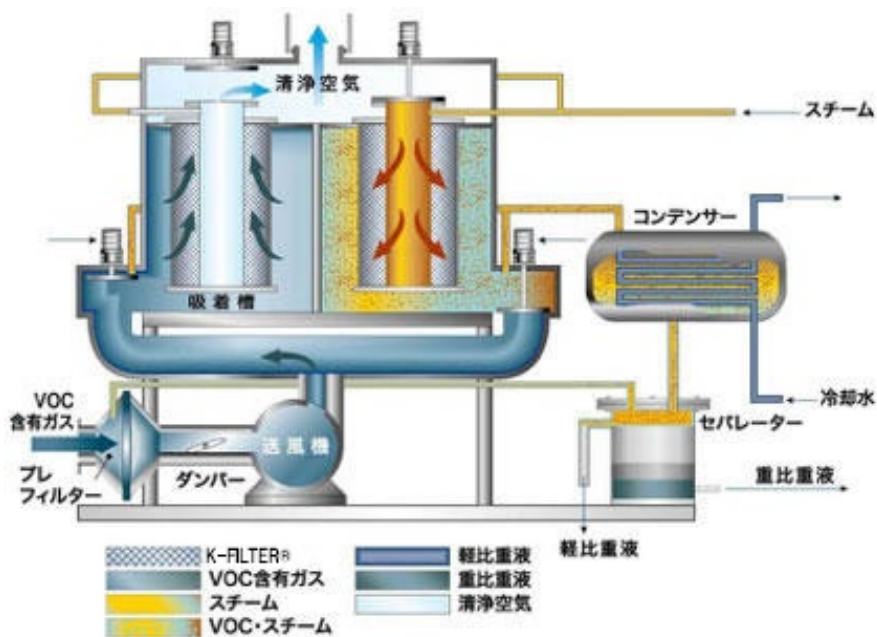
K-FILTER[®] VOC recovery apparatus

What is K-FILTER[®]?

K-FILTER[®] is our original activated carbon fiber that was successfully industrialized for the first time in the world in 1974. It is a highly functional adsorbent with a faster adsorption rate and fewer impurities than granular activated carbon.

K-FILTER[®] What is VOC recovery apparatus?

This VOC recovery apparatus using K-FILTER[®] can recover VOCs such as methylene chloride (lithium battery separator process, etc.) and ethyl acetate (Dry Lamination, Adhesion Process, etc.) with high efficiency and purity. In addition, K-FILTER[®] VOC recovery apparatus has been adopted when updating the aged granular activated carbon equipment because quality of recovered solvent is better than recovery system with granular activated carbon.



This apparatus can recover high-quality solvents with low pyrolysis components from exhaust gas containing VOCs.

With over 1,500 units and 40 years of experience, we can meet your needs.

K-FILTER[®] VOC recovery apparatus

1 Excellent VOC removal performance

The excellent adsorption and desorption characteristics (high adsorption/desorption capacity and adsorption/desorption speed) of K-FILTER[®] enable higher removal performance and reduced emission concentration compared to conventional granular activated carbon.

2 High-quality solvent recovery

The K-FILTER[®] VOC recovery apparatus, which brings out the excellent adsorption and desorption characteristics of K-FILTER[®], reduces the thermal decomposition of solvents during desorption and recovers high-quality solvents. The recovered solvents are reused in many fields.

3 Lightweight, Compact, Flexible

The excellent adsorption and desorption performance of K-FILTER[®] enables lightweight and compact. We offer a wide range of unitized functions and flexibly propose apparatus that meets your needs.

4 Excellent Safety

The apparatus is designed for normal pressure use. Less heat storage of VOC adsorption heat and superior safety.

5 Adaptable to various gas treatments

In addition to general VOC gases, it is also possible to remove and recover polymerizable monomers (styrene, vinyl acetate, vinyl chloride, etc.) as well as VOC in industrial gases (carbon dioxide gas, hydrogen gas, and hydrogen chloride).

processing performance example

Recovery and removal (deodorization)

Industry	Gas Conditions			Processing Performance	
	Subject Substance	Air Volume (m3/min)	Concentration (ppm)※	emission concentration (ppm)※	removal rate (%)
Pharmaceutical	Methylene chloride	20	9,900	16	99.8
	toluene	40	2,080	2	99.8
chemistry	benzene and others	60	2,760	6	99.8
	styrene monomer	480	100	1	99.0
	perchloroethylene	960	2,600	6	99.8
Semiconductors and liquid crystals	IPA, MEA, etc.	50	650	3	99.5
	Butyl acetate, etc.	60	700	5	99.3
	IPA et al.	120	380	5	98.7
	IPA, MEA et al.	280	60	1	98.4
Food and Fermentation	Ethanol	50	840	10	99.8
Wash	Trichloroethylene	390	2,300	3	99.9

Other

Industry	Processing Conditions			Processing Performance	
	Subject Substance	air volume (m3/min)	concentration (ppm)※	emission concentration (ppm)※	removal rate (%)
chemistry	impurities in hydrogen chloride	10	1,200	3	99.8
	vinyl chloride monomer	280	1,530	7	99.5

*Concentration is the methane CH4 value

K-FILTER[®] VOC recovery apparatus



Type : 2UG-12

Type	Processing airflow (m3/min)	Dimensions (m)			Accumulated weight (ton)
		L	W	H	
2R-2	10	1.9	1.3	2.3	0.9
2RG-2	25	2.5	1.3	3.2	1.5
2UG-4	50	3.0	1.9	3.5	2.2
2RS-2	60	3.2	2.1	5.2	3.5
2RG-6	75	3.5	2.4	3.7	2.9
2UG-8	100	4.0	2.5	4.0	3.6
2US-4	120	3.4	2.4	5.3	5.0
2UG-12	150	4.0	3.0	4.2	5.2
2RS-6	180	5.0	2.7	5.5	8.2
2US-8	240	5.5	2.6	5.7	11.5
2US-12	360	5.5	3.8	5.8	12.9
3UG-6	50	4.6	2.5	4.0	3.4
3UG-12	100	5.3	3.0	4.3	5.3
3US-6	120	5.4	3.1	5.3	7.6
3UG-18	150	6.0	4.0	4.4	8.2
3RS-9	180	7.0	3.5	5.6	12.5
3UL-18	800	8.9	9.3	10.3	40.0
4UL-36	1000	10.0	19.0	13.0	60.0
5UL-45	1500	15.0	23.0	13.0	80.0