

Your one-source partner for comprehensive VOC solutions



Control VOC emissions for a healthier environment



Volatile Organic Compounds (VOCs) are harmful by-products emitted during industrial processes involving chemicals, solvents, alcohols, and petroleum-based products like gasoline. These pollutants easily vaporize at room temperature and, when released into the atmosphere, combine with nitrous oxides (NOx) in the presence of sunlight and heat to form ground-level ozone.

Why VOC abatement is essential

VOC abatement is critical for industries that emit volatile organic compounds (VOCs). It helps businesses comply with environmental regulations, reduce emissions, and safeguard both people and the planet. Efficient VOC abatement supports sustainability goals and protects your license to operate.

Your total VOC abatement partner

Together, Munters and Airprotech, a proud and fully owned part of Munters, offer a complete range of VOC abatement systems and services tailored to your specific application. With advanced technologies and decades of experience, we provide reliable, energy-efficient solutions backed by expert service and support – ensuring long-term performance and peace of mind.

Solutions for every application

Concentrator/Oxidizer system: For high-volume, low-concentration VOC emissions, our integrated system concentrates pollutants, reducing air volume and energy consumption before final destruction in the oxidizer.

Oxidizer solution: For applications requiring direct VOC destruction, our thermal oxidizers offer fast, effective neutralization with high thermal recovery efficiency.

All systems are backed by comprehensive service and support throughout the lifecycle of your equipment. From commissioning and performance optimization to maintenance, upgrades, and genuine parts, our experts ensure continuous, reliable operation and maximum value from your investment.

Proven expertise in air treatment and pollution control

With over 60 years of experience, Munters has set the benchmark in air treatment and VOC abatement. Since launching our Zeolite Rotor Concentrators in 1986, we've led the industry with energy-efficient, low-maintenance technologies trusted worldwide. Airprotech complements this with 30 years of experience in thermal oxidation systems – including regenerative, recuperative, and direct oxidizers – ensuring high-performance pollutant destruction across a wide range of industrial processes.



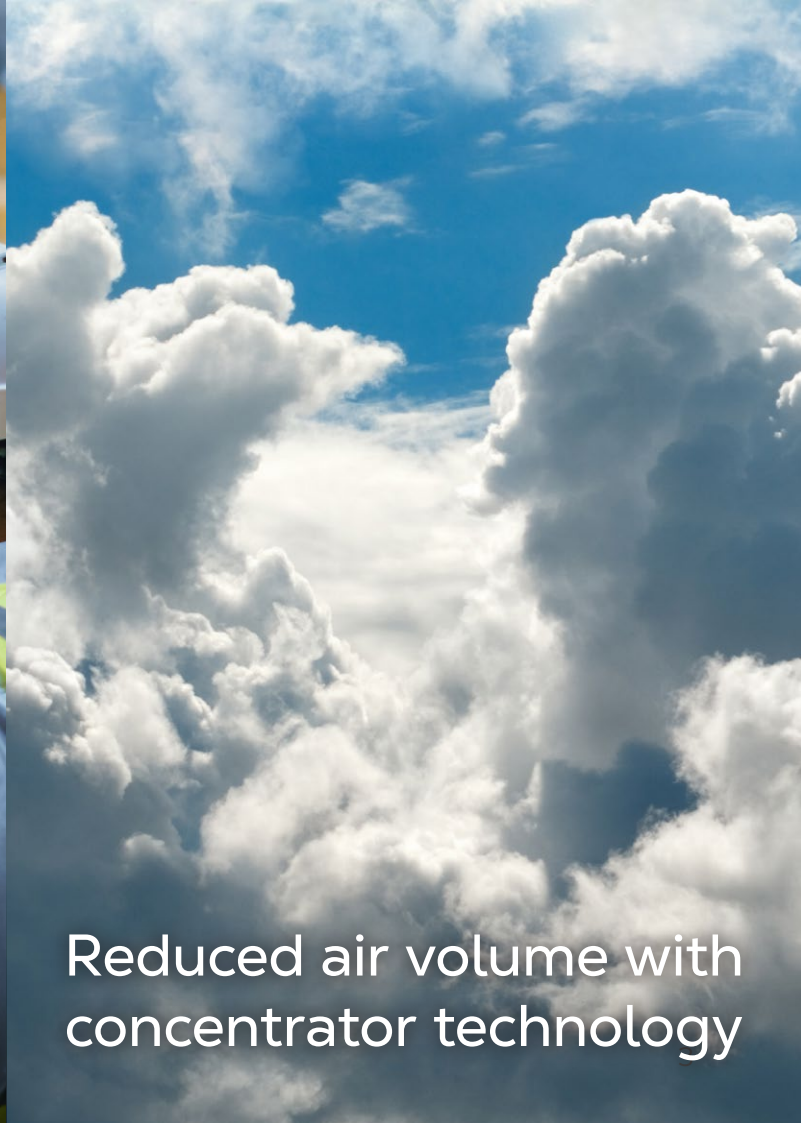
Complete solutions for
all VOC applications



High-efficiency oxidation
for low fuel use



The only manufacturer
with both technologies



Reduced air volume with
concentrator technology

Munters and Airprotech advanced VOC abatement technology



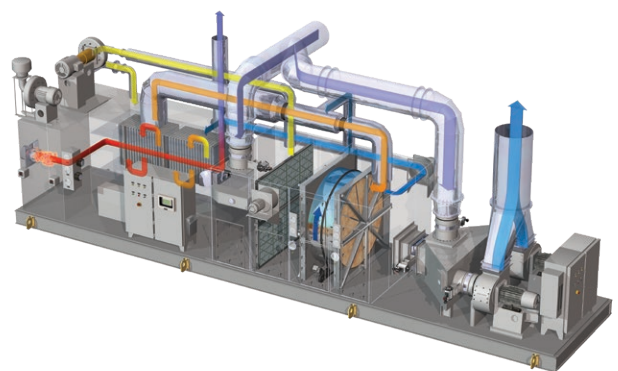
Munters and Airprotech provide the industry's most comprehensive VOC abatement solutions, tailored to diverse industrial needs. With our innovative technology, we offer two effective options to manage and neutralize VOC emissions.

Concentrator/Oxidizer system:

For high-volume, low-concentration VOC applications where VOC concentrations are below $1\text{g}/\text{Nm}^3$, our integrated concentrator/oxidizer system is ideal. Munters Zeolite Rotor Concentrators use a unique mix of hydrophobic zeolites with varying pore sizes to capture a wide range of organic solvents.

As VOC-laden air flows through the zeolite rotor, the molecular structure acts as a sieve, selectively capturing VOCs while allowing larger compounds to pass through. The captured VOCs are then desorbed using a heated air stream, concentrating them into a smaller airflow that's directed to an Airprotech Thermal Oxidizer.

In the oxidizer, VOCs are safely broken down through high-temperature combustion. Designed for exhaust streams with temperatures below 40°C , this efficient process not only ensures safe VOC destruction but also uses the heat generated by the VOCs themselves, significantly reducing overall energy consumption.

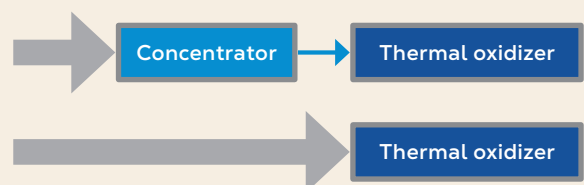


Concentrator/Oxidizer system

For high-volume, low-concentration VOCs ($1\text{g}/\text{Nm}^3$)

Oxidizer system

For applications that require direct VOC destruction.

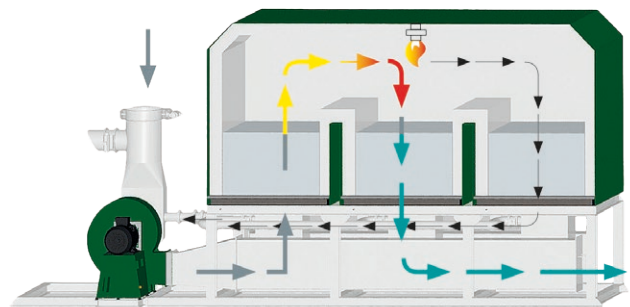


Oxidizer solution

For applications that require direct VOC destruction, Airprotech offers a complete range of thermal oxidizer solutions, including Regenerative Thermal Oxidizers, Recuperative Thermal Oxidizers, Direct Thermal Oxidizers, and Catalytic Oxidizers. These advanced abatement systems are designed to efficiently destroy pollutants through high-temperature oxidation, tailored to meet diverse industrial needs.

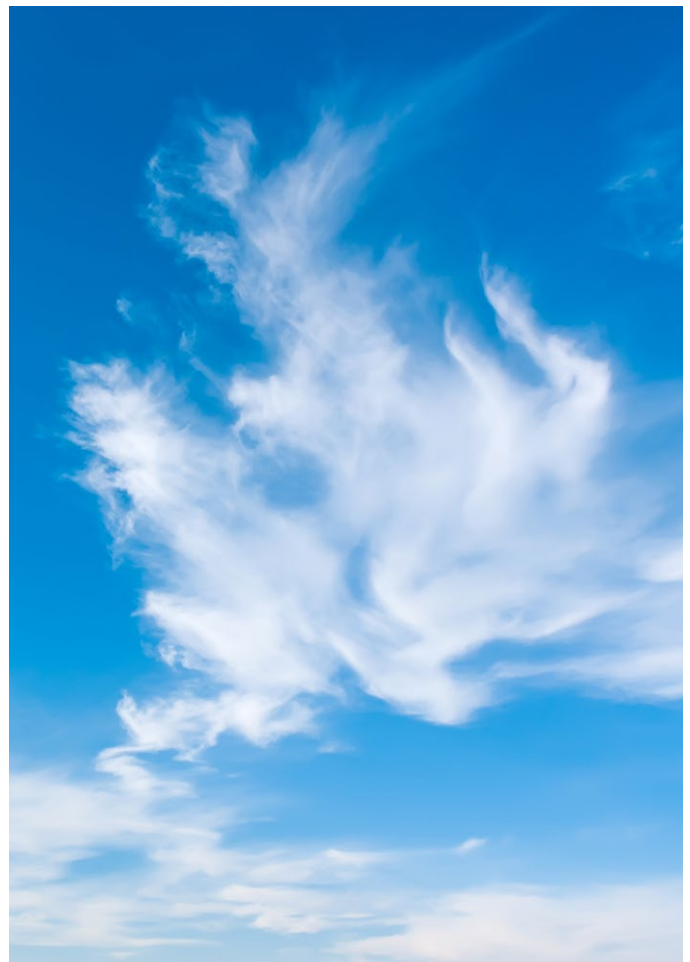
VOC-laden air flows directly to the oxidizer, where high-temperature combustion breaks down VOCs into harmless by-products. Regenerative Thermal Oxidizers provide high thermal recovery efficiencies of up to 96%, significantly reducing fuel consumption and operating costs. Recuperative and direct thermal oxidizers are optimized for specific process requirements, ensuring reliable VOC neutralization and energy-efficient performance.

This comprehensive offering makes Airprotech's oxidizers ideal for high-concentration or direct oxidation applications, delivering fast, effective VOC destruction with minimized fuel consumption.



Key benefits of Munters VOC abatement solutions:

- **Reduced energy usage**
The concentrator/oxidizer system minimizes energy requirements for oxidation by reducing the air volume treated, lowering fuel costs. The standalone oxidizer's thermal recovery design also optimizes fuel use for energy-efficient VOC destruction.
- **Low maintenance design**
Our VOC abatement systems are engineered for continuous, high-performance operation with minimal downtime and maintenance needs.
- **Scalable solutions**
From small manufacturing plants to large-scale industrial operations, our systems are designed to meet your specific needs.
- **Comprehensive compliance**
Both systems ensure businesses meet stringent environmental regulations, with destruction efficiencies reaching up to 99% for cleaner, safer emissions.



The complete VOC solution – only from Munters and Airprotech

Oxidizer solution:

Munters and Airprotech offer comprehensive VOC abatement solutions tailored to a wide range of industrial applications, ensuring compliance with environmental regulations and enhancing operational efficiency. No matter your application, Munters and Airprotech have a solution to meet your VOC abatement needs.



Packaging

VOC emissions from adhesives and coatings used in packaging processes are efficiently treated with our oxidizers. This ensures safe, compliant operations while maintaining cost efficiency.



Chemical and pharmaceutical production

In reactors or mixers, solvent use generates low VOC concentrations that benefit from pre-concentration. This advanced system enhances the abatement efficiency in these industries, where controlled conditions improve adsorption.



Printing

High-volume printing processes generate VOC emissions from inks and solvents. Airprotech oxidizers effectively manage these emissions, protecting air quality and ensuring compliance with environmental standards.



Rendering

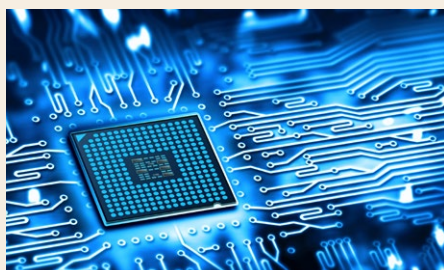
The rendering process emits significant VOCs. Our regenerative thermal oxidizers efficiently handle these emissions, ensuring pollutant destruction and environmental compliance.



Food processing

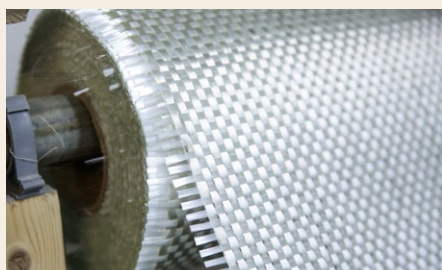
These industries generate high levels of VOCs and odors. The Airprotech oxidizer solution provides effective direct oxidation, maintaining a safe and complainant environment.

Concentrator/oxidizer system:



Semiconductor manufacturing

Processes such as photoresist drying emit VOCs from solvents. Our integrated concentrator/oxidizer system effectively concentrates these emissions before combustion, ensuring compliance with stringent air quality standards.



Fiberglass and composites production

The curing process in these industries emits VOCs that require direct oxidation for efficient VOC management, making the integrated concentrator/oxidizer system ideal for this application.



Automotive and industrial painting

Painting operations release low-concentration VOCs from solvents. Our concentrator/oxidizer system concentrates and oxidizes these emissions, ideal for controlled, low-temperature, and low-humidity environments in automotive and industrial painting applications.



Munters Service portfolio

At Munters, we are committed to offering a complete portfolio of service offerings to support you throughout the entire lifecycle of your Munters and Airprotech equipment.

Commissioning support

Our trained service technicians make sure your equipment is operating as designed so your investment gets the best possible start. We offer everything from basic unit start-up to extensive turnkey installations.

Maintenance

Keep your equipment running like new with on-site visits by factory-trained technicians and regular rotor performance checks.

Retrofit and upgrade

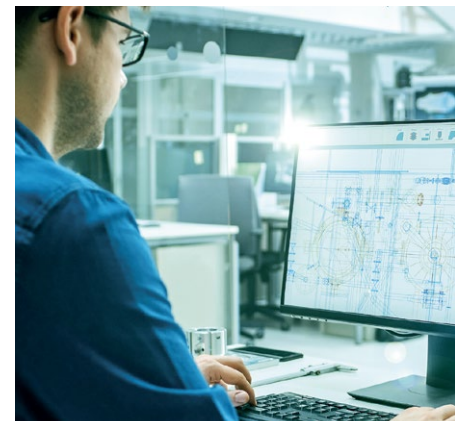
Retrofit your existing Munters climate control system with the latest technology to improve performance, increase energy efficiency, and reduce downtime. We can even eliminate fossil fuels from your process to meet your sustainability targets!

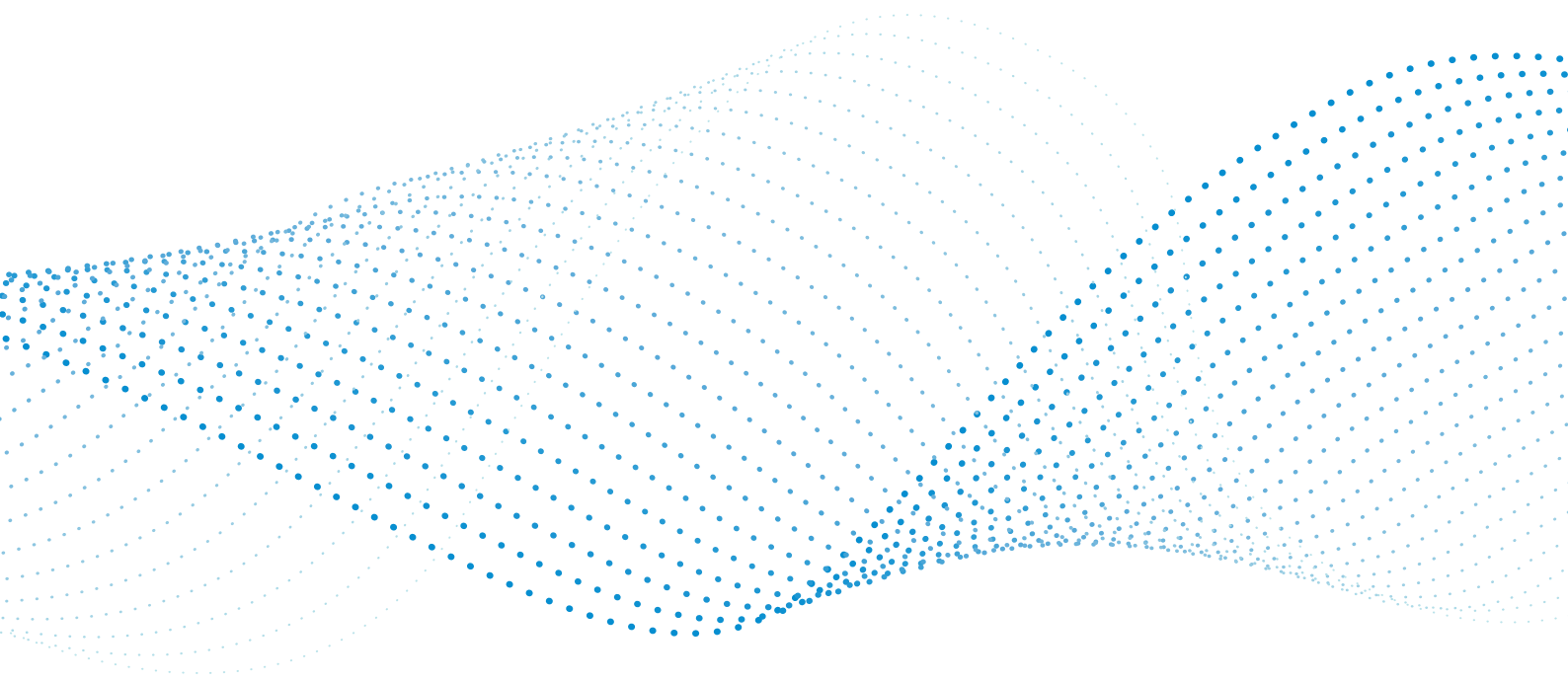
Service Agreements

Ensure that your equipment always performs according to specifications. Munters Service Agreements, tailored to your needs, offer industry-leading life-cycle care for your equipment – and peace of mind for yourself.

Genuine Parts

We use only Genuine Parts, which are designed, tested, and verified to ensure that each part meets or exceeds specifications. Convenient service kits are made to make maintenance simple.





Munters is a global leader in energy-efficient air treatment and climate solutions. Using innovative technologies, Munters creates the perfect climate for customers in a wide range of industries.

Munters has been defining the future of air treatment since 1955. Today, around 4,000 employees carry out manufacturing and sales in more than 30 countries.

Airprotech is a subsidiary of Munters and part of the Munters offering.

For more information, please visit www.munters.com