

Clean Air Solutions



Capability brochure

OVER 50 YEARS OF CLEAN AIR SOLUTIONS

In 1960, Sweden is about to start its nuclear program. Air filtration specialist Gösta Larson realizes that these new power plants need air filters of better quality than ever before. Using low quality air filters in a nuclear plant can quickly turn into a catastrophe. Gösta convinces the nuclear engineers to start using top quality filters and quickly wins a business contract. In 1963, he builds his first factory in Trosa, Sweden. Camfil is founded.

Today, with more than50 years of experience, Camfil delivers clean air solutions to customers and local markets all over the world. With high quality products, we are contributing to something that is essential to everyone – clean air for health, performance and well-being.





FILTERS FOR EVERY NEED

Comfort

- Comfort Ventilation
- Schools
- Offices
- Museums
- Airports

Clean processes

- Life Science
- Food
- Microelectronics
- Hospitals

Power systems

- Power Generation
- Compressors
- Oil & Gas

Air pollution control

- Mining
- Metal Working
- Life Science/Pharmaceutical Oral Solid Dosage

Containment

- Biosafety Labs
- Nuclear
- Chem/Bio Protection
- Healthcare

Industrial

- Warehouses
- Petrochemical
- Foam Industry
- Pulp & Paper

CAMFIL AROUND THE WORLD

With more than 3,400 employees, Camfil can serve you with sales offices, production units, R&D and customer agents all over the world.

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Europe

Almost every country in Europe is extensively served with sales companies, production units and local agents. Camfil is headquartered in Sweden, with state-of-the-art facilities for both R&D and manufacturing.



CAMFIL HEAD OFFICE

SALES OFFICE

AGENT

PRODUCTION UNIT (INCLUDES SALES)

With seven production units and 14 branches, we provide excellent coverage across North and South America.

Other Regions

Production and sales are represented in Brazil, as well as a sales company in Dubai, to serve customers with filtration solutions. Local agents are distributed across Africa, handled by Camfil International AB.

Asia/Pacific





Technical expertise at your service

Camfil continuously invests in R&D because it maximizes value for customers and is a very important factor for the growth and future development of air filtration. In Trosa, Sweden, our new Tech Center was opened in 2012. Here, chemists, technicians and engineers work with the latest equipment in molecular labs, IAQ labs and process development workshops to deepen our knowledge about air filtration, dust collection and much more. The Trosa Tech Center is the main innovation hub in a network of R&D facilities around the world.

Clean air is a human right

Working for a sustainable future is important to us. One example is our work to increase public awareness of air pollution and put Indoor Air Quality (IAQ) on the political agenda. For this reason we have invested in an IAQ Road Show, a unique 13-metre-long traveling exhibition with lab stations that show what you are actually breathing at home or at work. It also lets you know how you can keep polluted city air from penetrating indoor spaces, and how effective air filtration improves human health and has important economic and environmental benefits.

Eco design

Designing environmental aspects into Camfil's air filters has been a priority for years. Not only should our filters be energy-efficient. Product design and process control also integrate a number of eco-efficiency considerations, including the preservation of natural and fossil resources, reduction of waste and emissions, pollution risk prevention/reduction, the substitution of hazardous substances and use of recycled materials, and the development of alternative product recycling methods.

Read more about our sustainability programs at **camfil.com**

COMFORT

Protecting people

Comfort Ventilation

Our indoor air filter solutions for public and commercial buildings improve and protect people's health and wellbeing – and also boost their productivity. The end product is clean air, free of harmful or damaging pollutants.

Offices

As we spend increasing amounts of time indoors, we are more exposed to particle and gas pollution from the external air – via the building's ventilation system. Our high quality air filters improve the indoor air quality, which contributes to greater productivity and better health for the employees.

Museums

Sensitive artifacts need to be protected from particulate pollution (dust) and molecular (gaseous) pollutants. The preferred and most cost effective solutions often include molecular filters combined with high efficiency particle filters.

Schools

When the air in the classroom is clean, learning is enhanced and the students as well as the staff become more productive – and their health is protected.

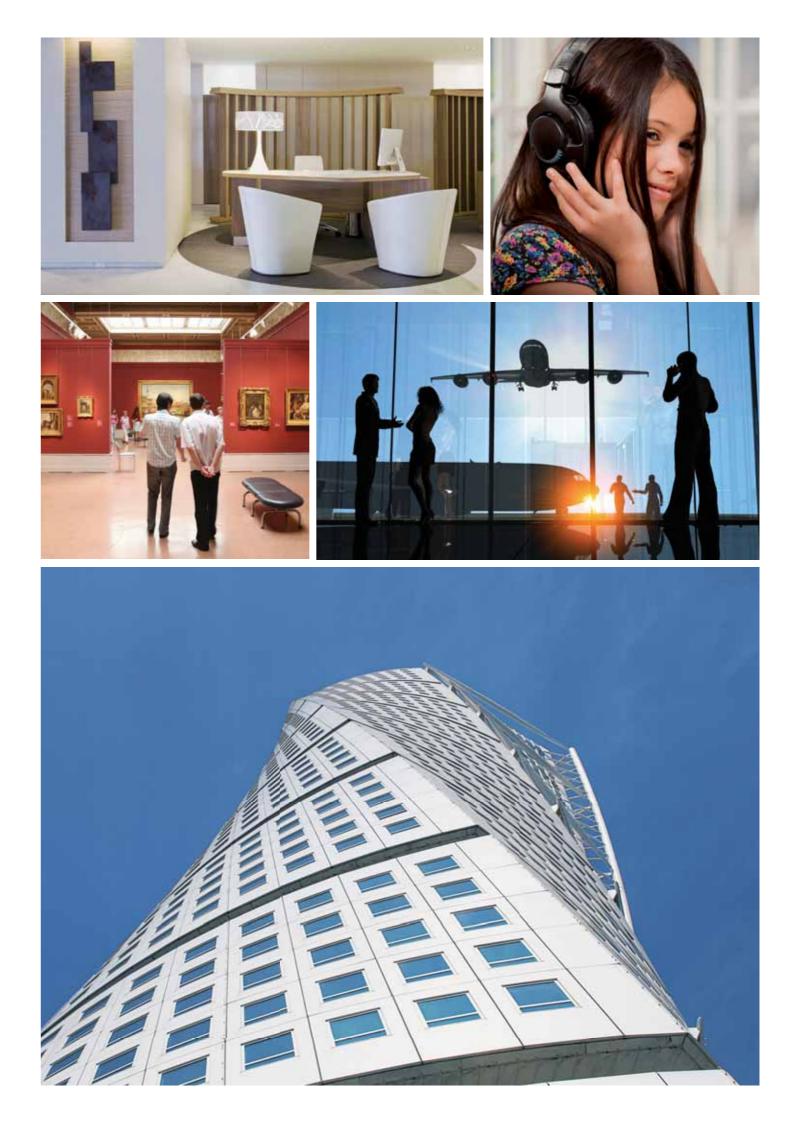
Our high quality air filters keep the air management system in schools at optimum efficiency. Low pressure drops over long periods of time reduce operating costs and energy consumption.

Airports

At airports the aircraft are one source of pollution. Another is the often diesel powered ground traffic supporting the operations. Together they are the source of most pollution inside terminals and other airport buildings. We offer market leading air filter solutions to control particulate and molecular pollutants at airports.



PRODUCT EXAMPLES Hi-Flo, Opakfil/Durafil, 30/30 and City-Flo.



CLEAN PROCESSES

Our leading filter solutions prevent airborne contamination in cleanrooms all over the world

Food

We offer a full range of high quality air filtration systems for the global food and beverage industry to avoid microbiological contamination. Because food safety compliance means safety and customer confidence.

A good example of our dedication is the development of the complete ProSafe[™] range designed for the demanding processes in the food and beverage industry – including safety, traceability and audit requirements.

Microelectronics

We have many years of experience and great expertise in preventing particles, nanoparticles and gas molecules from contaminating various sensitive manufacturing processes.

All advanced facilities need a proper airborne molecular contamination (AMC) control concept to avoid acidic corrosion of copper surfaces, hard drives or wafers, condensable organic deposition on sensitive surfaces and optics, or exposure to low levels of damaging ammonia. With our high quality air filters, we provide the entire range of advanced solutions, from cleanroom air intake to the process tool level for microelectronic manufacturing facilities.

Hospitals

For almost 50 years we have delivered air filtration solutions to hospitals and healthcare facilities in all major world regions. We can design the optimum system from your requirements, including easy maintenance and long service life. We can also assure you the highest availability for your operating theaters while ensuring high patient protection.

Life Science

Camfil has been a leading supplier, and partner, to the Life Science Industry since 1963.

Our products and R&D in Life Science applications keep the industry ahead of the ever changing standards in a reliable and sustainable manner.

We offer a wide range of high quality filters, housing products and software engineering tools. Together they provide the most efficient, reliable and safest clean air solutions with the lowest TCO available for the industry.





PRODUCT EXAMPLES Gold Series, Absolute, Gigapleat, Megalam, Pharmaseal and CamHosp.



POWER SYSTEMS

Protecting gas turbines via heavy-duty filtration and noise control equipment

Power Generation

Our leading heavy-duty filter systems protect gas turbines and diesel engines from erosion, fouling and hot corrosion. With less fouling and engine degradation, maximum efficiency and power production are maintained.

A lower pressure drop means higher power output, better dust holding capacity and an increased service life of the filter.

Compressors

Compressors play a vital role in many industrial processes facilitating our daily lives. We supply compressor intake air systems operated around-the-clock in industrial, desert, offshore and arctic environments. Our filters are the leading choice for refineries, steel works and chemical plants, where reliable operation and engine availability are the main concerns for operators.

Oil & Gas

We know how to design and manufacture challenging system solutions for environments where water, salt, heavy hydrocarbons and space limitations make operations particularly difficult. Demands for uninterrupted operation over long periods up to several years require well designed inlet filtration systems, both when it comes to high efficiency and service life. Through a complete range of air inlet filters and noise control systems we can provide your gas turbine with a reliable and cost effective solution.



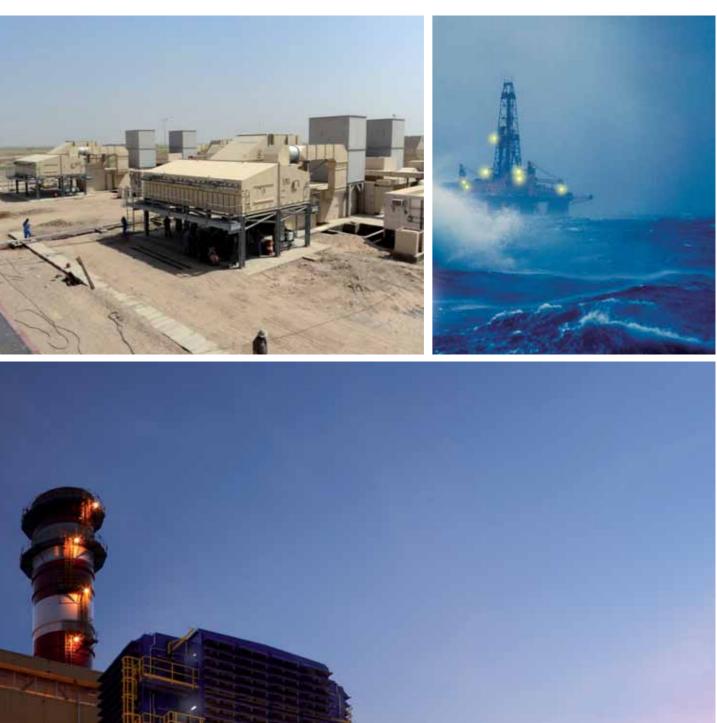
SYSTEM CAPABILITIES

Air inlet, noise control and exhaust systems for turbo machinery.



FILTER PRODUCT EXAMPLES

Pre-filter Cam-Flo XMGT, Campulse self cleaning filter and CamGT, high efficiency compact filter.





AIR POLLUTION CONTROL

The most technologically advanced dust collectors keeping dust and fumes out of the workspace

Mining

The Camfil – Farr Gold Series Dust Collector "Looks like a safe because it is built like a safe". The robust, modular construction is ideal for the harsh, abrasive environment of open pit mining. The Gold Series units have a proven track record of ensuring reliability and keeping production down-time to a minimum on many mining applications including Primary, Secondary and Tertiary Crushing, Stock Pile ventilation, Material Conveying, Screening, Fine Ore Bin ventilation, and more.

Metal Working

The Farr Gold Series is ideally suited for the many types of metal working processes including Room and Wheel Blasting applications, Source and Ambient Welding applications, Cutting Tables including Plasma and Laser cutting, and Thermal Spray applications such as Wire Arc Spray, Plasma Spray and HVOF. The various inlet and hopper discharge designs along with the most robust filter pulse cleaning system in the industry allow for efficient and effective dust and fume control with minimal maintenance requirements and minimal down-time.

Life Sciences/Pharmaceutical Oral Solid Dosage

The Farr Gold Series Camtain unit was a collaboration between Camfil and pharmaceutical industry experts striving to design a unit that utilizes the unique features of the Gold Series and adds containment options that meet or exceed ISPE industry standards. This is accomplished with the Camfil – Farr Gold Series Camtain, achieving better than 1 mgm/m³ OEL in independent surrogate tests performing several BIBO cartridge and material discharge changes within an eight hour period. Additionally, the Camtain's robust design easily allows for meeting or exceeding all NFPA and ATEX requirements for dust collector explosion protection, which is always a concern when dealing with organic materials.







CONTAINMENT

Safety-critical solutions to protect people and the environment against dangerous contamination

Biosafety Labs

Biosafety laboratories pose unique challenges for filtration of particulates. As part of the containment barrier, the filtration equipment must capture potentially toxic contaminants during their first pass. We have filters for every need and the expertise to assist you in selecting the appropriate clean air solution. We are recognized as the first choice for designers and owners.

Nuclear

We are the world leader in nuclear particulate and gas-phase filtration with more than 50 years experience from over 90 nuclear power plants around the world. Safety is a key concern when facilities are built and operated. Safety is paramount to us as well – this is why Camfil offers best-in-class products produced by worldclass professionals in state-of-the-art manufacturing facilities.

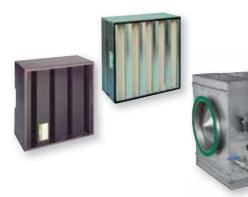
Chem/Bio Protection

We are the premier supplier of chemical and biological protection equipment. Protection of personnel and critical equipment demands superior equipment with proven technology. Camfil offers robust solutions.

Healthcare

Hospital isolation rooms/wards and Intensive Care Units (ICUs) require control of airborne pathogens, viral contaminants and infectious organisms. Traditional HVAC equipment is not enough. We produce equipment designed specifically for this application.





PRODUCT EXAMPLES Sofiltrad (Gas adsorber), Acticarb, Sofilair, CamContain CS.





INDUSTRIAL

Reliable equipment for heavy-duty purposes

Warehouses

CamCleaner is a range of patented air purifiers with the most efficient HEPA filters on the market. They are proven to lead to reduced energy costs, more efficient production, less need for cleaning, healthier employees and a better air environment.

Foam Industry

Many years of providing the foam industry with clean air solutions have brought us valuable knowledge on foam applications – including TDI effects, regulations and measurement techniques. Benefits of our carbon filter system are extremely high efficiency, long life, ability to deal with difficult conditions (liquid spills etc.), very low maintenance and no concerns about TDI control.

Petrochemical

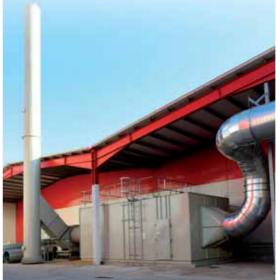
The Campure range of medias and housings is used to remove acidic sulfur gases and protect the valuable electronic and electrical equipment that controls refinery processes. A full range of solutions is available for make-up and recirculation air systems. Medias are inherently non-flammable, an important consideration in environments with high fire risks.

Pulp & Paper

Being a 24/7 enterprise, Pulp and Paper factories must be sure to keep their electronic control systems fully functional. The solution is to use molecular filtration to combat sulfur compounds like sulfur dioxide, hydrogen sulfide and mercaptans. Camfil provides deep bed solutions as well as supplying activated carbon alumina adsorbents and support services for these applications.















PRODUCT EXAMPLES CamCleaner, CamPure, CamCarb and Carbon media.

CAMFIL is the world leader in air filters and clean air solutions.

Camfil is the global industry leader in clean air solutions with 50+ years of experience. Our solutions protect people, processes and the environment to benefit human health, increase performance, and reduce and manage energy consumption. Twenty-three manufacturing plants, six R&D sites and over 65 local sales offices worldwide provide service and support to our customers. The Camfil Group is headquartered in Sweden but more than 95% of sales are international. The Group has around 3,500 employees and sales in the range of SEK 4.9 billion.





camfil.com