



# MATTER FOR THOUGHT

IMPROVE THE QUALITY  
OF YOUR INDOOR AIR



# Clean indoor air quality in the working environment

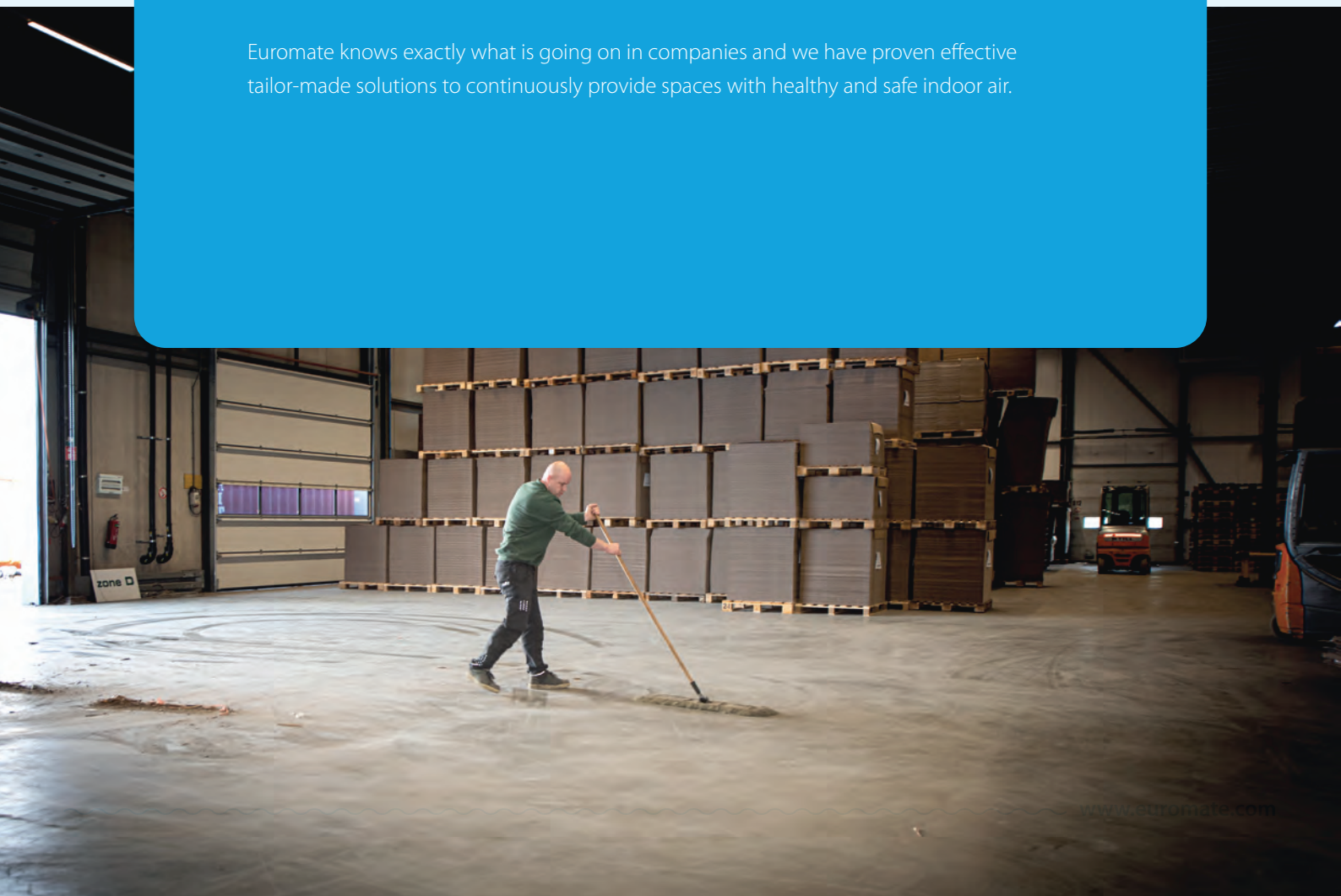
**The indoor air is polluted in every workplace. This is clearly visible in some environments, such as dust formation in warehouses or welding fumes in machine construction. In other cases, the pollution is not clearly visible, but the consequences are noticeable.**

The thought is often: if you don't see it, it's not there. Employees in offices suffer from headaches and fatigue at the end of the day. Students and teachers become drowsy in a classroom where there is odour nuisance. In recent years it has become clear that all industries suffer from high absenteeism due to contagious viruses such as flu and corona.

We spend most of the time indoors. The corona pandemic has taught us how important healthy indoor air really is and has increased awareness about this. When it comes to air quality in the working environment, for most people this is not a choice, but a given.

From a good employer, it is time to work on clean indoor air in every workplace! Not only now but also in the future, a healthy working environment is of great importance for general health and for the optimal running of business processes.

Euromate knows exactly what is going on in companies and we have proven effective tailor-made solutions to continuously provide spaces with healthy and safe indoor air.





## POLLUTED INDOOR AIR / TYPES OF POLLUTION

# Which pollution source has the most influence on your work processes?

Air pollutants are not always clearly visible to the naked eye, but they do influence the quality of the indoor air. Unpleasant odours, particulate matter, tobacco smoke or grease particles affect the health of your employees and work processes.



### Particulate Matter

*Particulate matter is a collective term for a variety of particles of different sizes that float through the air. It is one of the largest pathogenic sources of pollution worldwide. Not only outside, but also indoor areas such as logistics environments, production halls and offices are often subject to dust nuisance*



### Odours and Gases

*Health authorities are paying more and more attention to odours and gases in the (work) environment. Think of reaction gases during welding, the chemical smell of paint and chlorine, but also body odours. Employees in the industry, catering and healthcare sectors in particular have to deal with this.*



### Grease and Oil

*Oil and grease are often used for repairs and maintenance of machines and vehicles. As a result, industrial companies often have to deal with polluted air caused by oil mist. Nuisance caused by grease in the air is common in the hospitality industry.*



### Viruses and Bacteria

*Airborne viruses are mainly transmitted via small droplets; aerosols. These minuscule droplets are emitted during coughing, talking, coughing and breathing and can float in a room for hours. Breathing it in can lead to indirect infections, causing a lot of absenteeism.*



### Cigarette smoke

*Despite the fact that legislation is becoming stricter in certain countries, many people worldwide still smoke. In places where people smoke, annoying and also sickening air is created. Think of smoking areas in organisations, airports and residents' rooms in healthcare institutions.*



## POLLUTED INDOOR AIR / INDUSTRY

# A black handkerchief at the end of the day?



**Developments in the industry are going very fast. Innovation, sustainability and global trends and developments play an important role. In addition, air pollution in industrial buildings is a major problem, whether it concerns metalworking, logistics, woodworking or the paper industry. What are the consequences of polluted indoor air in your company?**

Recognizable that your employees have a black handkerchief at the end of the day? Or that your employees complain about coughing, stinging eyes and headaches at the end of a working day? Other consequences of polluted indoor air include staff being sick more often, which means that processes are regularly delayed. This leads to longer delivery times and unnecessarily high costs. In addition, production processes are disrupted by malfunctions of forklift trucks and conveyor belts. Products also leave the door with an layer of dust. This mainly damages the image of the company.

## DUST AND OIL MIST IN METALWORKING ENVIRONMENTS

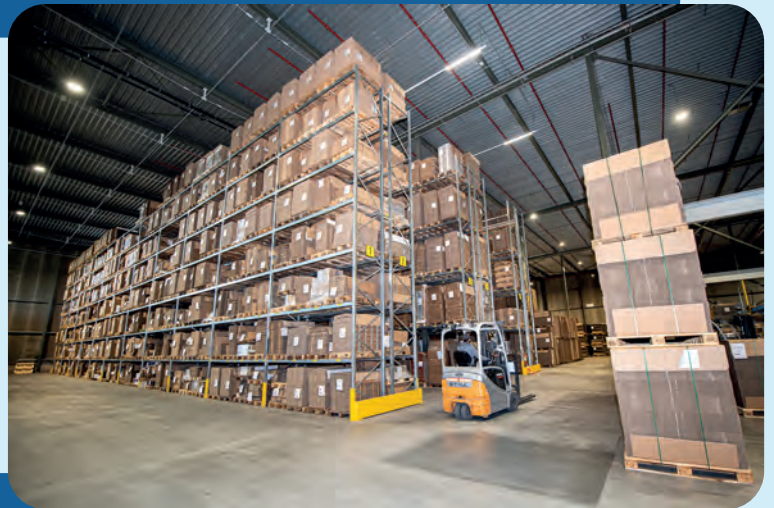
In mechanical engineering, metal dust and metal fumes are created during the processing of metal. These substances are toxic and very harmful to health (including allergies, lung disorders and carcinogenic). Source extraction is usually not sufficient, with the result that these toxic substances still linger in the production hall. You will not see the effects of inhaling these toxic substances until years later.





### **PARTICULATE MATTER IN WOODWORKING ENVIRONMENTS**

In the Netherlands only, an estimated 740,000 employees are exposed to wood dust caused by mechanical sawing or processing of wood. Wood dust is included in the list of carcinogenic substances. The greatest risk is caused by particulate matter, because it can be inhaled deep into the nose and lungs and cause damage.



### **PARTICULATE MATTER IN LOGISTIC HALLS**

The occurrence of whirling, precipitating dust is a well-known phenomenon in logistics. The operational actions in the logistics hall lead to the formation of dust particles, which continue to swirl around due to continuous movements. Processing of paper, cardboard and repackaging activities also cause a lot of dust formation. In addition, there are also the dust particles that enter the building through ventia. The adverse consequences are major for the health of personnel and for business processes.



### **PARTICULATE MATTER IN PRODUCTION HALLS**

In a production hall, all kinds of pollution can arise in the indoor air. Despite the fact that source extraction is often used, the small dust particles continue to swirl in the air and eventually settle on the products or semi-finished products. The substances that remain suspended in the air pose a risk to the health of personnel. If they settle, they lead to machine failures, high cleaning costs, a bad image and pose a risk to hygiene.



### **MEASURING IS KNOWING**

Pollution from particulate matter is sometimes visible when you swipe your finger over shelves or boxes. However, it is often not so clearly present. But it's there that's for sure. How do you know if the pollution in your industrial space is acceptable or not? Measuring is knowing! By means of a long-term measurement of PM 10, PM 2.5, PM 1, the temperature and humidity, we can provide monthly insight into the exact pollution in your hall. This also gives you insights into peak and seasonal loads. With the help of the measurement you can determine whether and where it is necessary to minimize the pollution.



## POLLUTED INDOOR AIR / INFLUENCE OF POLLUTION

# What is the effect of pollution on:



### Human

- Every day, a person breathes in 12,000 liters of air, consisting of nitrogen, mold spores and (fine) dust
- Lungs can handle a limited amount of dust and pollution
- Breathing in too much pollution too often causes health problems

**Air pollution and absenteeism are closely related.**



### Product

- It's all about the good quality of your products or services
- Settling dust during storage contaminates products, as well as fats and oils

**Dusty production areas lead to a loss of quality.**



## Machinery

- Dust harms machines
- Oils and electrostatic charges are magnets for dust particles
- Particulate matter accumulates in the tiniest corners of equipment
- Unexpected malfunctions and extra maintenance are the result

**Unexpected breakdowns and extra maintenance on machines.**



## Image

- Air pollution is a huge cost item
- Pollution such as (fine) dust damages people, machines, products and thus your image
- Fighting (in)visible (fine) dust results in an enormous image improvement

**A healthy working environment and clean products are good for your image.**





## POLLUTED INDOOR AIR / THE SOLUTION

# Air cleaning as solution!



**What can you do to reduce indoor air pollution? Building-related systems provide sufficient fresh air in industrial buildings, but cannot absorb the pollution. Source extraction removes coarse dust particles from the air, but small particles remain suspended in the air and spread throughout the room.**

By cleaning the air professionally, the pollution is continuously and effectively removed from the air. An additional advantage is that the airflows are optimised; this ensures a pleasant temperature all year round and reduces energy costs. By working with modular, plug and play systems, flexibility is guaranteed.

An Euromate air cleaner is easy to install without having to make any adjustments to the building. No air needs to be fed in from the outside and therefore does not have to be cooled or heated. This also contributes to sustainability!



## POLLUTED INDOOR AIR / CUSTOMERS SAY

“Due to the high dust concentration, complaints such as burning eyes, sore throat and headache arose.”



**Welkoop Retail B.V. is a retailer, traditionally specialized in garden and animal. The distribution center moved to a new sustainable building in Apeldoorn at the end of 2020. Every day, more than 100 employees are at work to ensure that the stores are stocked in the right direction. In total, about 6000 items are kept in stock.**

### THE CHALLENGE

Jan Jaap van der Dussen is Supply Chain Manager at Welkoop Retail B.V. He says that after the new building was put into use, it soon became apparent that there was a considerable nuisance caused by dust. There was really a blur visible on the workplace. Jan Jaap noticed it himself when he walked through the building. “Due to the high dust concentration, complaints such as burning eyes, sore throat and headache arose. Another consequence was that a lot of dust was formed on the products. As a result, contaminated products were regularly delivered to the stores.”

### THE SOLUTION

“During an appointment with the Euromate consultant, it quickly became clear that using Dust Free Industrial 8500 units would be a good solution for our dust problem. Euromate has carried out pre- and post-measurements to properly map out the dust load. After installing the recommended 18 units, it turned out that we have an average dust reduction of 75%, which in some places even rises to 80%.” He continues. “This means that in the winter the warm air is redistributed and in the summer this applies to the cool air. This creates a pleasant temperature in the distribution center all year round. Immediately after installation, the difference in dust reduction was noticeable, there is no longer any dust formation on our products and our employees are very enthusiastic.”





# Dust Free Industrial 8500



The Dust Free Industrial 8500 is a professional air cleaner specially designed to remove particulate matter from the indoor air. A special HEPA filter can be added to the device in order to minimize viruses in large spaces.

- Filters up to 90% of the particulate matter from the air with high efficiency
- Scalable and modular system
- Thanks to an adjustable grille, the airflow can be set yourself
- Easy control via a graphic touch screen



## THE DUST FREE INDUSTRIAL IS SPECIALLY FOR:

- Manufacturing
- Distribution centres
- Warehouses
- Workshops
- Wholesalers
- Retail companies
- Gyms
- Event halls

# HF-Serie



The HF-series air cleaners are robust, volume air cleaning systems that are built around a main filter and have an integrated fan. Depending on the configuration, the device removes pathogenic pollution such as fine and coarse dust particles, smoke, oil-containing particles, odours, gases and rubber from indoor spaces.

- Customization through a choice of various filters
- Various models available
- No duct work required
- Energy savings due to optimal airflow
- Sustainable; when equipped with an electrostatic filter there is no question of waste since the filter is interchangeable and is cleaned and reused at Euromate.



## THE HF-SERIE IS SPECIALLY FOR:

- Manufacturing companies
- Metalworking
- Mechanical engineering
- Food factories
- Logistics
- Wholesalers
- Retail
- Waste processing
- Process industries



# Air Monitor System 5



Would you also like to know whether the air quality in your indoor spaces is good? For industrial companies, there is now the solution to measure the indoor air easily and at low cost for a longer consecutive period. This creates insight into possible peak loads and seasonal influences. The Air Monitor System 5 provides insight into the air quality.

- Measures PM10, PM2.5, PM1, temperature and humidity
- Clear monthly reporting with the measurement results
- Provides insight into seasonal effects and peaks
- Tailored advice from one of our specialists
- All in one for a fixed monthly amount



## THE AIR MONITOR SYSTEM 5 IS SPECIALLY FOR:

- Production Companies
- Distribution centers
- Warehouses
- Workshops
- Wholesalers
- Retail businesses
- Waste processing
- Process industry

## AIR CLEANING / GREASE, SMOKE AND SMELL

# SF-serie

Grease, smoke and soot particles are released during every cooking process. In professional kitchens where intensive cooking takes place day in and day out, these particles quickly accumulate in the extraction duct and the fans. And that involves serious risks, because many particles are flammable.

How do you tackle fire hazards effectively? By filtering the grease, smoke and soot particles from the air before it enters the ventilation system. And that is exactly what you can achieve with the Euromate Kitchen Filtration System. This filter system removes even the smallest particles from the air. An additional advantage: thanks to the cleaner air, you also save considerably on the maintenance costs of the ventilation system.

**The SF kitchen filtration system is easy to install 'plug & play' in new and existing ventilation systems. In most existing cases, the extractor fan provides enough power to compensate for the low pressure drop. Outdoor mounting is also possible if provisions have been made for this.**

The SFE Kitchen filtration system from Euromate is based on an electrostatic filter technique. The air stream first passes a mechanical pre-filter to filter the larger particles (step 1). Then the air is blown through the ionization section. There, grease, smoke and soot particles acquire a positive electrostatic charge (step 2). The negatively charged collector plates attract these charged particles. The electrostatic filter thus removes even the smallest particles (down to 0.1 micron) from the airflow (step 3). And if you also want to further reduce odour, you can add a carbon filter to the system.





## POLLUTED INDOOR AIR / IN ACCOMMODATION SPACES

# What is floating around in living areas?



**It is not just industrial companies that suffer from polluted indoor air. Poor air quality is also often present in general areas such as offices, work rooms, canteens and control rooms.**

In many organizations, the way of working has changed radically due to the need to work from home. Where working from home first seemed like a temporary solution, more and more organizations are now switching to a hybrid working method. The office is often used for flexible working and as a 'place to meet'.

With regard to viruses, more than 90% of all infections occur in poorly ventilated indoor spaces. In addition, there are sources of pollution such as pollen, (fine) dust, moulds, odours and gases that cause health problems and less productivity for employees. Frequently heard complaints are: headache, dry or burning eyes, dry throat, annoying sound, skin complaints and drowsiness. These complaints are also referred to as 'sick building syndrome'. If these complaints are related to the building, they often disappear after leaving the building.

### **AIR CLEANING AS A SOLUTION**

Office buildings usually have well-functioning ventilation systems. Why then use air cleaning? With higher occupancy in meeting rooms, open-plan offices or canteens, the ventilation is usually inadequate. Pollution as mentioned earlier is then not sufficiently removed from the room. This is done by installing an air cleaner. Also with a view to the sick building syndrome, an air cleaner helps to prevent complaints and increased absenteeism.

An air cleaner also provides a fresh and pleasant working environment. Because the air is recirculated and blown out cleanly, you can easily save energy, as there is no need for extra heating or cooling. In line with this, clean indoor air has a positive effect on productivity and absenteeism.



## POLLUTED INDOOR AIR / CUSTOMERS SAY

“We are so pleased with the air cleaners! It works really well, complaints have disappeared and employees are satisfied.”



**Ricoh is a global technology supplier that helps organizations restructure and improve their business processes and information management. The goal is to make companies faster, more productive, sustainable and profitable.**

### THE CHALLENGE

In the office on the Magistratenlaan in 's-Hertogenbosch there were complaints regarding the indoor air. Bert Streppel is Senior Employee Facility Management at Ricoh, he says “A call center has been created on the second floor of our building with 44 workplaces in a relatively small space. We have never received complaints about the indoor air before. But after the call center was commissioned, our employees suffered from headaches, dry and red eyes. We also received complaints about stuffiness and odor nuisance.”

### THE SOLUTION

*He continues: “As soon as we started looking for a solution, Euromate contacted us. After an inventory, a test placement of four VisionAir Blue Line air cleaners was proposed. In this way it was possible to test the air cleaners without any obligations. During the trial period, the indoor air quality of the call center was significantly improved. The employees clearly noticed the difference.”*

The call center employees are positive and very satisfied. About 90% of indoor air pollution is filtered out of the air and they are happy with that at Ricoh! The air purifiers fit nicely into the interior and are neatly installed. “We also concluded a service contract for the periodic and timely replacement of filters. This way we are always assured of properly working equipment. Maintenance takes place at a time that suits us best and that is always announced properly in advance.”





# VisionAir Blue Line



Depending on the space and the specific pollution, the VisionAir Blue Line offers a tailor-made plug and play solution. The air cleaner makes little noise and the operation is very user-friendly. The device is suitable for ceiling and wall installation. In addition, the air purifier is also available on a mobile stand.

- Widely applicable thanks to unique filter combinations
- SGS tested and certified
- Plug & Play system
- Five-year warranty\* due to the use of European parts (in combination with a maintenance contract)
- Has a positive effect on productivity and absenteeism



## THE VISIONAIR BLUE LINE IS SPECIALLY FOR:

- Office spaces
- Printer Rooms
- Childcare
- Care Home
- Hospital
- Mouth care
- Nail studios
- Hair salon
- Skin Care Practice
- Physiotherapy
- Catering
- Schools
- Changing rooms
- Smoking areas

## AIR CLEANING / PRODUCTS

# Pure Air Shield 3300



The Pure Air Shield 3300 (PAS 3300) air cleaner has been specially developed for large indoor spaces such as open plan offices, reception areas and canteens. This air cleaner filters, very efficiently, suspended particles and aerosols from the air. The PAS 3300 has eight different positions and is easy to set up.

- Plug and play system with easy operation
- Energy-efficient thanks to the timer function and also whisper-quiet
- Contributes to a healthy working environment with less absenteeism
- Sustainable product: the felt is made from recycled PET bottles
- The basic setting of the PAS 3300 ensures five air changes per hour
- Removes particulate matter, viruses and bacteria
- Suitable for large spaces (from 200 m<sup>2</sup>)
- SGS certified and therefore proven to be effective

### THE PURE AIR SHIELD 3300 IS SPECIALLY FOR:

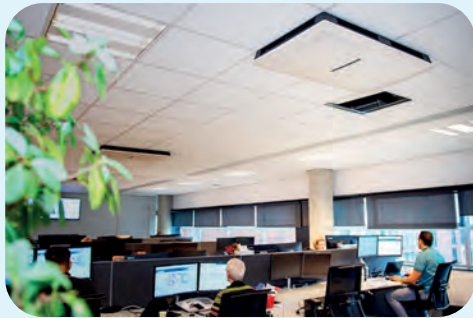
- Meeting rooms
- Schools
- Theaters
- Gyms
- Stores
- Catering
- Office spaces
- Event halls
- Supermarkets
- Childcare





## AIR CLEANING / EXPERIENCES

# Our customers tell us...



“We are so happy with the air purifiers! It works very well, complaints disappeared and employees are satisfied. Maintenance takes place at a time that suits us best and that is always announced well in advance.”

”

**Bert Streppel, Senior Employee Facility Management at Ricoh**  
- office space



“We give the air cleaner a TEN for reducing dry dust and particulate matter. We are very satisfied with the operation!”

“The slumber dust has almost disappeared and our employees notice the difference. They are much less affected by dust.”

**Thijs van der Made, Co-Owner at Holland Packing**  
- production company



“The factory feels ‘fresh’ and our employees are happy with this solution.”  
“You cannot see particulate matter, but the measurements are proof that our colleagues work in a safer environment.”

”

**Ton Koridon, Director at Koridon Industriële Plaatbewerking**  
- metal processing



“After installing the Dust Free Industrial units, we immediately saw the result!”  
“Measurements prove that the particulate matter content has dropped significantly.”

**Ronald van der Tang, Director Operations at Royal Brinkman**  
- wholesaler



“I have often referred to our air cleaners when discussing with colleagues, telling them about our good experiences.”

“Clean and virus-free indoor air is important now and will remain so in the future.”

”

**Rolf Dany, Owner at DANY Koblenz - fitness center**

# About Euromate

The expert and source of information in air cleaning.

**Euromate is a Dutch company that has specialized in air cleaning for over 47 years. From the design, production up to the regular maintenance; the entire process is in-house.**

In the Benelux and Germany we often deliver our professional air cleaners directly to our customers. In addition, we have long-standing partnerships with installers and construction companies. In the other countries, we work exclusively with a close network of distributors. We work with European parts as much as possible, so that we can guarantee a longer lifespan of our products. This also reduces the need for transport, which contributes to the sustainability of our air cleaners.

Our professional air purifiers ensure that pollution such as viruses, bacteria, (fine) dust and odour nuisance is removed from the air as effectively as possible without nuisance to people. We ensure efficient installation and sufficient capacity, in addition to existing building-related systems. Professional air cleaners suck in the air, filter it and then blow the filtered air back into the room in a cleaned state.

## FEATURES OF OUR AIR CLEANERS

Our devices are plug and play, very user-friendly and scalable. At the heart of the air cleaners is a special filter package that ensures that even the tiniest particles are captured.

## Contact



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