



Bringing clean air to life.™

# Filtration Solutions for Original Equipment Manufacturers

**You can Focus on Your Business –  
Because We Focus on Your Products**





## We partner with OEMs around the globe.

Dinair and AAF have an in-depth understanding of the challenges and opportunities for Original Equipment Manufacturers (OEMs). This understanding and technical ability makes us the preferred partner in sustainable air filters for your products.

“We have a very long track record with OEMs around the globe and produced millions of filters during this time. However, it is not only the manufacturing – it is more about the continuous improvement of processes and the connection of dots with our customers. This is what represents a true champion in collaboration with Original Equipment Manufacturers.”

Kent Petersson, Global Vice President OEM



# You are moving air to where it is needed – We are moving particles out of the air stream.

Indoor Air Quality (IAQ) is a term that refers to the air quality in your building, breathed in every day by the building's occupants. The pollution levels in this indoor air can be up to 5 times higher than outdoor levels (in many cases up to 100 times higher), and people spend more than 90% of their time indoors! Additionally, poor IAQ ranks as one of the top five environmental risks to public health, but is often overlooked by key decision makers.

We are supporting OEMs in getting the best out of the equipment they produce. During the development of OEM products we focus on key parameters that save time and money while reducing the risk during daily operation. At all-time a reasonable cost structure is the unwritten guideline for our activities.

## HVAC

In commercial office buildings, Indoor Air Quality (IAQ) is a primary concern. IAQ refers to the indoor air breathed in by a building's occupants. The pollution levels in this indoor air can be up to five times higher than outdoor levels, and poor IAQ ranks as one of the top five environmental risks to public health.

High quality air filtration system design, operation and maintenance are critical for providing clean and healthy IAQ. Properly functioning filtration systems clean the air of dirt, dust, pollen, dander, fibres, control odors and reduce the pollutants that cause most IAQ problems inside buildings. In addition to improving occupant health and performance, regular HVAC maintenance also saves energy.

We support AHU OEMs with best possible configuration to get the best performance out of their units – during operation and maintenance.

## Cabin Air

As buildings vehicle cabins are closed rooms. Pollen, soot, fine dust, allergens and gases are considerable risk factors for personal health and safety in transportation. They can significantly impact the functioning of heating and air-conditioning systems. With our high-quality cabin air filter solutions, we offer reliable and long-lasting protection for vehicle occupants as well as system processes.

Available space for Air Handling Units in vehicles is always challenging. Therefore Cabin Air filter are always individual designs for specific vehicle AHUs. We support OEMs in finding the best possible filter design under the given conditions for all on-road, off-road and railed vehicles.

## Air Purifier

When a building is not centrally connected to get air from a centralized Air Handling Unit, Air cleaners are the tool of choice. Not only for residential homes, but also for industrial applications. Generally, an air cleaner is less expensive than a centralized fresh air system and can be moved easily. And, especially at industrial manufacturing places it is not always possible to get proper clean air at every location within a building. Here air cleaners help by supplying clean air where it is needed most.

We are supporting air cleaner manufacturers in making their air cleaners more efficient. The most appropriate filter combination or an innovative multi-function filter can always be key to solving a problem, no matter if it is an industrial unit for metal processing applications or an residential unit in a living room.

## SUPPLY AIR

Tailored filtration solutions for Original Equipment Manufacturers providing units to improve indoor air quality for people.





## PROCESS AIR

Tailored filtration solutions for Original Equipment Manufacturers providing units that improve air quality related to the production process of goods.

**You produce equipment to assure performance of workers and occupants – We create filters that increase the performance of your products.**

Maintaining air quality in industrial and residential environments is crucial to achieve high productivity and wellbeing.

Bad indoor air quality has a high influence on the output of an industrial production and the quality of products produced in this facility.

### **Stationary and Central Mist, Smoke and Fume Extraction units**

Air filters for Mist, Smoke and Fume collectors increase production efficiency, reduce environmental impact and keep the workshop and workers safe.

Depending on the industry, contamination from metalworking can include heavy dust levels, explosive dusts and molecular pollutants that are responsible for odor, corrosive reactions or toxic threat to operators and the environment. All of these require unique air filtration solutions that are purpose designed to provide high levels of long-term performance in potentially harsh operating conditions.

The metalworking industry can include aerospace, buffing, polishing, grinding, laser cutting, plasma cutting, machining, metallizing, paint spraying, shot blasting, silos, welding, thermal spraying and more. Capturing the dust, smoke, mist or fumes generated during metalworking processes can create a unique challenge.

We are experts in industrial dust, mist and fume collectors that stop pollutants from entering the workspace and outside air, creating safer and cleaner environments and support OEMs with best possible filter configuration to get the best performance out of their units – during operation and maintenance.



# You help to reduce the environmental impact of your customers facilities – We help to reduce dust and gases in exhaust air.

Our filter products reliably separate dust and gases from exhaust air, no matter what kind of filtration application and the respective specific dust characteristics. Based on our comprehensive application knowledge we support OEMs in defining the correct filtration solution so environmental impact can be kept at lowest levels.

## Air pollution control

The analysis of the process requirements, including the nature of the dust arising there, is a major success factor in our concepts. After an analysis of the current situation, we individually select the suitable filter medium and the right dust removal element, which can vary in shape, nominal diameter and pleat geometry. We also provide support on technical aspects of the system design. In this way, we develop solutions that can overcome even the most difficult dust removal problem.

## Odor reduction and Corrosion control

It is not always dust that is emitting. When harmful gases are part of the exhaust air of an application, this can lead to serious damage due to corrosion or unpleasant odors in the environment.

Corrosion damage to electronic components increases plant costs over the long term. Unpleasant odors reduce the comfort level of workers.

The right filtration concept must be selected based on the maximum permissible contaminant gas concentration or odor intensity. The filter modules and multi-stage solutions we develop, are therefore tailored precisely to the needs for the industry you serve.

## EXHAUST AIR

Tailored filtration solutions for Original Equipment Manufacturers providing equipment that manages air streams leaving their customers facilities.







HIGH PURITY AIR  
Tailored filtration solutions  
for Original Equipment  
Manufacturers providing  
equipment that improves air  
quality in High Purity Areas.

## You create clean environments – We create filtration system integrity

Managing the air quality for high purity processes can be challenging, because the smallest factors can have serious consequences. Contaminated air can lead to expensive rework and even shut-downs of production lines or complete facilities.

We support OEMs in the development of clean air systems that reduce risk while, at the same time, save time and money for end-users.

### High Purity Equipment (RABS, minienvironments, Isolators, Air showers, Sterilization tunnels)

AAF has a long track record in designing solutions for industries where highest filtration performance is crucial. This experience enables us to help OEMs already during the design phase to find filtration system solutions with highest possible system integrity.

### Solutions for the Life-Science Industry

Control of viable and non-viable particles is crucial in many process applications compounds is equally important. There is a wide variety of supply, exhaust and recirculated air housings and filter types to address each application. It is important to utilize a manufacturer who can offer a fully integrated solution in order to minimize risk and points of potential failure.

### Solutions for the Microelectronics Industry

Historically the need to control particulate in semiconductor applications has been addressed with conventional HEPA/ULPA filtration. In the last decades the need to control AMC (Airborne Molecular Contamination) has increased where specific grades of chemical filters and membrane ULPA filters have been deployed. Reduction of energy consumption by optimizing construction and media types has become 'the norm' as the industries thirst for lower operating costs and increased yields continues to drive our product development and technical leadership in this segment.



**You are looking for a one – stop shop –** We have the capabilities to provide support throughout the complete product life cycle.

**Sustainable Air Filters for your Products**

As one of Europe's leading manufacturers of original air filters which are incorporated into customers' end products, AAF is dedicated to the provision of our customers' filtration problems, particularly where they call for the highest level of technical expertise. We develop and produce air filters and filter inserts encompassing all existing techniques and filter media, and are leaders in the development of new clean air technology.

**Product Development**

As a leader in clean air technology, we have our own designers, mechanical workshop and test laboratory facilities where we can effectively and swiftly create and test prototype filters and zero series. For our production, we manufacture customer-specific moulds, tools and manufacturing equipment thereby enabling us to manage and cover the entire production process. Beside the plant in Latvia, we can count on our global production and development network. Together we offer the most comprehensive air filtration portfolio in the industry.

**Quality and Environment**

AAF is certified in accordance with both ISO 9001 and ISO 14001, and many of our filters are Eurovent certified and P-marked. Quality, service and close co-operation with our customers during the development phase has made us one of the leading manufacturers on the filter market and as our OEM products are often incorporated in customers' end products, we play an integral role in their quality assurance work. Our business activities and operations are verified and certified by RISE, the Swedish National Testing and Research Institute, which also takes responsibility for continuous inspection and validation.

**Manufacturing Capacity**

At the main manufacturing hub in Latvia AAF runs several different pleating machines as well as pocket filter and HEPA filter lines using the latest technology. We have fully automated assembly lines, equipment for foaming PU gaskets, and test equipment for scanning in compliance with EN1822. Beside the plant in Latvia, we can count on our global production and development network. Together we offer the most comprehensive air filtration portfolio in the industry.

PRODUCT PORTFOLIO  
FOR OEMS

**Filter Cartridges**

Welding fumes, sand blasting, spraying, surface treatment, etc.

**Filter Bags**

Sand blasting, wood industries, casting industries, vacuum cleaners, etc.

**HEPA Filters**

Cleanrooms, hospitals, vacuum cleaners, vehicles, welding fumes, oil mist, etc.

**Compact Filters**

Hospitals, cleanrooms, vehicles, welding fumes, oil mist, spraying, etc.

**Pocket Filters**

HVAC applications, healthcare, vehicles, oil mist, etc.

**Panel Filters**

HVAC applications, healthcare, vehicles, industrial vacuum cleaners, etc.

**Carbon/Chemical**

Industrial process air and vehicles, office and residential HVAC applications, etc.

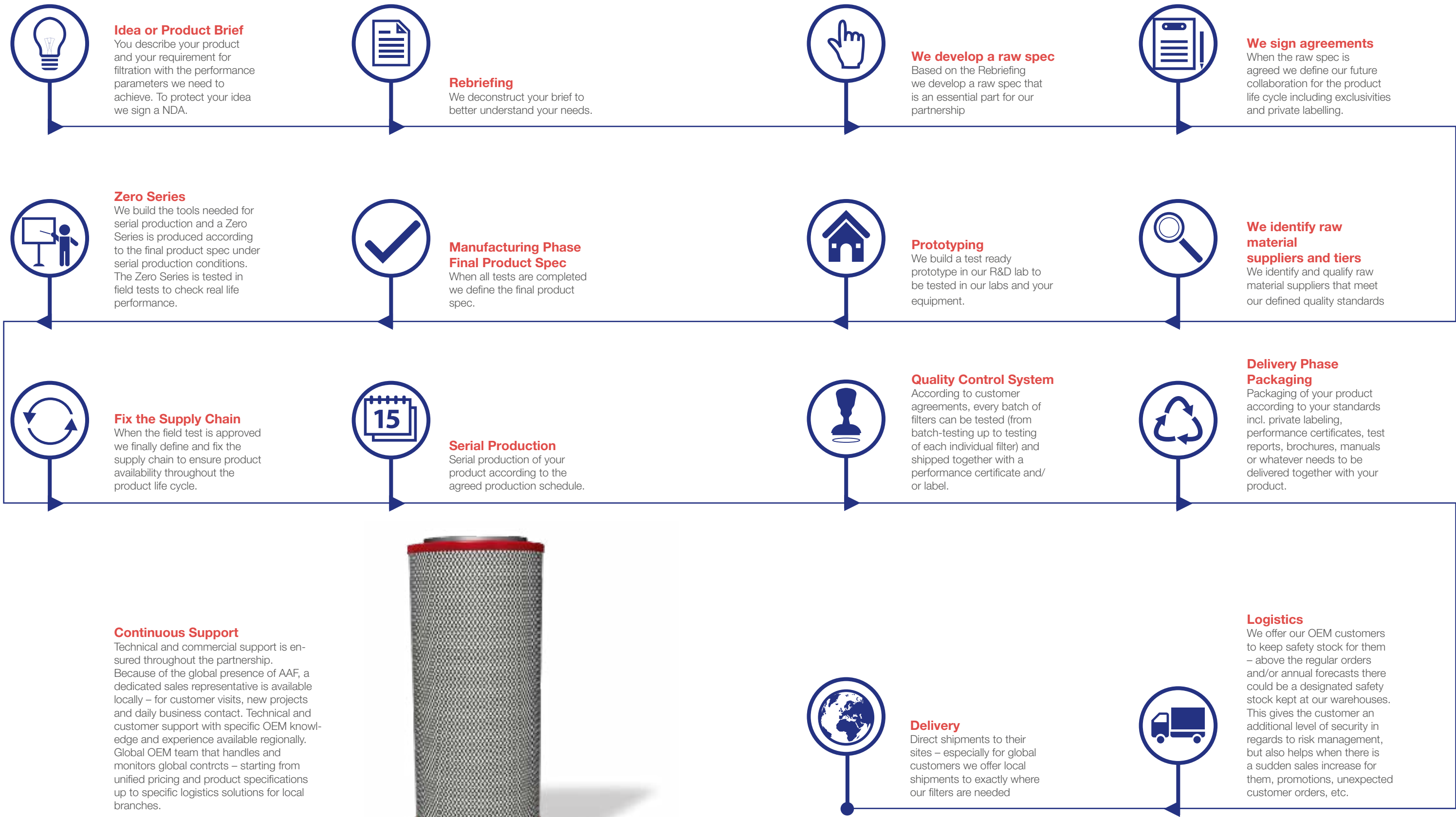
**Metal Filters**

Spark traps, oil mist, grease



# How we work

## Product Development Phase





SENSOR360 – The first Internet of Things patented technology platform of the Filtration Industry to demonstrate effectiveness of building's filtration system by monitoring particulate levels.



## You ensure reliability of your products – We monitor and demonstrate filtration system performance

AAF is the Pioneer that brought Sensors and Internet of Things (IoT) to the filtration industry. We provide the technology for clean air related machine-to-machine communication that is built on cloud computing and networks of data-gathering sensors with mobile, virtual, and

instantaneous connection. We support OEMs in the development of future ready equipment by designing our products to be Sensor-ready if this is needed.

### Next-Generation Monitoring and Management Tool

- Monitors pressure drop to determine filter change-out point that offers the best value and energy efficiency
- Battery-powered sensors measure particulate concentration in both unfiltered air and indoor air, and communicate values to a mobile/ tablet/computer app
- Sensors send alert to app when particulate levels are at an unacceptable concentration level, so that IAQ issues can be resolved quickly
- App can be customized with user defined alerts
- Lobby kiosks display both indoor and outdoor air particulate levels for building occupants
- App immediately alerts facility managers that particulate levels are at an unacceptable concentration, enabling them to resolve issues quickly
- Cross platform capability – PC, tablet, or smartphone



### Sensor360 - Enables You to Understand and Plan Air Filter Performance and Maintenance in Entirely New Way

Poor Indoor Air Quality (IAQ) ranks as one of the top five environmental risks to public health. The Sensor360 tool helps facility managers solve this problem by monitoring their building's indoor air, offering instantaneous monitoring of a filter system's performance and automatically tracking pressure drop and PM1, PM 2.5, and PM10 particulate levels. This device gives the user the ability to resolve potential indoor air quality issues before they

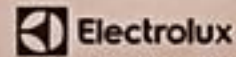
negatively affect building occupants. Building occupants will also have clarity regarding the quality of air that they are breathing. With Sensor360, the user can optimize preventive maintenance scheduling, decrease deferred maintenance, save money, reduce risk, and gain time. No other tool in the current marketplace gives this level of clarity and specificity regarding filter performance and IAQ.



## AWARDS

The Electrolux Supplier Excellence award is just one example for our very long track record with Original Equipment Manufacturers.

Electrolux  
Supplier  
Excellence  
Award  
2018



# You are looking for supplier excellence – We help our customers in bringing clean air to life

“We are proud to be considered as one of Electrolux top suppliers globally and award winner in the category Home Care & Small Domestic Appliances,” says Dr. Stefan Berbner, Chief Operating Officer Europe at AAF International.

“This award is another evidence for the excellent performance of the complete Dinair team and demonstrates the great value Dinair is bringing to AAF”. Kent Petersson, Vice President OEM of AAF and Dinair, added, “We have a very long track record with Electrolux and produced millions of filters during this time. However, it is not only the manufacturing – it is more about the continuous improvement of processes and the connection of dots with our customers. This is what represents a true champion in collaboration with Original Equipment Manufacturers.”

For Electrolux Dinair invested considerably in a new, highly modern, production line in Latvia. The plant in Latvia produces thousands of products per day, in steady high quality, within agreed time-frames helping OEM customers around the globe to be more successful in bringing clean air to life.

Electrolux  
Supplier  
Excellence  
Award  
2018







## AAF International Plant Locations

### European OEM HQ

Rūpnīcu street 4, LV2114, Olaine, Latvia:

[dinair.latvia@dinair.se](mailto:dinair.latvia@dinair.se)

AAF, the world's largest manufacturer of air filtration solutions, operates production, warehousing and distribution facilities in 22 countries across four continents. With its global headquarters in Louisville, Kentucky, AAF is committed to protecting people, processes and systems through the development and manufacturing of the highest quality air filters, filtration equipment, and associated housing and hardware available today.

Contact your local AAF representative for a complete list of AAF Air Filtration Product Solutions.

### Americas

Louisville, KY  
Atlanta, GA  
Ardmore, OK  
Bartow, FL  
Columbia, MO  
Fayetteville, AR  
Hudson, NY  
Momence, IL  
Ontario, CA  
Smithfield, NC  
Tijuana, Mexico  
Votorantim, Brazil  
Washington, NC

### Europe

Cramlington, UK  
Gasny, France  
Vitoria, Spain  
Ecoparc, France  
Trencin, Slovakia  
**Olaine, Latvia**  
Horndal, Sweden  
Vantas, Finland

### Asia & Middle East

Riyadh, Saudi Arabia  
Shah Alam, Malaysia  
Suzhou, China  
Shenzhen, China  
Miaoli, Taiwan  
Bangalore, India  
Noida, India  
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