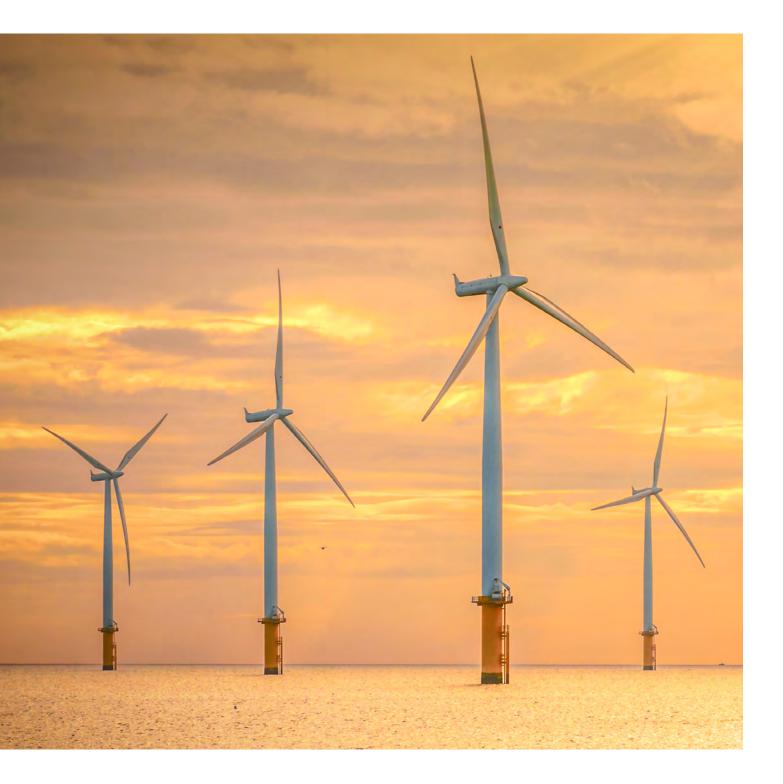
# Wind Turbine Air Filtration

Air filtration solutions dedicated to the wind energy sector





aafintl.com



## Bringing Clean Air to Life

AAF International was founded in 1921 in Louisville, KY. Today, AAF operates in 22 countries across four continents and is one of the world's leading manufacturers of air filtration solutions. AAF International offers fully comprehensive, innovative solutions for protecting against airborne particulates and gaseous contaminants in residential, commercial, industrial dust collection and energy applications.

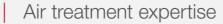
AAF has several strategic R&D locations around the world, including its Clean Air Innovation & Research Center in Indiana and its offshore testing centre of excellence in the UK. Each location is designed to develop innovative and value adding products. As a global filtration leader, the entire team at AAF is committed to providing the highest levels of expertise and support to its customers across a wide range of markets.



Dedicated applications



Years of experience



- Renowned reputation
- Full system capabilities
- Product development
- Critical protection



Comprehensive knowledge



Innovative products

## **Energy Sector Focus**

For over half a century AAF International has been providing air filtration systems to OEMs and Operators in the energy sector, with a wealth of experience in the gas turbine and reciprocating engine markets across the power generation and oil and gas sectors.

The AAF brand is trusted around the world with well over 7,000 gas turbine installations, including desert operations, arctic conditions and offshore platforms and vessels. AAF is now considered the

# Our years of filtration experience and know-how are management and project execution.



leading supplier to offshore platforms after gaining a wealth of knowledge and experience in this harsh and unforgiving environment.

AAF is also a leading supplier of clean air solutions in the nuclear sector, providing innovative filtration products from the turbine hall to the nuclear islands. AAF is now leveraging expertise developed in these power markets to support projects across the wind energy sector, with a focus on offshore filtration and cooling.

supported by our proven ability at product design, project

#### The Advantages of Air Filtration Technology

Air filtration and cooling solutions are essential in wind turbines to protect capital equipment, reduce maintenance costs and increase the life of critical components.

# 1 Nacelle Solutions

A nacelle air ventilation module stops critical equipment from overheating and ensures the area is well ventilated. Ambient air must be filtered to remove salt, moisture, dust, pollen, and hydrocarbons to protect the generator, gearbox, brake, control electronics and ensure continuous operation.

# <sup>2</sup> Generator Solutions

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As wind turbines increase in size and generator cooling evolves to air cooling solutions it puts greater emphasis on air intake filtration. AAF has the filtration and cooling expertise to allow you to optimize performance. AAF is supported in this area by its parent company Daikin Industries, the world's leading air conditioning company. 3 Tower Solutions

Tower air ventilation modules allow air to circulate in the wind turbine tower, ensuring clean filtered air is used in the air conditioning process. Removing harmful air contamination to protect critical components and ensure the area is well ventilated. AAF filters are lightweight, easy to install, and have a long service life to reduce maintenance.



#### 4 Substation Solutions

Wind farms have substations located offshore to connect the energy generated to the power grid. AAF, along with its parent company Daikin, can provide a full range of air filtration, heating, air ventilation and air conditioning systems to protect critical equipment from the harsh offshore environment to ensure continuous operation and lower maintenance costs.

### Expertise You Can Rely On

At AAF, our extensive experience in air filtration technology makes us the ideal partner for your next wind energy project. AAF is already an established air handling unit specialist and we've been supplying onshore and offshore filters for decades, designed for specific environmental conditions.

We can meet your required specification and offer advice, guidance, and support. When it comes to product design, project management and project execution you are in safe hands. We are not only a filter expert but a system designer with extensive air cooling experience through our parent company Daikin.

We also have dedicated R&D, testing and validation facilities where new products are developed, equipment in these facilities includes a dedicated offshore test rig using salt water to validate offshore filters and ensure maximum protection.

We've served the energy sector for many decades with filtration and cooling technology expertise, dedicated to delivering projects that enhance performance.





#### Products You Can Trust

In the offshore environment salt corrosion and water ingress can pose a major threat to wind turbine operational efficiency. In extreme cases, exposure can result in power loss, downtime, costly repairs, and, ultimately, failure of critical components.

AAF is used to making systems as compact as possible to minimise weight. We also understand the challenges of replacing air filters in wind turbines, so filters have a long service life to reduce filter changeout, are easy to install and handle, and are designed to maximise reliability.

Regardless of whether we are supporting nacelle ventilation, generator cooling, tower air conditioning or substation air filtration our aim is simple; to protect your capital equipment, reduce maintenance costs and increase the life of critical components. With decades of experience in a whole variety of applications, we're here to advance your position as an industry leader.

- Capture harmful particles
- Remove moisture
- Long filter life
- Easy to handle
- Improve performance



#### AAF International

Filtration has been at the heart of our business since 1921 and thanks to the high calibre of our products and services, we are trusted by many of the world's leading power and industrial companies. We provide our customers with the expertise, the solutions and the best available filtration technology to increase operational performance. Bringing clean air to life, our products provide the highest levels of indoor air quality, the lowest environmental emissions and the optimum safety conditions for employees and the wider community.

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aafmarketing@aafintl.com

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