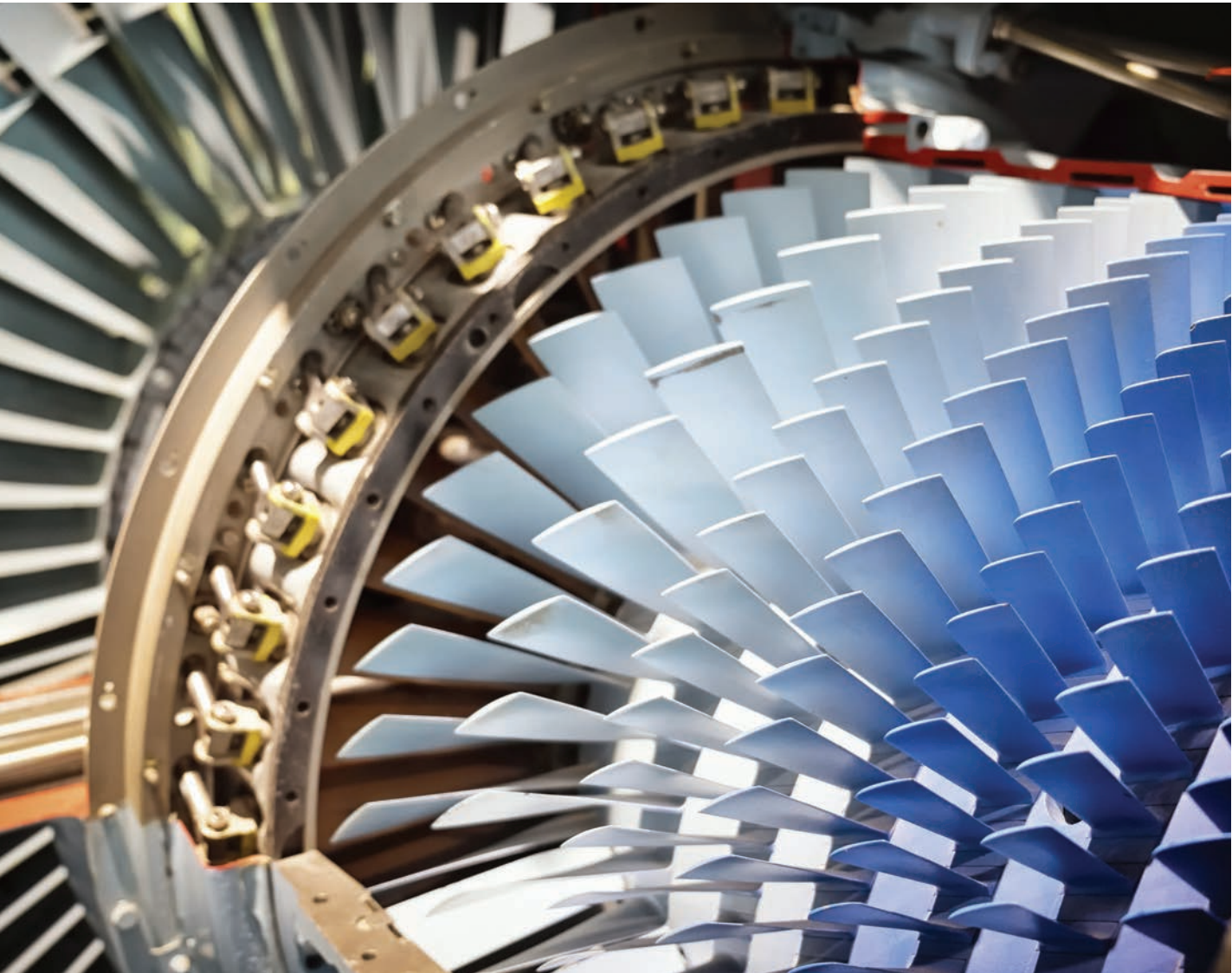


# Global Products & Services

Performance enhancement for gas turbines

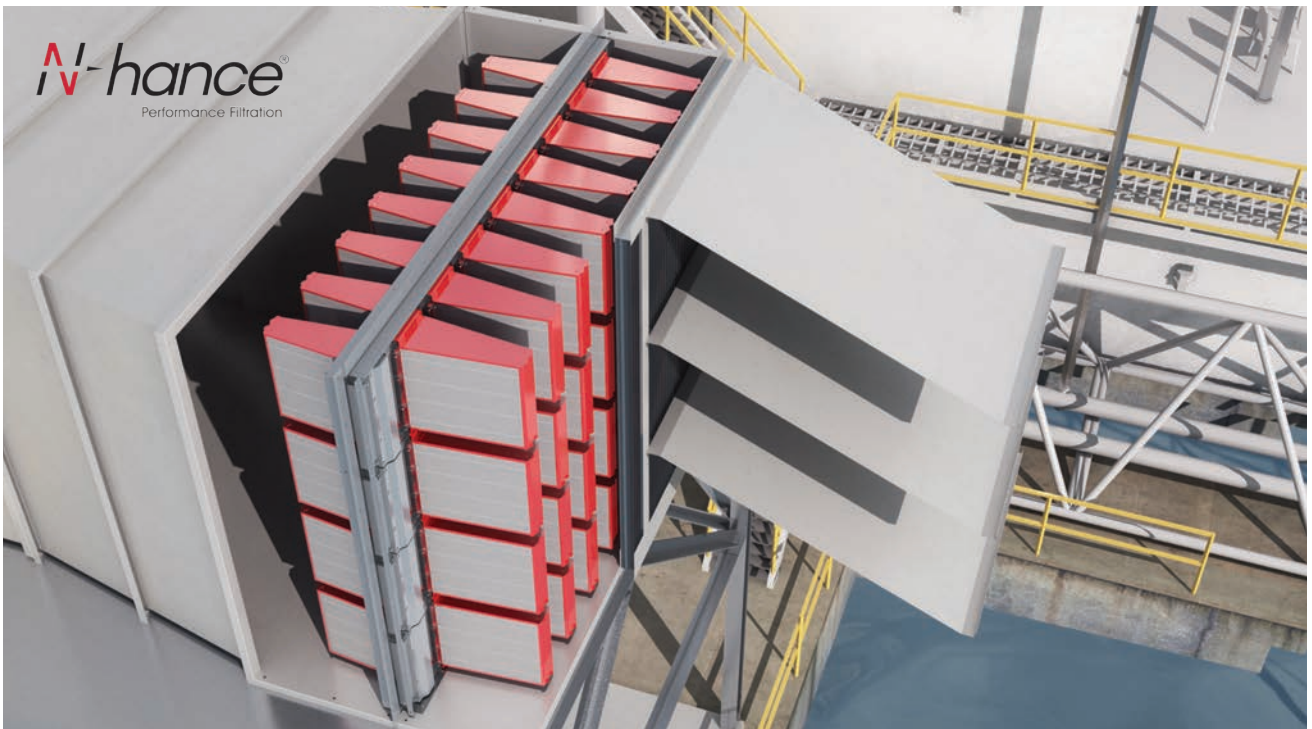


Bringing clean air to life.®



## Gas Turbine Solutions

At AAF, our years of experience underpin our expertise, our mission is to provide best in class service and support throughout the lifecycle of your plant. We strive to ensure your assets utilise the best available technology providing highest availability, superior efficiency, higher power output, greater reliability and easier maintenance.



## It Starts with Innovation

Throughout the history of AAF innovation has been at the core of everything we do. We pioneered (H)EPA filtration in cleanroom applications back in 1964 and have been promoting the added value this technology can bring to gas turbine filter houses ever since.

That spirit of innovation has led to many marketing-leading products, including the ASC filter house with inertial separation to maximise pulse cleaning, the AmerShield pre-filter with integral impress technology media and now N-hance Performance Filtration, utilising EPA E12 filtration in offshore applications.

AAF has executed thousands of projects, delivering gas turbine auxiliary equipment, for small to large machines and to all of the major original equipment manufacturers.

Our product portfolio has allowed us to succeed in executing projects in the most demanding environments; from sub-zero Arctic, to offshore marine and remote sandstorm deserts. In all cases the measured evolution of our products has proven to ensure reliable performance for our operators.





## Inlet and Filtration Solutions

With an extensive range of solutions to protect critical components, AAF is recognised globally for its quality, expertise and innovation in air inlet treatment and filtration. For over 50 years, AAF has been a leader in the design and application of gas turbine air filtration, developing a range of static and pulse filter solutions for all operating environments.

# Designed for your Operational Requirements

AAF International's entire product range meets all industry and original equipment manufacturers' (OEM) standards, ensuring superior protection and total peace of mind. With a product portfolio that utilises the latest innovations in technology to enhance gas turbine performance.

This results in greater gas turbine availability, a higher constant power output, an increase in engine component life, lower operating costs, reduced heat rate and an increase in fuel efficiency.

## Applications

- | Power generation plant
- | Mobile generation unit
- | Oil & gas platform
- | FPSO vessel

## Filtration

- | Prefilters
- | Static filters
- | Pulse filters
- | (H)EPA upgrades

## Environments

- | Desert
- | Rural
- | Coastal
- | Marine
- | Arctic
- | Tropical
- | Industrial
- | Urban

## Inlet solutions

- | Evaporative cooling
- | InstaKool
- | Mechanical chillers
- | Anti ice protection
- | Heating & cooling coils





## The Value of (H)EPA Filtration

AAF (H)EPA filters help gas turbines realise greater power, enhanced efficiency and extended time between water washes, even in the harshest conditions on earth. Right now, AAF (H)EPA filters are hard at work supplying clean air at stable differential pressure, extending engine life and increasing reliability to gas turbines around the world.

## Increase turbine reliability

### Increase machine availability

The advanced filtration of AAF (H)EPA filters help engine cores remain in close to new condition during operation. As a result, cycles between on or offline cleaning can exceed 8,000 hours. More time online means greater productivity.

### Recover lost power

With an initial filtration efficiency of 99.5% or greater at the smallest penetrating particle size, AAF (H)EPA filters help maintain gas compressor cleanliness by recovering 6% of the power output normally lost to engine fouling in none power loss megawatt hours (Mw/hrs).

### Enhance fuel efficiency

Today's modern gas turbines have incredibly tight tolerances and critical profiles for maximum efficiency. AAF's advanced filtration removes airborne pollution that can foul the engine compressor stator and rotor blades, helping gas turbines run with like-new efficiency even after extensive operation.

### Extend engine life

With AAF (H)EPA technology, operators can enjoy substantially longer component life and engine reliability. The outstanding protection against salt, hydrocarbons, water and other airborne particles ensures complete peace of mind.

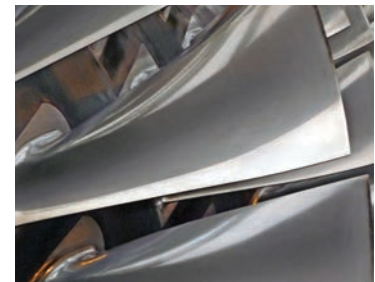
## Operating cost benefits

- | Recover lost power
- | Reduce fuel cost
- | Constant power output
- | Increase turbine availability
- | Lower maintenance costs
- | Avoid expensive core engine damage

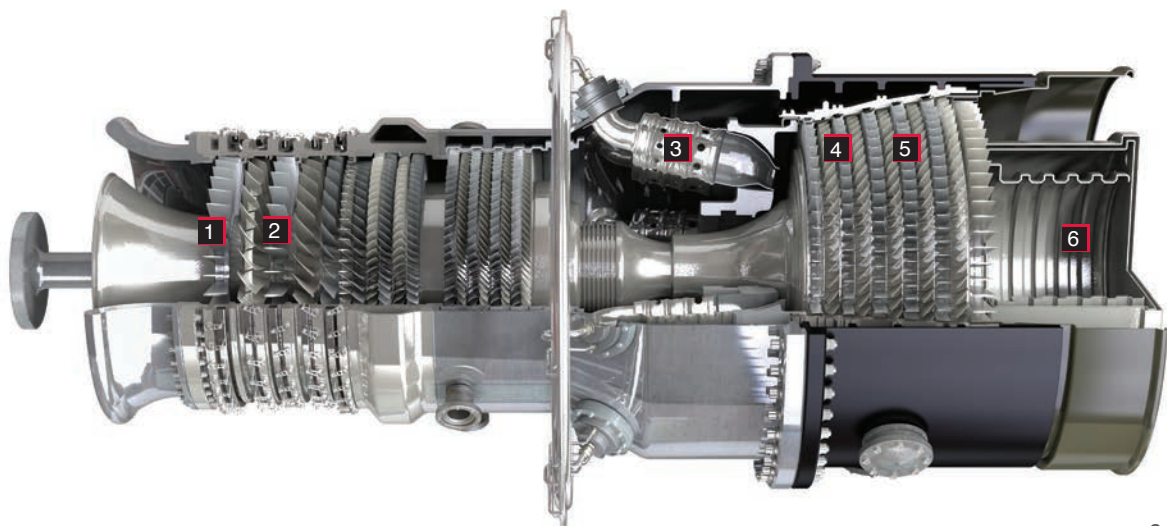
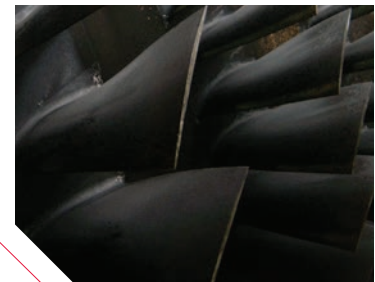
## Maintain a healthy engine

- 1 | Eliminate compressor fouling
- 2 | Eliminate or reduce the need for compressor washing
- 3 | Increase fuel efficiency
- 4 | Extend lifetime of engine components
- 5 | Cooling ports clear of blockage
- 6 | Constant power output

With AAF (H)EPA (8,000 hours)



Without AAF (H)EPA (2,000 hours)





## Acoustic and Exhaust Solutions

AAF has a wide range of technologies to support the demands of the gas turbine sector, with a wide range of clients and extensive gas turbine packaging experience. The scope of previous projects is vast and firmly puts AAF as one of the leaders in full-service noise control systems.





AAF's experience in gas turbine packaging has supported its development into one of the leading and most diverse suppliers within the gas turbine auxiliary equipment field. This includes all areas of the exhaust system, from diverter dampers and silencers, AAF's high performing products are designed to meet the extreme conditions found in the gas turbine exhaust.

Through an extensive testing programme and continual investment in research and development AAF offers innovative solutions for even the most arduous of operation environments and stringent restrictions. The Company strives to ensure the customer's assets always utilise the best available acoustic and exhaust technology.

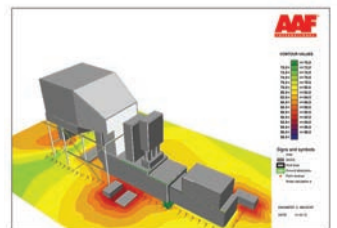
AAF has completed a wide range of acoustic projects, with positive feedback derived from the application of cutting edge noise mitigation solutions. As a provider of turnkey projects AAF will take control of the entire process, from design and manufacture, through to assembly and installation.

## Products

- | Inlet silencers
- | Ventilation systems
- | Exhaust systems
- | Exhaust diverter dampers
- | Acoustic enclosures
- | Control rooms
- | Acoustic buildings
- | Barriers & cladding

## Services

- | Feasibility studies
- | Consultation
- | Surveys
- | Modelling & mapping
- | Design & engineering
- | Production
- | Installation
- | Verification & measurement





## Service Solutions

Gas turbine air intake, exhaust, ventilation and acoustic systems are vital components, which when maintained operate to protect gas turbines. Equipment of this importance requires the right calibre of support, with years of experience and a highly qualified global support team, AAF will work with you to fulfil all of your maintenance requirements.



Starting with understanding your past and current plant performance, as well as ambitions for improvement, AAF takes ownership from inlet to exhaust to guarantee a dependable air quality hour after hour.

- | Full inspection and maintenance of GT ancillaries
- | Air quality guarantee
- | Gas turbine efficiency reporting
- | Equipment life assessments
- | Health and safety risk assessed
- | Materials and design analysis
- | Failure modes and effects analysis (FMEA)
- | Active filter management



AAF field specialists ensure gas turbine ancillary equipment is kept within optimum working conditions, including a comprehensive upgrade and modification service.

- | Plant acoustic management
- | Inventory management (filter and spares)
- | Installation supervision and commissioning specialists
- | Repair/troubleshooting
- | In situ or factory repair to OEM standards
- | Genuine spare parts
- | Upgrades & modifications



Bringing clean air to life.®

A light gray world map is centered in the background of the page. A semi-transparent white rectangular box is overlaid on the map, containing the company name and a paragraph of text.

## 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.

[aafintl.com](http://aafintl.com)

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