

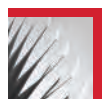


Global products & services

Gas turbine solutions



BETTER AIR IS OUR BUSINESS®



GAS TURBINE
SOLUTIONS



“Striving to be a company that creates opportunities to take on challenges and effect change”

Darren Allsopp

Chief Operating Officer, AAF P&I





AAF heritage

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.

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 through to remote deserts.

In all cases the measured evolution of our products has proven to ensure reliable performance for our operators.

To guarantee reliability of your assets we have positioned ourselves strategically to ensure a qualified engineer is always close at hand to respond to the ongoing service and maintenance requirements demanded.





Inlet and filtration solutions

An extensive range of inlet solutions to protect critical components in all applications and environments.

AAF is recognised globally for its quality, expertise and innovation in air inlet treatment and filtration. As a world leader in the design and application of gas turbine air filtration for over 40 years we offer 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. The AAF product portfolio also includes a wide range of filtration options, utilising the latest innovations in technology. This results in a higher constant power output, lower operating costs, reduced heat rate, an increase in fuel efficiency and will extend the lifetime of engine components.

Applications

- | Power generation plant
- | Mobile generation unit

Filtration

- | (G3 - H13)
- | Prefilters
- | Static filters
- | Pulse filters

Environments

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

Inlet Treatment

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





(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 reliable differential pressure to gas turbines around the globe, including the advanced F-class machines.

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).

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 8000 hours. More time online means greater productivity.

Enhancing 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.

Longest engine life—setting world records

The protection offered by AAF (H)EPA technology keeps engines so clean, operators can enjoy substantially longer component life and engine reliability. In fact, a record 84,000 hours hot gas path section life has been logged on one engine using AAF protection from aggressive salt ingestion.

Operating cost benefits:

- | Recover lost power
- | Less fuel cost
- | Constant power output
- | Increased turbine availability
- | Less maintenance costs
- | Avoid expensive core engine damage

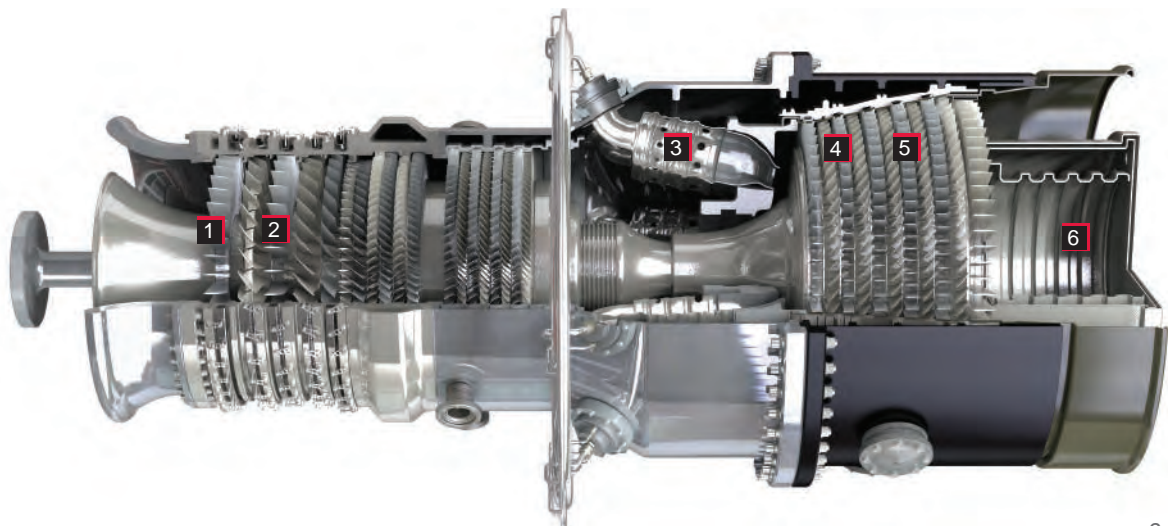
Increased turbine reliability:

- 1 | Eliminates compressor fouling
- 2 | Eliminate or reduce the need for compressor washing
- 3 | Increased fuel efficiency
- 4 | Extended 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)





Acoustics solutions

AAF has a wide range of technologies to support the noise control demands of the power 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.



The acoustics division is a multi-disciplined team with years of experience in the power generation sector. The team continues to offer class leading acoustic solutions, products and services. Supported by technical expertise and assistance, which includes plant feasibility studies and analysis.

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 technology.

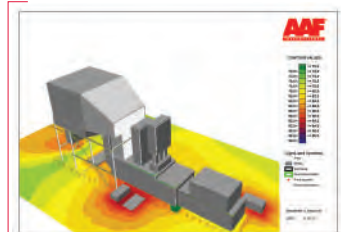
AAF has completed a wide range of acoustic projects, with positive feedback derived from the application of cutting edge noise mitigation solutions. As a provider of turnkey projects AAF will take control of the entire process from design and manufacture through to assemble and installation.

Acoustic products:

- | Inlet silencing
- | Ventilation silencing
- | Exhaust silencing
- | Enclosures
- | Control rooms
- | Buildings
- | Barriers
- | Cladding

Acoustic 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

Quality, expertise and innovation

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