

**POWER &
INDUSTRIAL
MACHINERY
FILTRATION &
ACOUSTIC
SYSTEMS FOR
GAS TURBINES**



B E T T E R A I R I S O U R B U S I N E S S ®



MACHINERY FILTRATION AND ACOUSTIC SYSTEMS FOR GAS TURBINES

OUR QUALIFICATIONS

AAF International is a name recognized globally for quality, expertise, and innovation in the air filtration industry. As a world leader in the design and application of air filtration and noise control systems for gas turbines and other high-performance rotating machinery, we realize that proper operation of this equipment is absolutely essential to your business. What this means is you will be served by a company with an outstanding industry record.

The diversity and caliber of our existing customers enable us to provide total turnkey systems capabilities based on a broad industry perspective. Our understanding of the industry, and the maturity of our project management team, enable us to deliver value at a competitive cost and to get the job done with minimal disruption, regardless of the location.

Our goal is simple: to provide top quality air filtration and noise attenuation solutions in a manner that most efficiently meets your needs.



AAF supplied air intake and exhaust systems for a Solar Mars Turbine at Placer Dome, New Guinea.

ABOUT AAF INTERNATIONAL

Headquartered in Louisville, Kentucky, AAF International is the world's leading manufacturer and marketer of air filtration products and systems. Selling globally under the AmericanAirFilter and AAF brand names, our products include commercial, industrial, and residential air filters; air pollution control products and systems; and gas turbine filtration and acoustical systems.

With operations in sixteen countries and more than 2,100 employees worldwide, AAF places a heavy emphasis on research and development to meet the increasing demand for cleaner air.

As an OYL Industries Berhad and Hong Leong Group Malaysia affiliate, AAF is supported by the financial resources of a multinational conglomerate involved in financial services, real estate investment, and the manufacture and distribution of industrial, consumer, and high technology products.

Many years ago, we adopted the slogan, Better Air is Our Business®, to simply state our purpose. Better Air is just as applicable today as it was in 1921, when a clever entrepreneur operating an automobile paint shop discovered the solution to dirt settling on his freshly painted automobiles. His "filter" discovery, consisting of steel wool and chicken wire, was so successful that he soon stopped painting automobiles and began selling filters.

The same pioneering spirit that led to the formation of the original American Air Filter Company in 1921 is still alive today at all levels of AAF.

COVER PHOTO: AAF supplied a total turbine system for two LM2500 turbines for EGT.

INDUSTRY OVERVIEW

Today's gas turbines demand maximum protection against environmental effects to ensure performance, longevity, and minimum maintenance. This machinery depends on high quality air to prevent fouling, erosion, and corrosion regardless of site conditions. From harsh deserts, to inner cities, to the most remote arctic

regions, gas turbines must perform at optimum efficiency on demand 24 hours a day, seven days a week, year after year.

Gas turbines generate intense noise levels that can be harmful to operating personnel, the general population, and the environment. Reducing noise pollution is a necessity for proper system operation, personnel safety, and compliance with environmental regulations. At AAF, we have the solutions.



AAF supplied a Pulse Jet filter for a Westinghouse W-251 turbine at Bali, Indonesia.



Total turbine systems for offshore North Sea.

INDUSTRY COMPETENCE

Since 1921 AAF has been providing filter systems to clean intake air for machinery. We are unmatched in our ability to engineer and manufacture total air filtration and acoustic systems. In fact, AAF pioneered many of the techniques and processes used in the protection of gas turbines and other high-performance machines. Our total system, turnkey solutions for air filtration and acoustics are found in thousands of installations around the world.

WORLDWIDE MANUFACTURING CAPABILITIES

With production facilities located worldwide, we offer the most comprehensive manufacturing capabilities in the industry. Our facilities are specifically designed for the manufacture of complex

industrial products. We fabricate in stainless steel, carbon steel, and aluminum. Each AAF location has a full range of capabilities and is able to meet customer specifications for a multitude of applications.

OUR APPROACH

Our approach focuses on careful planning and design, state-of-the-art engineering and manufacturing, and a continuing dialogue between our project management team and our customers. These are the reasons why so many OEMs, end-users, and system packagers have chosen us as their single source air filtration and noise attenuation experts for new installations and performance-enhancing retrofits.



AAF uses state-of-the-art engineering to meet customer specifications.

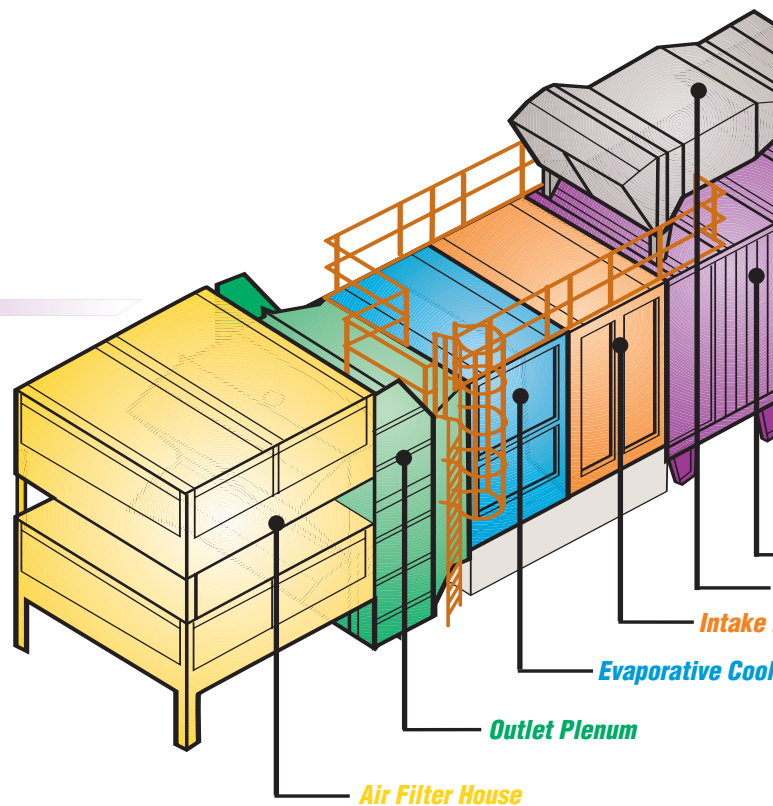


AAF built 21 exhaust systems for GE Frame 5 machines to be used on the Russian gas pipeline.

OUR TOTAL SYSTEM CAPABILITY AND PRODUCTS

Extensive experience in the design and application of gas turbines and other high-performance rotating machinery, plus our global manufacturing capabilities, position us uniquely to deliver total systems and top-quality products including:

- Inlet Filtration
- Chilled Water Coils
- Anti-Icing Systems
- Evaporative Cooling Systems
- Inlet Ductwork
- Inlet Silencers
- Expansion Joints
- Acoustical Enclosures
- Exhaust Silencers
- Support Structure
- Ventilation Systems



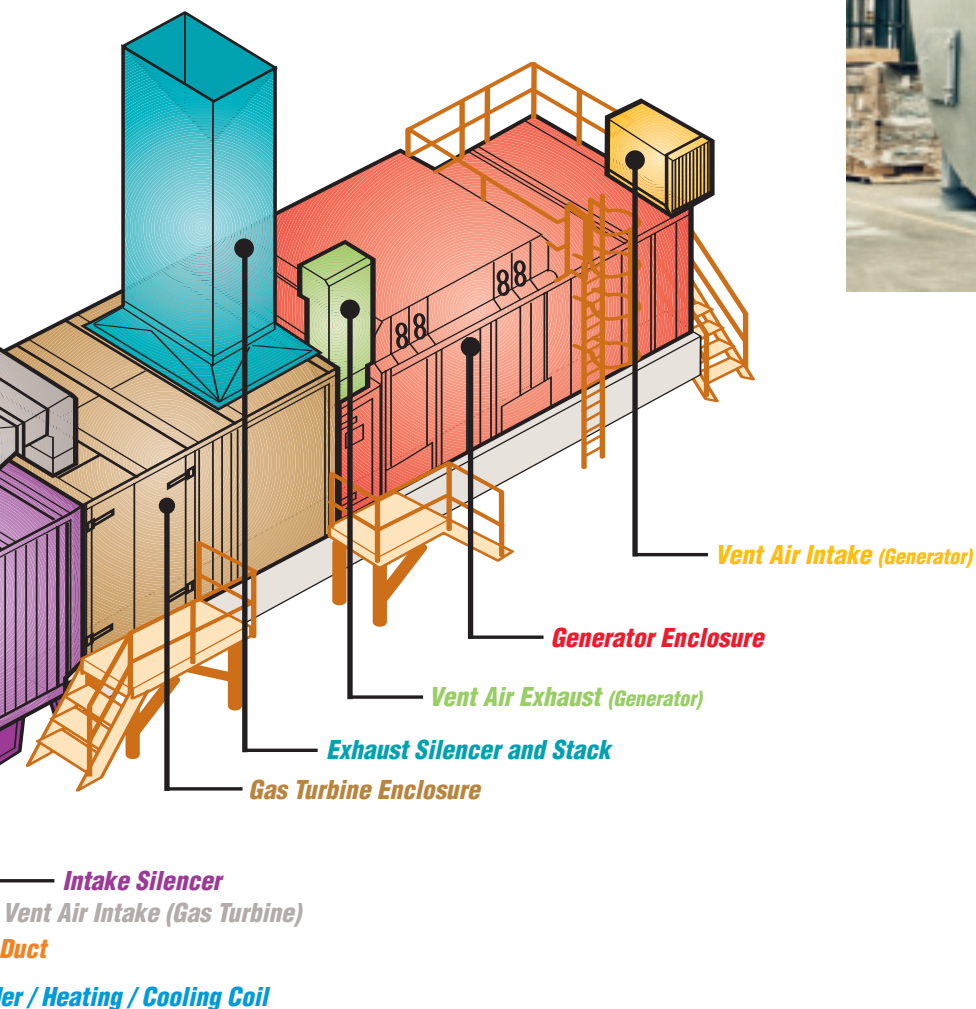
As a single-source supplier, we are able to offer customized total solutions for your air filtration and noise attenuation needs. We are able to execute engineering intensive projects. Working closely with your project managers, our filtration, structural, and acoustical

engineers ensure that all systems and products meet your specifications and arrive at the job site free of defects and on time. We can assist you with equipment arrangement and work with you to accommodate limitations in physical layout.

Expertise in structural design and manufacturing sets us apart from our competition. We couple expert design with

the highest quality manufacturing processes, overseen by the engineering design team, to ensure that the final product meets every requirement.

AAF conducts a final inspection on an air intake silencer with a special aerodynamically shaped outlet elbow.



QUALITY THAT MAKES A DIFFERENCE

Prior to delivery, we conduct comprehensive inspection to ensure that all specifications are met. During the entire production process, from the first customer contact until the system or product is operational, our activities are governed by our quality assurance program in accordance with ISO-9001. This guarantees that the product complies with established quality standards and satisfies the requirements of our customers.

Our commitment is to build quality into our systems and products, not inspect defects out of finished products.

OUR SPECIALTY - PERFORMANCE-ENHANCING RETROFITS

We specialize in retrofitting aging gas turbines and compressors to enhance performance. Our engineers are technically proficient in a variety of industries and understand the challenges of designing cost-effective retrofits. Using our worldwide resources, we can handle all requests for retrofits quickly and efficiently. Most importantly, our engineers and technical experts will ensure that every retrofit causes a minimum of downtime and equipment outage.

Here are a few system and equipment modifications, typical of our retrofits, that we have implemented to improve air delivery and enhance the performance of gas turbines and compressors.

WE HAVE:

- *Redesigned filter banks to increase filtration efficiency, improve airflow, and minimize resistance;*
- *Modified existing ductwork and equipment to improve airflow and minimize resistance;*
- *Placed evaporative coolers, chillers, and fogging systems in the intake air path to control humidity and boost turbine output;*
- *Provided streamlined duct systems to facilitate efficient gas flow;*
- *Installed anti-icing systems to increase equipment availability.*

These modifications often result in increased total system output and an immediate positive impact on bottom line profit. In most instances, our customers realized very large percentage increases in production capacity. Clearly the payout on these retrofits is measured in days, not years.

If you are interested in discussing the retrofitting of an existing system, contact AAF at 888-223-3596 for more information. We will be happy to arrange a site visit and evaluation of your systems and equipment.

AAF supplied a total air filtration and acoustic system for an EGT packaged LM6000 at Knapton, England.



AAF supplied a retrofit air intake package with evaporative cooling for a FCC compressor at a BP refinery at Belle Chasse, Louisiana.



WE'LL PROVIDE TRAINING AND SUPPORT

To ensure performance and maintain reliability, we offer specific training for operational and service personnel. This

training enhances and supports our customers' knowledge as they operate and maintain installed equipment. We can also provide supervision during startup, or at any time our expertise and advice are needed.

Our systems and products are designed for a long operating

cycle. Excellent reliability in operation can be guaranteed, if original AAF spare parts and filter elements are used. New filter elements and parts can be ordered from us, or any of our affiliated companies. We have representatives located throughout the world ready to serve you.



AAF supplied a custom barrier inlet filter package for a Westinghouse W-501D5 in Orange County, Florida.

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WE'RE READY TO GO TO WORK

Engineering expertise, experience, product offering, worldwide manufacturing, and an uncompromised commitment to quality define AAF International. But what really places us ahead of the competition is our willingness to work with customers to meet their specific needs for machinery air filtration and acoustic systems. We are willing to meet the most stringent specifications and develop project specific systems and equipment that best meet our customers' requirements. We are the company that OEMs and end-users have confidence in when problems arise.

With a commitment to customer service; the strength and resources to support your most stringent requirements; and the quality of our existing customer installations to build on, we are well positioned to meet customers' needs worldwide, now and in the future.



Total turbine systems for offshore North Sea.



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