# HydroShield<sup>®</sup> Sustainable (H)EPA Performance

| (H)EPA cartridge filter for gas turbines





## Optimum Filtration Performance

The HydroShield cartridge range has been specifically designed to protect gas turbines in rural, urban and coastal environments to maintain the compressor efficiency and output turbine output. It not only protects your gas turbine but in turn improves GT efficiency and ultimately enhances your revenue stream.

The HydroShield (H)EPA media is based upon proven AAF proprietary technology designed to maintain the penetration efficiency of the filter through its lifetime, while still ensuring a low pressure drop to keep turbine output stable. The HydroShield is also a pulsable cartridge, ideal to eliminate ice during the winter.

Regardless of the operating environment upgrading to HydroShield will sustain your GT output, eliminate fouling, reduce your heat rate, remove the need for frequent water washing and reduce fuel usage between 1-5%. Furthermore, the sustainable penetration performance of the HydroShield will only get better as it loads with particles.



#### Excels in high humidity

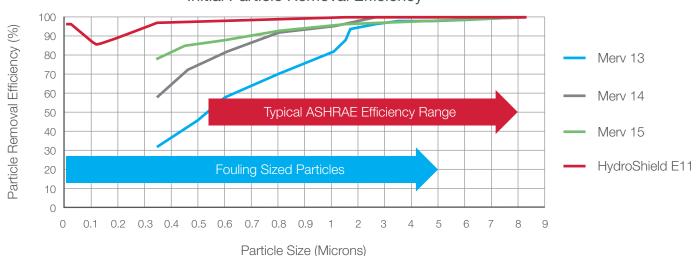
AAF's HydroShield (H)EPA cartridges are manufactured with a hydrophobic component, so the fibers are resistant to mist, fog, tower drift, and sustained rain events. The design acts as a water barrier so is particularly suitable for coastal locations, ensuring no contamination through harmful soluble minerals and salts.

### Features and Benefits



#### Product Comparison

The graph below illustrates typical ASHRAE efficiencies of 80/20 blends and standard synthetic media and shows the contrast in performance by upgrading to HydroShield EPA E11 media. Smaller particles typically foul gas turbines over time, so if you're running an intermediate or baseload gas turbine, it would make sense to upgrade to protect your revenue stream. The high performance and multi-phase media of the HydroShield EPA E11 captures 100% of particles greater than 1µm micron and significantly outperforms lower grade filters in the submicron particle sizes including hydrocarbons and salts.



#### Initial Particle Removal Efficiency

### A Complete Filtration System



Utilizing AAF's system knowledge will allow you to truly optimize your perfromance and take advantage of AAF's AmerShield<sup>™</sup> and HydroSleeve<sup>™</sup>. These pre-filters to maximize the life of the HydroShield. AmerShield pre-filters, with integrated Impress<sup>®</sup> technology, offer an outstanding combination of advanced filtration technology and coalescing performance.

An AmerShield wall upstream of the HydroShield cartridges will protect your investment and ensure reliable power even in the harshest of environments. AmerShield's optimized pleat spacing loads evenly and removes bulk moisture, while maintaining a very low resistance to airflow.

#### HydroSleeve™ pre-filter wrap option

AAF's HydroSleeve pre-filter wrap has been specifically designed to extend the life of cartridge filters. HydroSleeve captures large particles, airborne fibers and sticky hydrocarbons and protects against seasonal problems such as insects, pollen or seeds.

Unlike generic pre-filter wraps the HydroSleeve is hydrophobic and repels mist, fog, and rain particles that may penetrate poorly designed rain hoods. It will also repel and coalesce hydrocarbons that congeal into oil-like liquids during very persistent rainfall.

The HydroSleeve is a cost-effective solution, easy to remove and replace and will extend the filter life of the HydroShield product range.





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