



The Importance of Filter Design

A high strength faceguard design leads to stable gas turbine operation

Gas turbines consume large volumes of air every second. A well-designed faceguard adds much more than just strength to the filter element.

During operation of the gas turbine, shutdowns, restarts and changing operating conditions lead to large variations in the airflow through the filter system. These turbulent conditions can result in distortion and weakening of the filter over time, leading to poor filtration performance, shortened filter life or even a catastrophic failure of the filter.

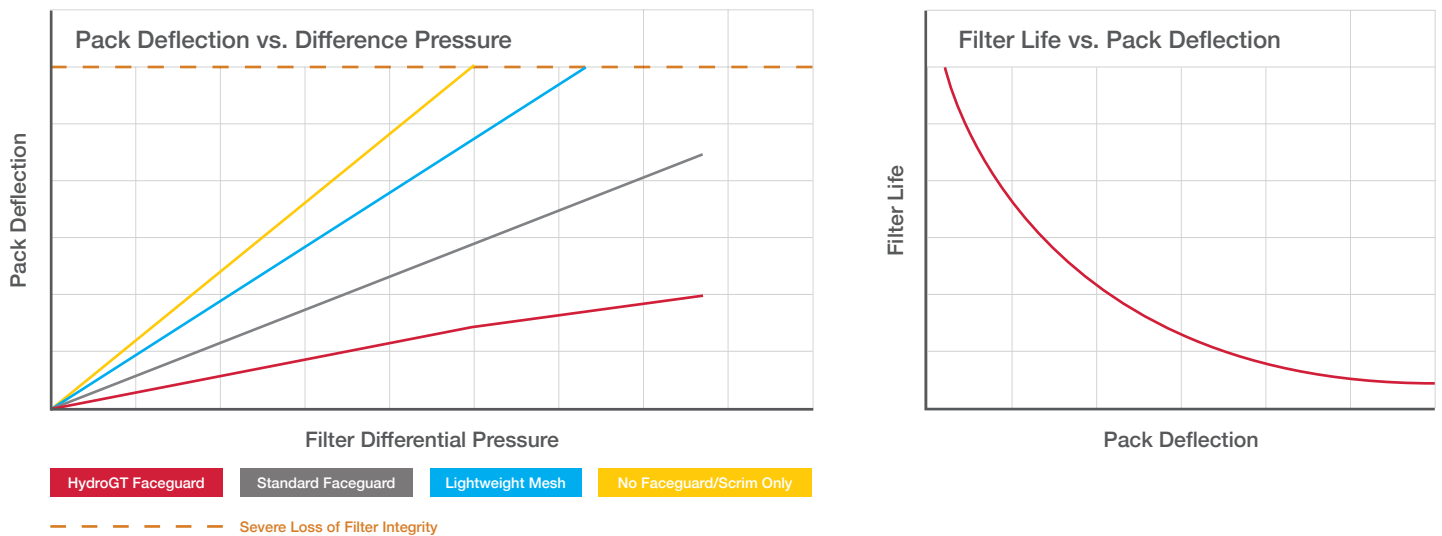
Designed specifically for gas turbine applications, AAF V-Bank filters (DuraGT V and HydroGT V) are supplied with a rigid faceguard as standard. By comparison, many competitor products typically have either a lightweight faceguard or no faceguard at all, which can lead to reduced filter effectiveness and performance.



Bringing clean air to life.®

Product comparison

The unique, high strength design of AAF products supports both the media pack and the filter frame, eliminating the risk of distortion of the filter and deflection of the media pack. This results in extended stable filter life, for optimum performance and protection of the gas turbine. The below graphs illustrate the relationship between media pack deflection, filter differential pressure and overall filter life.

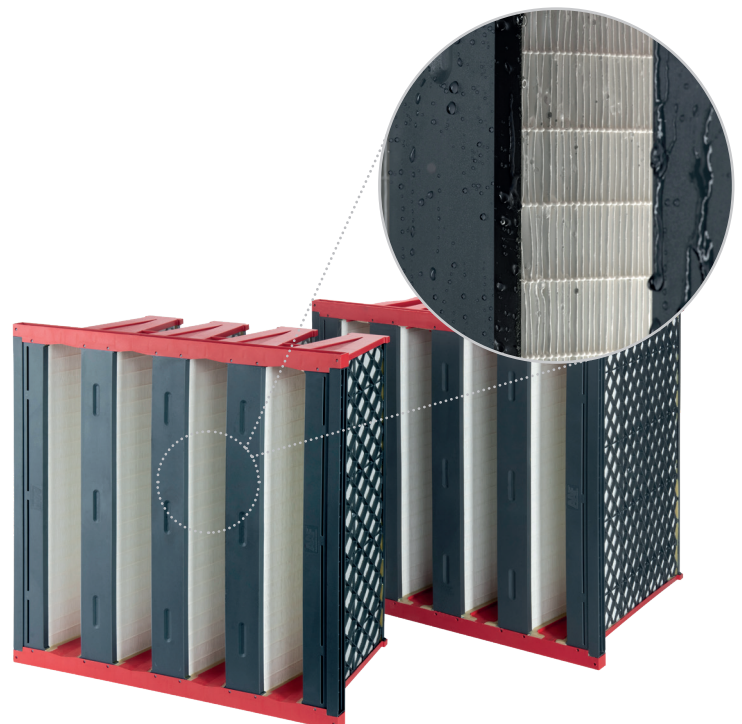


As can be seen, higher filter differential pressure leads to increased deflection. The greater the deflection, the more susceptible the filter is to sudden spiking in differential pressure, which can lead to alarm trips and unplanned shutdowns of the gas turbine. This becomes even more apparent as the filter becomes loaded with contaminant, and in periods of high relative humidity (e.g. fogs, mists, heavy rainfall etc.).

The ultimate protection

The HydroGT high efficiency filter delivers class-leading protection for your gas turbine, helping to extend component life and reduce maintenance costs. Utilising AAF's unique media this filter range is perfectly adapt to environments of high humidity.

- | AAF's proprietary media prevents water and salt ingestion
- | Vertical pleats and integral drainage remove moisture from the filter
- | New AAF faceguard provides class-leading filter integrity and strength
- | Fully supported media pack extends useful filter life
- | HydroGT V450+ has an increased media area to deliver further life extension



AAF's Hydro Media prevents water and salt ingress