

NEW HYBRID TECHNOLOGY
RELIABLE PERFORMANCE
IN ALL WEATHER CONDITIONS

Clean air solutions for turbomachinery

CAM-FLO GT HYBRID

BREAKTHROUGH TECHNOLOGY PROTECTS YOUR GAS TURBINE FROM THE ELEMENTS

The Cam-Flo GT Hybrid is a new generation of premium bag filters for gas turbines that utilize the breakthrough Hybrid media technology to combine glass fibers and synthetic fibers. The results are a smart solution for an extended filter life, a stable and predictable performance, and most of all, carefree operations.

Why pre-filtration matters

Pre-filters have an important impact on the overall efficiency of a filtration system. They are generally used as a first line of defense against the elements, and should therefore have good water handling performance and the capability to remove large amounts of heavy particulate from the airstream. Strength and dust holding capacity are obvious characteristics to consider.

Pre-filter efficiency is often overlooked since it may be perceived as only protecting and extending the life of the final filter. While this is true, air particulate filters do not work like strainers. Filter efficiency impacts all particle sizes by probability, so pre-filters may remove small particulates from the airstream that a final filter could have let through, increasing overall system efficiency. The pre-filter impact on overall efficiency is more important for lower grade final filters, while the pre-filter impact on extending the final filter life is more important on EPA grade final filters.

Table 1 shows how the right pre-filter can substantially reduce salt ingestion for turbines located in coastal environments.



Application areas

A robust filter suitable for all environments, the Hybrid can be used in areas with high dust loads, turbulence, or high humidity.

Most common applications where long filter life is needed:

- Air inlets for gas turbines
- Diesel engines
- Industrial air compressors
- Ventilation systems in control rooms and acoustical enclosures

TABLE 1. PRE-FILTER EFFICIENCY IMPACT

Gas turbine coastal application example

| Pre-Filter | Final Filter | Penetration (g) |
|------------|--------------|-----------------|
| None | T9 | 9659 |
| T7 | T9 | 3054 |
| T4 | T10 | 353 |
| T7 | T10 | 227 |
| T9 | T10 | 136 |
| None | T12 | 14 |
| T7 | T12 | 10 |
| T9 | T12 | 9 |

Estimates based on one year operations (5500hr) of a 27MW gas turbine in a coastal environment (ambient salt concentration of 0.3 particles per million).

THE HYBRID TECHNOLOGY

Performance and reliability that works for you

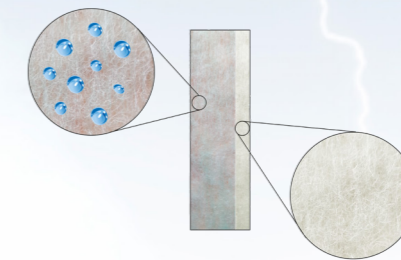
The Cam-Flo GT Hybrid filter combines the high efficiency and low pressure drop of glass fiber media with the strength and durability of the synthetic fibers. The result is an increased dust holding capacity and an extended filter life.

The synthetic pre-layer is composed of a lofty synthetic media that allows humidity to drain or dry out. It stops droplets, as well as coarse and fine particles, providing reliable and predictable operations no matter the weather events. The fine glass fibers have high mechanical efficiency; they stop particles down to a submicron size and have a high dust holding capacity for great filtration performance.

KEY FEATURES

SYNTHETIC PRE-LAYER

The synthetic fibers have excellent high mechanical strength and durability, which makes it a perfect pre-filter match for gas turbine operations in areas where considerations for high humidity and/or turbulence are important.

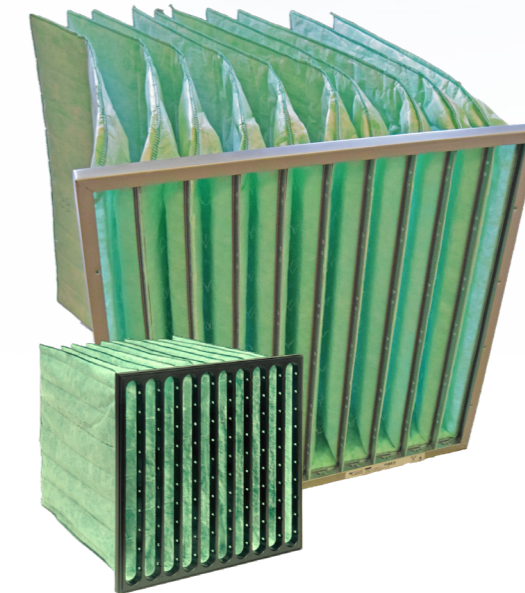


FINE GLASS FIBERS

Glass fiber media is best known for its efficiency and high, stable, and reliable performance. It has the finest yet most delicate fibers.

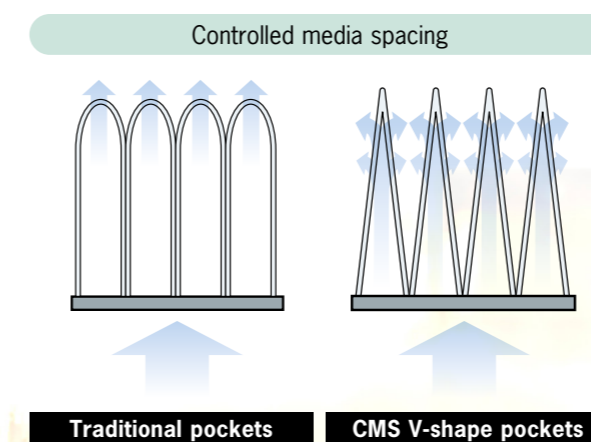
CONTROLLED MEDIA SPACING (CMS) Maximum Surface Use

The pocket design of the Hybrid distributes the air more evenly over the filter area, using the entire filter surface. The filter pockets are manufactured using the proprietary CMS method. Each pocket is formed into a uniform V-shape, preventing contact between bags and optimizing the airflow profile.



FRAME

The Hybrid filter is available with rigid galvanized steel for maximum robustness or plastic for full incinerability. It is sealed with a neoprene gasket on either the upstream or downstream side.

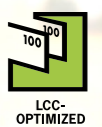


Key benefits

- Worry-free operations
- Extended filter life
- Stable & predictable performance

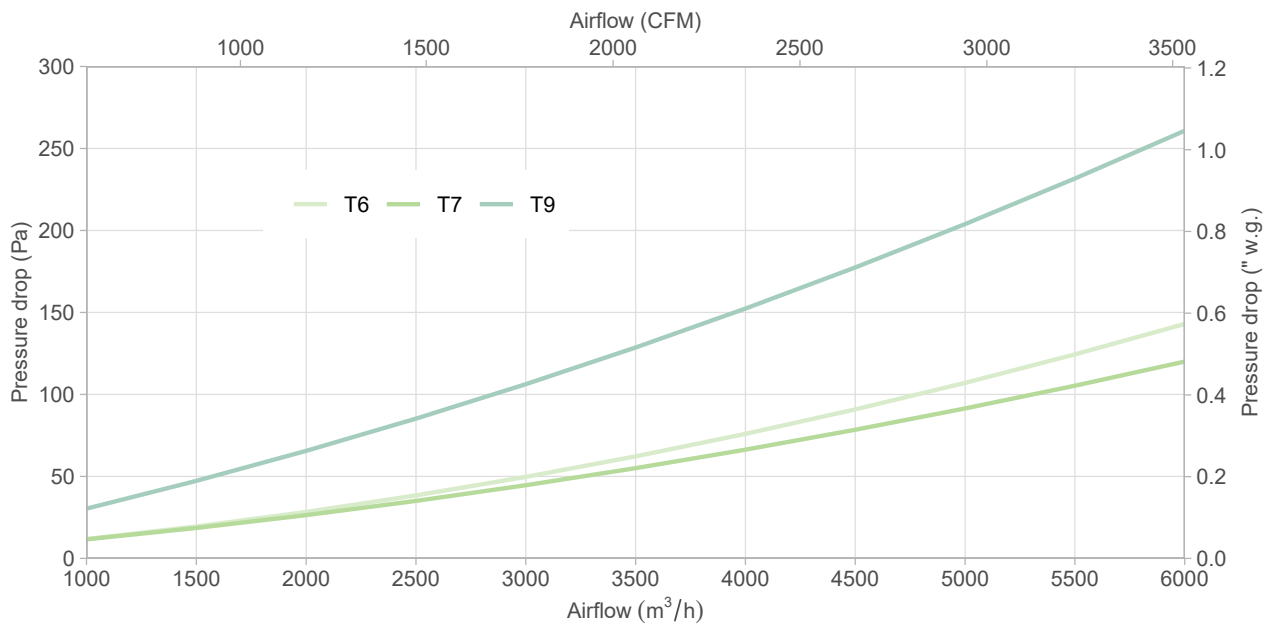
Additional benefits

- Lower CO₂ emissions per MWh
- More power output



Camfil Power Systems

Pressure drop



Technical data

| Model | Media | Length x O.D. | | Air flow/Press. loss | | Filter class ISO 29461-1:2021 |
|-------------------------------|--|---------------|---------------------------------|----------------------|-------------------------|----------------------------------|
| | | mm | inch | m³/h/Pa | CFM/\" w.g. | |
| Cam-Flo GT Hybrid T6 | Synthetic / Glass | 592x592x640 | 24 x 24 x 25 | 4250 / 80 | 2500 / 0.32 | T6 |
| Cam-Flo GT Hybrid T7 | Synthetic / Glass | 592x592x640 | 24 x 24 x 25 | 4250 / 90 | 2500 / 0.36 | T7 |
| Cam-Flo GT Hybrid T9 | Synthetic / Glass | 592x592x640 | 24 x 24 x 25 | 4250 / 165 | 2500 / 0.66 | T9 |
| Type | Bag filter | | Rec. final pressure drop | | 450 Pa / 1.8\" w.g. max | |
| Frame | Galvanized steel or plastic | | Rec. max. temperature | | 70°C / 160°F | |
| Media | Hybrid Technology | | Nominal air flow | | 4250 m³/h / 2500 cfm | |
| Pockets | 10 (standard) | | Efficiency standard | | ISO 29461-1:2021 | |
| Application | Suitable for all environments, also in high humidity and/or exposure to high turbulence | | | | | |
| Additional information | Standard pocket length 640 mm / 25\", other sizes & number of pockets available upon request | | | | | |

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