



New CamGT filters
improved and upgraded

Clean air solutions for turbo machinery

CamGT for more power output & efficient operation



Introduced more than a decade ago, found in a large number of gas turbine applications around the world, CamGT has become a trendsetter in the industry. Now, to meet increasing demands for performance and power output, we have upgraded the CamGT with a number of innovative features.

CamGT is a compact high capacity filter, specially developed for the high demands on equipment for power generation. The robust heavy duty construction combined with a large filter area, assures high efficiency, increased dust hold capacity and low pressure drop over time. As a result you will get optimum protection and reliable engine performance under the most demanding operating conditions.

Thanks to its unique design, performance is maintained in humid or wet conditions, guaranteeing a long lifetime and an overall good filter economy.

The CamGT is available in a range of efficiencies to meet individual requirements. With the E10 and E12 version (red plastic bars), the CamGT also offers clean room efficiency resulting in superior engine protection and extended periods of operation without the need to shutdown for cleaning.

Application areas

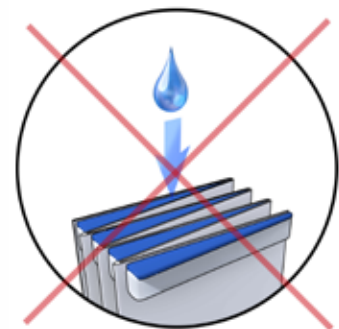
CamGT is used as a fine filter in combination with a pre-filter like Cam-Flo XMGT and a weather protection system.

Most common applications are:

- axial reciprocating compressors
- offshore and coastal installations
- installations with recurrent high humidity



Open hot melt separators allows water to drain



Closed hot melt separators blocks water



Vertical pleats



Open hot melt separators



Draining



Easy grip



Strong backing screen



Rigid plastic frame

CamGT for turbomachinery

Reliable, efficient and resistant to humidity. The CamGT's large filter surface is based on Camfil Farr's own construction featuring vertical pleats, hot melt separators and polyurethane seal. The filter media packs are reinforced with a strong backing screen and enclosed in a robust plastic frame to withstand the often severe pressure fluctuations encountered in turbomachinery applications.

The upgraded filter geometry optimizes the air flow and reduces initial pressure drop.

With the backing screen and the moulded polyurethane gasket permanently fixed to the filter frame, the filter installation is simplified with limited risk for filter media damage and leakage.

High humidity conditions

The CamGT's construction allows trapped water to drain freely from the filter during operation, thus avoiding re-entrainment

of dissolved impurities and maintaining low pressure drop under high humidity conditions.

Superior engine protection

The CamGT's are available in an E10 as well as an E12 version. They both offer considerable improvements in engine protection resulting in lower engine degradation and prolonged service intervals without the need of shutdowns for compressor cleaning. The E12 version includes 27% more filter media in order to maintain a low pressure drop along with an extremely high filtration efficiency.

(Green bars for the F/Merv-series, red for the E-series.)

Key features

- Vertical pleats
- Hot melt separators
- Heavy duty construction
- Fully incinerable
- Easy grip
- Maximum surface use

Key benefits

- Low pressure drop also in wet conditions
- Ensures water drainage
- High filtration efficiency
- Resistant to humidity/turbulence
- Reduced environmental impact
- Excellent burst pressure performance
- Easy mounting

User benefits

- Higher power output
- Less maintenance
- Less fuel consumption
- Extended turbine life
- Reduced life cycle costs
- Excellent in damp and humid climates

Camfil Farr filters are tested in our R&D center in Trosa, Sweden and also at a third party, in accordance with EN779:2002 and ASHRAE 52.2. Burst pressure tests have been conducted with excellent results.

The importance of good filtration

The prime function of an inlet filter system is to protect the gas turbine from pollutants in the inlet air.

Particles entering the gas turbine can cause erosion or fouling of the turbine internals. Erosion is mainly caused by relatively coarse particles, above 5 µm in size. Smaller particles in the sub micron size, cause fouling of turbine blades and cooling coils, which rapidly reduces performance and becomes a serious threat to the turbine.

Effective capture of small particulate and airborne salt is therefore of vital importance for long and efficient operation.

If not removed by the inlet air filtration system, the particle injection will force the operator to frequently water wash the compressor either by temporal on-line washing or more efficiently during shut down. Maintenance is costly due to the loss of power during the necessary stand still for water wash.

Camfil Farr gas turbine filters optimize the power output by minimizing the effect of erosion and fouling and significantly reduce the maintenance costs while increasing the compressor and turbine lifetimes.

Economic benefits:

- Higher power output
- Less maintenance
- Less fuel consumption
- Extended turbine life
- Reduced life cycle costs

One complete system supplier

Camfil Farr Power Systems is a global company offering high quality air filtration and noise reducing systems for turbomachinery. Our scope of supply comprises; intake systems (ducts, silencers and filter houses), sound enclosures and ventilation, exhaust systems, dampers and slides, service and retrofits.

Life Cycle Cost (LCC) is the key:

For example; 100 Pa less operating pressure drop at the intake system will increase the turbine output by approximately 0.2 % and reduce the fuel consumption by approximately 0,1%.

Camfil Farr can run calculations to determine the optimum combination of filters needed for the lowest total cost over a given time period.

The LCC program takes into account such factors as engine sensibility, energy cost, running time, filter price, cleaning cost, different environments and filter characteristics.

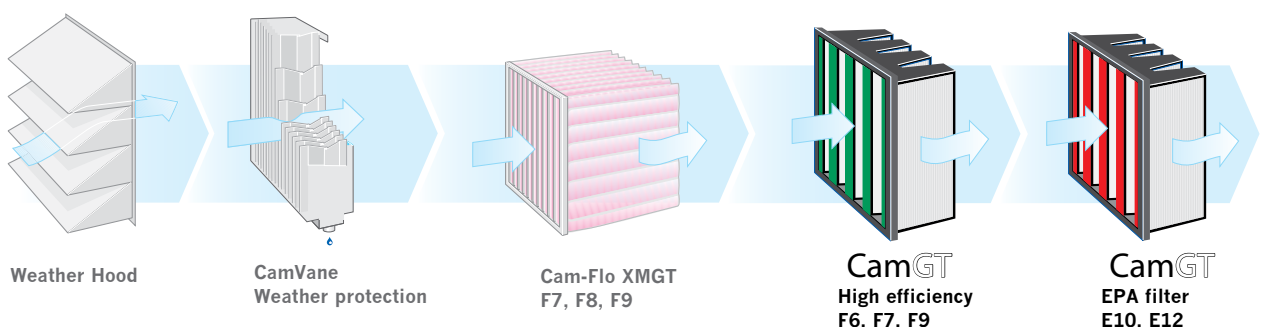
Camfil Farr's calculations are based on real life testing data from a large number of sites.

The cost of clean air is not the cost of replacement filters - it is how much energy the filters use during their working life at the desired efficiency.

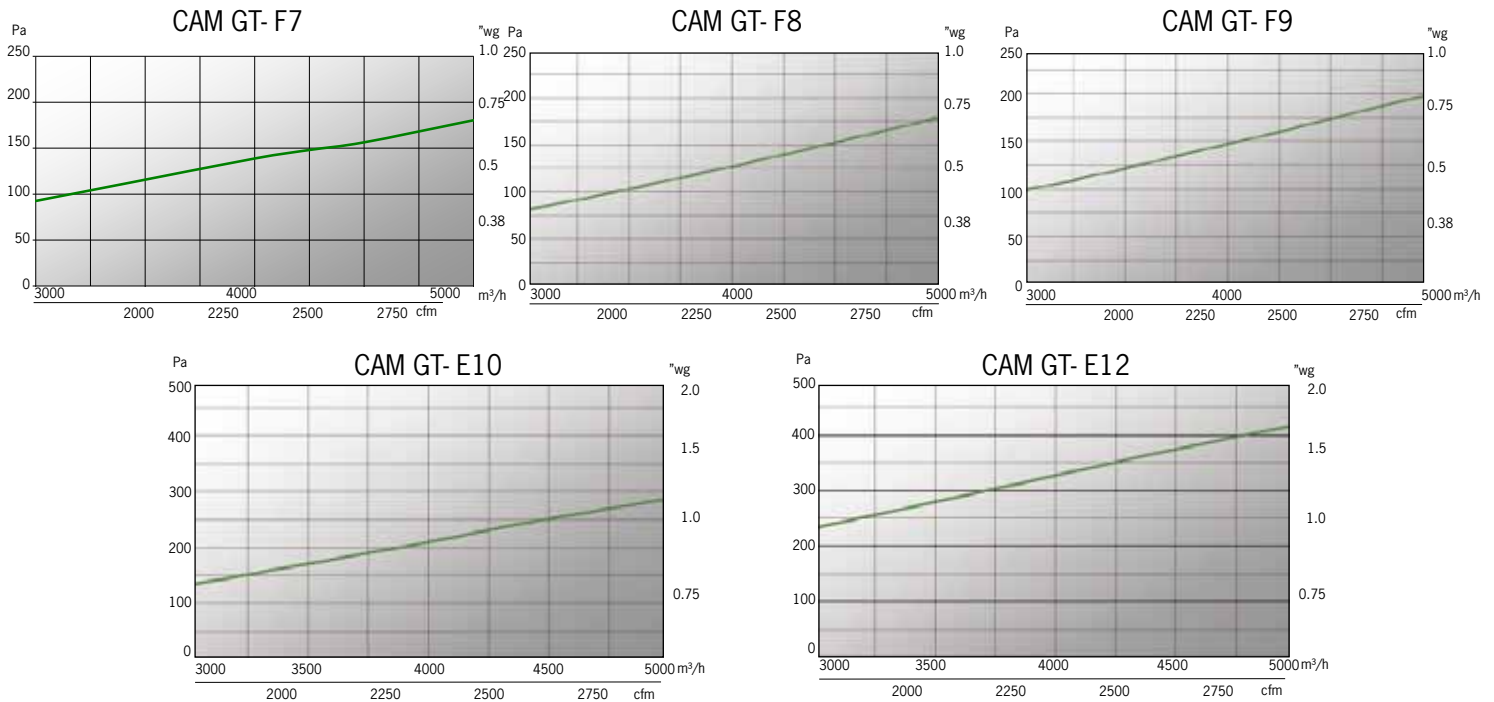
Contact us for LCC calculations applicable to your site.

Camfil Farr inlet air filtration system

An air inlet system is adapted to environment and operating conditions. Contact us for free consultation.



Pressure drop



Technical data

Model	WxHxD		Shipping data		Media Area m ² / ft ²	Air flow/Press. loss		Dust holding capacity * g/lb	Filter class EN779
	mm	inch	m ³ /ft ³	kg/lb		m ³ /h/Pa	CFM/"wg		
Cam GT-F7	592×592×292	23.3×23.3×11.5	0.11/3.9	7/15.4	19.0 / 204	4250/116	2500/0.47	425/0.94	F7/MERV 13
Cam GT-F8	592×592×292	23.3×23.3×11.5	0.11/3.9	7/15.4	19.0 / 204	4250/141	2500/0.57	415/0.92	F8/MERV 14
Cam GT-F9	592×592×292	23.3×23.3×11.5	0.11/3.9	7/15.4	19.0 / 204	4250/148	2500/0.59	355/0.78	F9/MERV 15
Cam GT-E10	592×592×292	23.3×23.3×11.5	0.11/3.9	7/15.4	19.0 / 204	4250/214	2500/0.86	NA	E10 (EN1822)
Cam GT-E12	592×592×292	23.3×23.3×11.5	0.11/3.9	7/15.4	24.0 / 258	3400/266	2000/1.07	NA	E12 (EN1822)

The CamGT is available in half size filters on request. Also available as XL [24 m²] and Reverse flow version as option.

Type	High efficiency, incinerable, compact	Class EN779:2002	F7, F8, F9
Frame	Plastic	Class EN 1822	E10, E12
Media	Glas fibre media	(ASHRAE 52.2)	MERV 13, 14, 15)
Separators	Hot melt	Rec. max final pressure drop	600 Pa (2.4" wg)
Seal	Polyurethane	Rec. air flow nominal	F7, F8, F9 - 4250 m ³ /h / 2500 cfm
Gasket	PU foam		E10 - 3800 m ³ /h / 2235 cfm
Operating temp.	80°C/176°F running temp.		E12 - 3000 m ³ /h / 1765 cfm

Camfil Farr Power Systems

CAMFIL FARR is the world's largest and leading manufacturer of filters and clean air solutions

There is a good chance that, at this very moment, you are breathing clean air that has passed through a filter manufactured by us. Our products can be found everywhere from offices to clean rooms for sensitive electronics production, mines, factories, hospitals and nuclear power stations. Camfil Farr is a global company with 29 subsidiaries, 23 production plants and an extensive network of agents in Europe, North America and Asia.

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