



## Marine Systems

<b>Camfil Farr</b>	<b>Segmentbrochure</b>	
<b>Air Intake Systems</b>		
<b>Camfil - clean air solutions</b>		



**Military Patrol Boat**  
Weather Louvre 65



**Cruiser "Seabourn Legend"**  
Weather Louvre 65 + 185



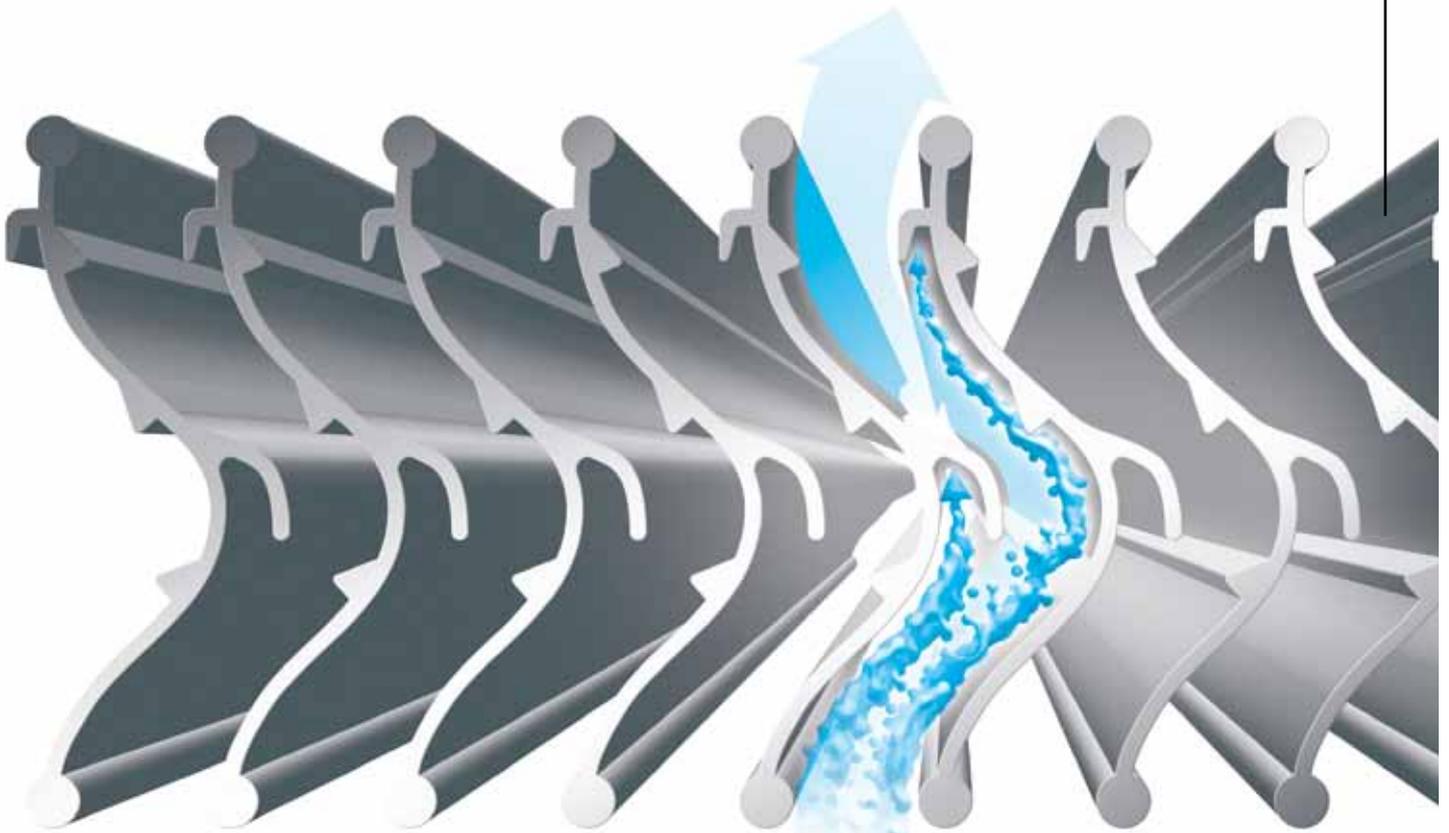
**Passenger Ship "Color Fantasy"**  
Weather Louvre 185



**Few things are as calming** as a boat trip on a smooth, blue ocean. Unfortunately, not all days are as harmonious as that: various types of ships and vessels are often exposed to aggressive environmental conditions—and of course, so are their ventilation installations.

**Air intakes must often handle large amounts of water** from heavy rain, strong winds and high sea as well as water spray generated by fast going ships. Therefore, the air intakes to machinery rooms, gas turbines, diesel engines and compressors must have an efficient water and moisture eliminator system. The same goes for the general ventilation that dictates the environment for all on board.

**The marine and offshore environment** is not only exposed to water and moisture. Apart from high weather resistance the air system also requires an efficient air filter to remove airborne dust particles from different sources around the world. Soot from the ship's own chimneys, dust from cargo handling and airborne dust when the ship sails in dusty environment like desert areas put high demands on an efficient air filter.



## Technical conditions

**Weather Louvre 65** and **185** are very compact and effective and can be employed on all air intake systems where water, rain or moist problems are common. The Weather Louvre is as effective in marine environments and coastal areas as in lake districts and inland regions.

- For air intake velocity between 1,0–4,0 m/s (Weather Louvre 65) or 1,0–7,0 m/s (Weather Louvre 185)
- Low noise level
- Very low pressure drop
- Weather resistant materials
- High separation efficiency
- Minimized freezing risk

**Weather Louvre 65** and **185** have especially designed profiles in aluminium where the air is forced into turbulence. The water is caught up in the vertical profiles, and due to gravity the liquid is drained to the bottom of the profiles and removed via the drainage openings. Our solution with vertical profiles is preferable to a horizontal outer grid since droplet formation and freezing are avoided.

**Weather Louvre 65** and **185** can benefit from being a part of a system with special prefilters and fine filters that give an even better moist control and air cleaning.

**Weather Louvre 65** and **185** are also effective against snow, but when installations are to be used in environments with large amounts of cold powder snow, a complement with a spun glass filter is recommended to catch the last remains of the fine snow.

**Weather Louvre 65** and **185** can be delivered in optional sizes, width × height, up to 1 500 mm (Weather Louvre 65) or 2 500 mm (Weather Louvre 185).





## Living conditions

It is a well known fact that highly efficient filters in combination with low pressure drop for the entire inlet system means not only low operating and maintenance costs, but also that both humans and machines can work under less exhausting conditions.

Rain and moist in the ventilation system is an underrated problem. Corrosion damages and deteriorated air cleaning increase the risk of health problems due to more moist gathering in the air systems.

## Design conditions

Aboard ships, filter equipment must be designed to suit the limited space available. The optimum design is frequently a compact design with a high efficiency filter supplemented by an efficient water separator.



## Weather conditions

No matter if it is a cruise ship working its way through the Caribbean archipelago or a heavy freight ship striving through the rough waters of the North Sea, all marine environments expose the air intakes to salt particles in both dry and wet phases. Large values are lost each year due to corrosion damages.

Considering this, aluminium is an excellent material as its corrosion resistance ensures low maintenance costs. Aluminium also has the added advantage of having a low specific gravity which gives up to 50% weight-saving.





## On world standards ...

...Camfil Farr is the leader in clean air technology and air filter production. Camfil Farr has its own product development, R&D and world wide local representation. Our overall quality goal is to develop, produce and market products and services of such a quality that we aim to exceed our customers expectations. We see our activities and products as an expression of our quality. To reach a level of total quality it is necessary to establish an internal work environment where all Camfil Farr employees can succeed together. This means an environment characterized by openness, confidence and good business understanding.

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