

MARINE & OFFSHORE
Mist Elimination for air intakes



Protect your pleasure

Mist elimination for pleasure boats.

Protect your pleasure

The very purpose of the pleasure boat is to bring pleasure to its owner and passengers. And at the heart of each vessel are the engines, powerful and precision-engineered to deliver performance at a moment's notice. So it's surprising how often water and water-borne contaminants are allowed to drive right into the heart of the boat, affecting performance, longevity and comfort. That air can be heavily laden with moisture, salt and even sand or other abrasives and yet often it is 'filtered' simply by decorative louvers that do little to protect the engines or the interior. The effect is often reduced engine performance, corrosion and even severe long term damage. It also increases down-time, affects resale value and raises maintenance costs. Yet the problem is easily solved, with purpose-built Munters marine mist eliminators.

Moving fast or cruising leisurely – it's all the same air

Naturally you'd expect racing boats and their engines to need the highest level of protection – air-hungry high performance engines having to cope with high levels of spray close to the waterline. But craft cruising at a far more leisurely pace, from day sailers and weekenders right up to the most impressive motor yachts, also need protecting. And not just within the engine rooms – the high level of finish within the cabins and day areas are also vulnerable to mildew and discoloration from moist, salt, sand and other pollutants.

Effective protection of engines and interiors for:

- Racing boats
- Day cruisers
- Weekenders
- Catamarans
- New vessels and re-builds



Form and function

Munters marine mist eliminators allow the engines to breathe unrestricted while at the same time effectively removing the salt content of the air. Every type of pleasure boat and boating environment is catered for, from the calmest inshore waters with low saline content right up to extreme conditions. Yet the mist eliminator units are unobtrusive, blending in smoothly with the outer surfaces of both modern and classical boat designs. Munters' units are suitable both for newbuilds and also for retrofitting. You scarcely notice them as they look like an integral functioning part of the overall vessel design – and that's exactly what they are!

Breathe easy!

The secret of the technology lies in preventing water and especially salt water from entering, while still ensuring efficient aspiration for the engines and the air conditioning at all times. And when the engines breathe easily, they perform effortlessly, optimizing fuel consumption, performance and extending service life.



Air in, water out – how do we do it?

The principle of the mist eliminator is ingeniously simple and simply ingenious. Air entering the mist eliminator has to pass through precision-engineered profiles. As the moisture-laden air impinges on the profiles, the droplets coalesce and form a liquid film that is heavier than the air. This liquid drops down the profiles into drainage channels. The exact size, shape and angle of the eliminator ensure that the liquid is separated without causing unacceptable pressure loss. The technology of mist elimination pioneered by Munters has been extensively used throughout the industry for nearly half a century and its application in boatbuilding has been widely adopted by designers and builders for decades.



Ready-to-fit marine mist eliminators

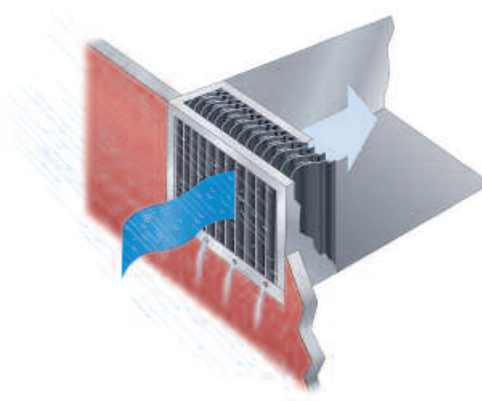
Munters' range of marine mist eliminators addresses the whole range of pleasure boat applications, from fresh-water and inshore usage right up to extreme green water conditions with high salt, sand and contaminant content. Munters' mist eliminators are available in seawater-resistant aluminium and talcum-reinforced polypropylene (for strength) and can be delivered in marine white, black or natural. Other materials and colours are available on request. They come in single- or 2-stage configurations, including an additional filter with low installation depths.



Single-stage mist eliminators

PB25

This basic design features a low installation depth of 120 mm and is intended to address a wide range of operating conditions, when little space is available. It copes with intake velocities of 4–5 m/s and is available in aluminum or polypropylene as a standard.



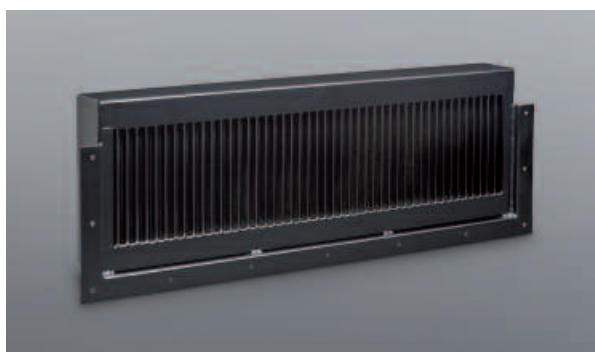
Single-stage protection for less severe conditions. Basic mist elimination and droplet separation with standard spacing between the profiles.

PB35

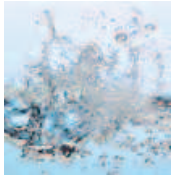
This higher capacity unit is for medium to high intake velocities with an installation depth of 145 mm, to provide much better protection, especially in harsh conditions. This unit is particularly well suited when higher running speeds are predicted. Available in aluminum or polypropylene as a standard.

PB48

Available in aluminum only, this mist eliminator requires just 97 mm for installation, permitting fitting into the most confined of hulls, while still offering excellent water handling capacity.



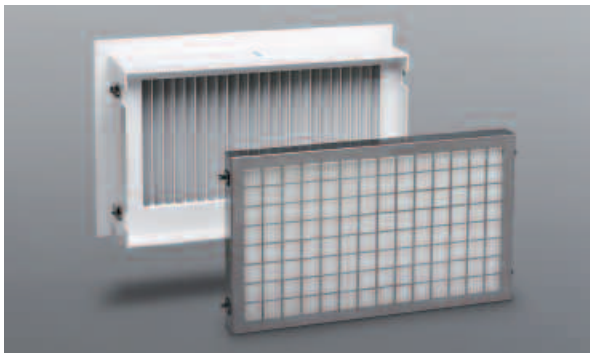
PB35 in customized black.



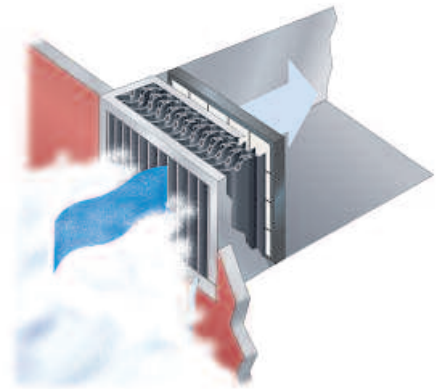
2-stage mist eliminators

PBF35

This unit is designed for very high liquid removal applications and offers salt and dust filtration of up to 98%. The additional filter stage provides an extra level of protection that is often needed when boats are operated in highly saline or sandy areas.



PBF35 with additional filter.



For sensitive machinery removing salt and sand-laden droplets may require a 2-stage solution with coalescers to strip away the smallest particles in the final air stream.

Wave breaker 2-stage mist eliminator

For specific applications Munters also offers wave breaker designs. These sit close to the waterline, as is often required when retrofitting to classic and high performance designs. This design features an additional agglomerator that catches the water first and prevents the mist elimination elements from being overwhelmed by heavy swell and wash.

DF PBAR

The gold standard of protection against water entry through the air intakes. The PBAR features an additional inlet agglomerator to protect against heavy water splashes and even green sea conditions.



PBAR.

The combination of water loading and efficiency requirements determine the equipment for your application. Just enter your scenario into the Application Matrix.

Elimination of	Intake location	
	Close to sea level	Open bulkhead
Rain	PB35	PB25
Heavy rain	PB35	PB35
Splash water	DF PBAR	DF PBAR
Sea spray	PBF35	PBF35
Salt	PBF35	PBF35
Sand and dust	PBF35	PBF35

Product models are recommended minimum requirements.

For performance data and further information, please contact Munters.

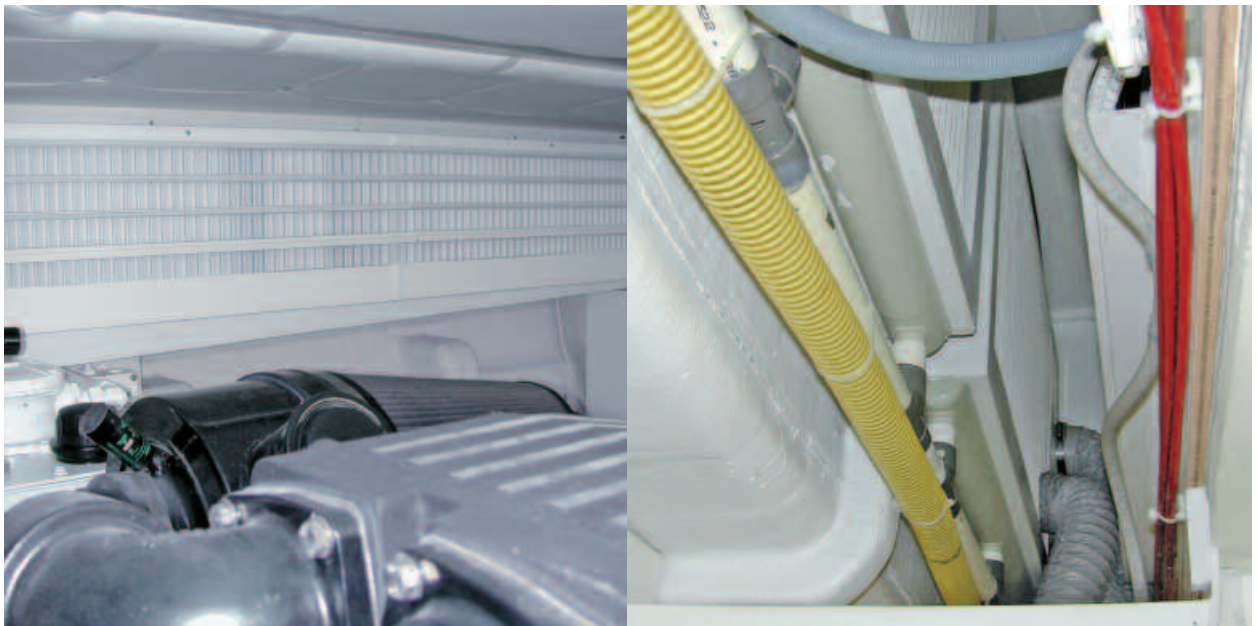
Can't find what you're looking for?

In addition to the standard sizes and configurations, Munters also produces a number of rectangular, round or teardrop shaped mist eliminators as well as offering custom build options to match the individual design of the pleasure boat in question.



Keeping the heart of your pleasure boats healthy

- Prevent water spray and corrosive substances from entering the engine room
- Protect the interior of your boat, for less work and more pleasure
- Prolong the life, performance and appearance of your high value engines
- Reduce downtime required for maintenance
- Ensure optimal performance with full spray protection
- Minimal pressure loss – let your engines really breathe
- Unobtrusive design – suits modern and classic boat design
- Custom-build options
- Proven technology
- Available in weight-saving polypropylene and aluminium as well as in special materials and colours
- Specified by leading boat builders



PB35 installed to protect the engine room.



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