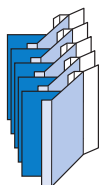




Trusted throughout the world

Premaberg is a world leader in the design and manufacture of high efficiency air intake separators and filtration systems.



PREMABERG
SEPARATION FILTRATION SYSTEMS



**A world leader in the design and
manufacture of high efficiency air intake
separators and filtration systems**

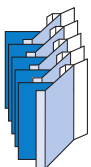
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Premaberg has been at the forefront
of separation and filtration technology
since 1972.

Separation Filtration Systems

We have a proud reputation for the design, manufacture and supply of products that meet the highest standards of quality and performance.

Our systems are used extensively around the world to protect capital equipment from the harmful ingress of salt water and solid contaminants. They are used for a wide range of applications, including marine, offshore oil and gas, railway rolling stock, power generation and HVAC.



PREMABERG
SEPARATION FILTRATION SYSTEMS



TAILORED SOLUTIONS

All Premaberg products are designed and manufactured to withstand the harshest of conditions and environments, and are tailored to meet the individual needs of each installation.

AFTER SALES SUPPORT

Our engineers are always on hand to provide our customers with technical support and to discuss their specific engineering requirements. We also offer a full service and support including spare parts and replacement panels and filters, in full compliance with our ISO 9001:2015 quality system.



F4N
Fit For Nuclear



Single stage separators

Used to remove visible moisture and heavy sprays from airstreams at the intakes to engines rooms and other areas where water ingress has to be eliminated.

- High efficiency moisture droplet removal - effectively 100% removal of all droplets larger than 12 microns
- Low pressure drop and high operation velocities
- Choice of vane profiles, tailored to each application
- Effective water drainage and discharge
- Compact construction and simple installation



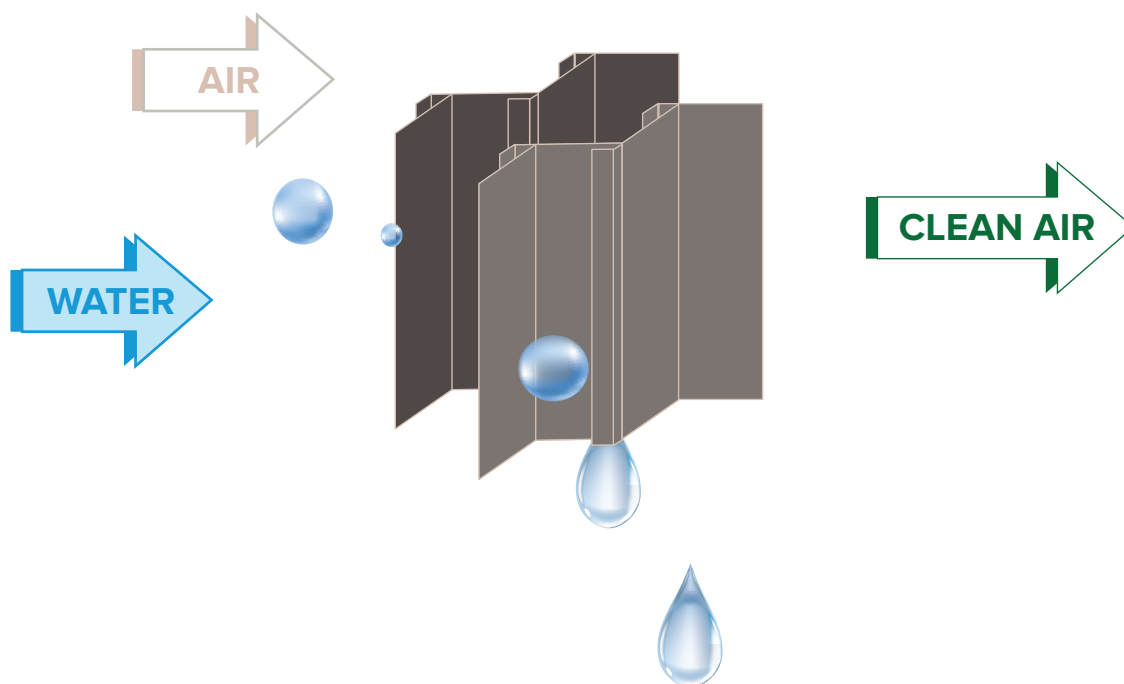
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PREMABERG
SEPARATION FILTRATION SYSTEMS



APPLICATIONS INCLUDE

- Cruise ships
- Pilot & Patrol boats
- Luxury yachts
- Diesel engines
- Ventilation systems on offshore platforms
- Motors/blowers/ventilation plant on railway rolling stock.

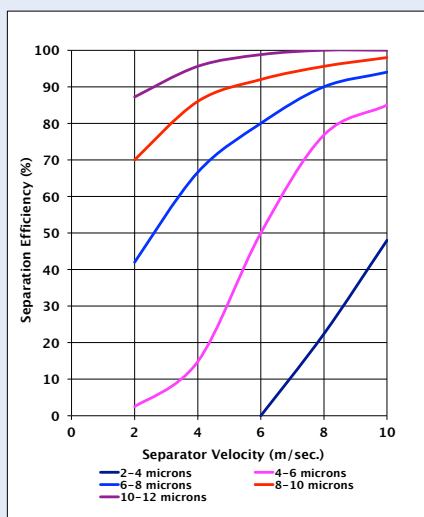
MATERIALS AND FINISHES

- Marine grade aluminium alloy
- Stainless steel 316L
- Powder coat available in a wide range of colours
- Optional anodising

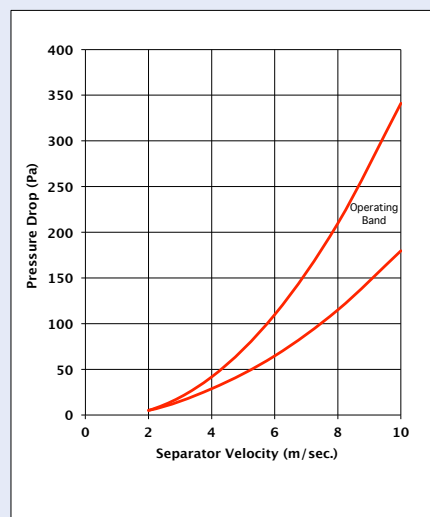
ANCILLARY EQUIPMENT

- Heat tracing
- Water-tight covers
- Vermin screens

SEPARATION EFFICIENCY



PRESSURE DROP





Two stage separators

Combines inertial vanes with filter/coalescer panels. Used to remove airborne water droplets and aerosols from air stream intakes to HVAC systems, diesel engines and other areas where water ingress has to be eliminated to a high degree of efficiency.

- High efficiency removal of water droplets and aerosol - output salt-in-air content reduced to 0.01ppm (w) or less, depending on input conditions
- Low pressure drop and high operation velocities
- Effective water drainage and discharge
- Compact construction and simple installation
- Can be tailored for both sheltered and exposed positions as required



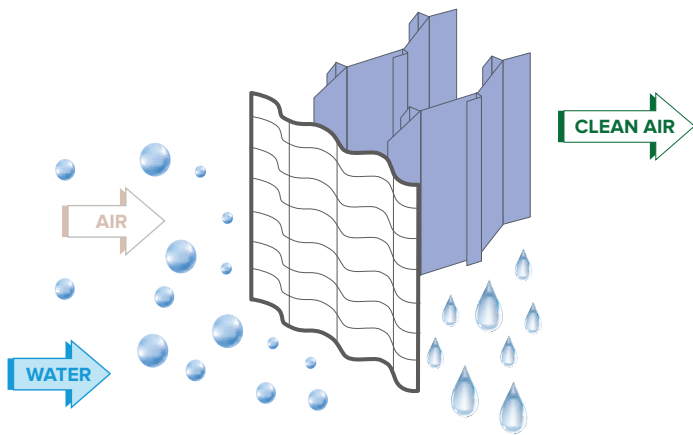
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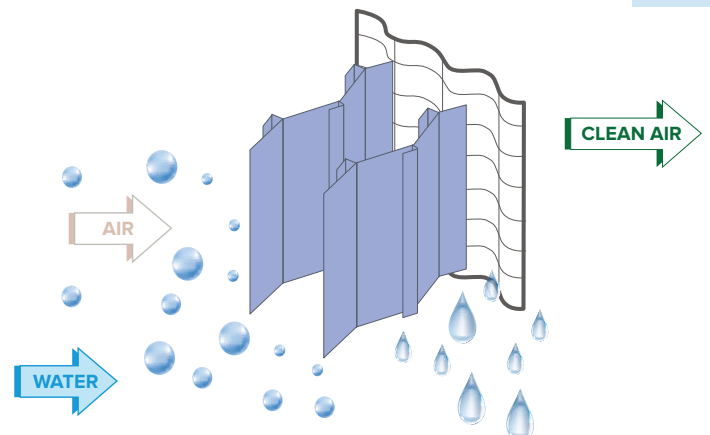
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SEPARATION FILTRATION SYSTEMS



Type A - For sheltered positions.



Type B - For exposed positions.

MATERIALS AND FINISHES

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- Stainless steel 316L
- Powder coat available in a wide range of colours
- Optional anodising

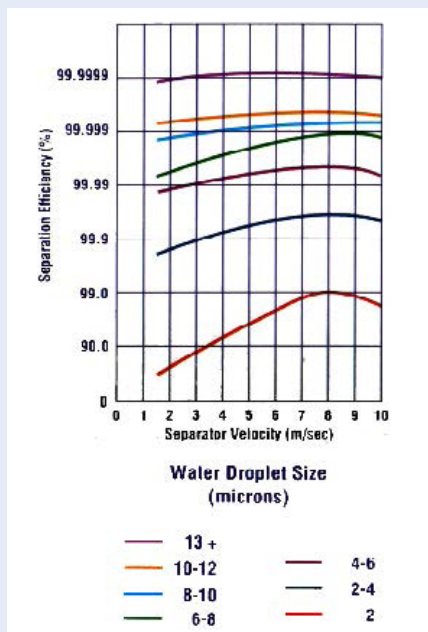
APPLICATIONS INCLUDE

- Offshore oil and gas
- Protection of HVAC systems
- Diesel engines for pumps and generator sets
- Commercial and military marine

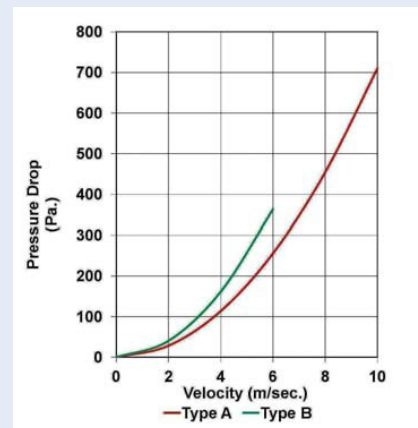
ANCILLARY EQUIPMENT

- Pressure differential monitoring equipment
- Heat tracing
- Water tight covers

SEPARATION EFFICIENCY



PRESSURE DROP COMPARISONS

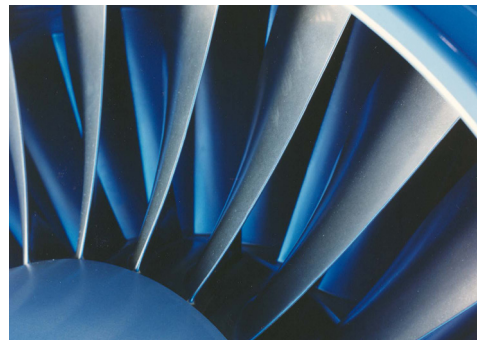




Three stage separators

The elite high efficiency air intake separation system. Typically used for removing airborne salt spray and aerosol droplets from airstreams at the intakes to sophisticated machinery operating in a marine or coastal environment.

- Very high efficiency removal of water droplets and aerosols (to 0.01ppm or less)
- High efficiency and low pressure drop at all operating velocities
- Low maintenance with cleanable second stage elements
- Compact, lightweight construction
- Used extensively throughout the world



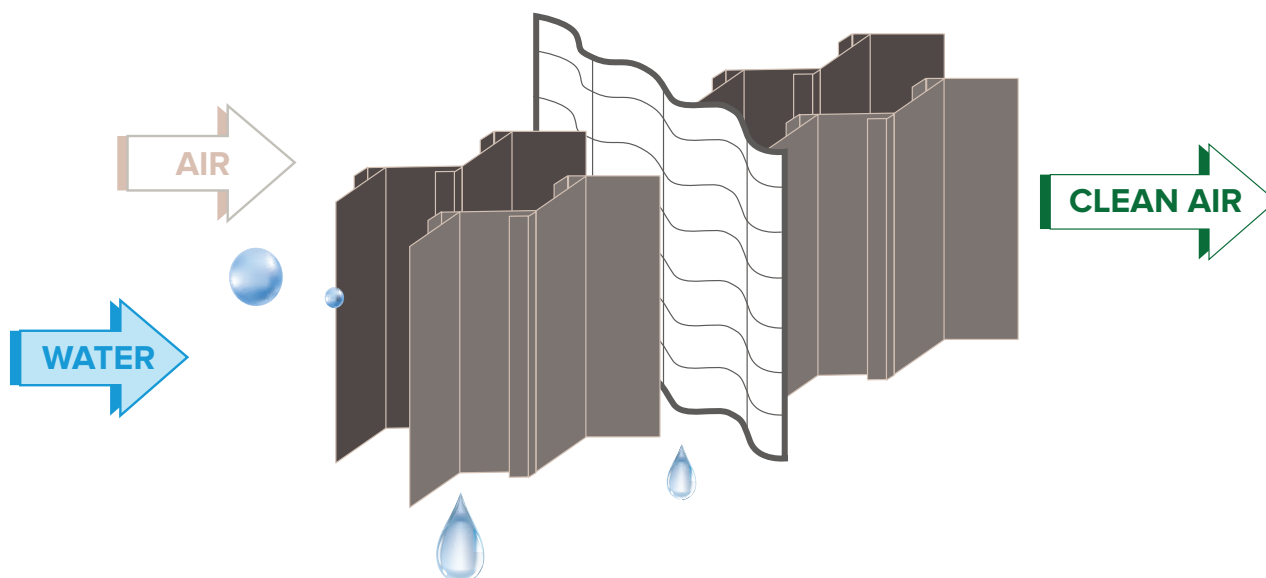
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MATERIALS AND FINISHES

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- Optional anodising

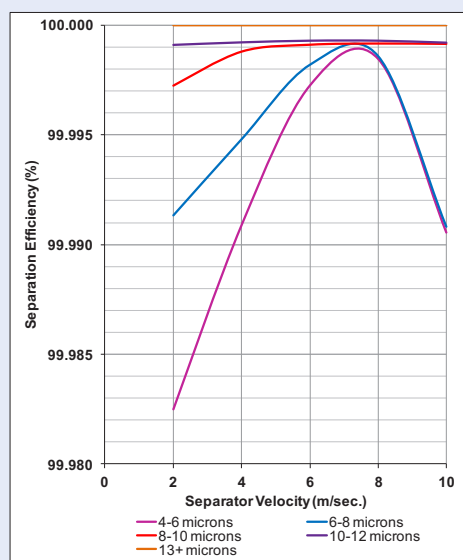
APPLICATIONS INCLUDE

- Combustion air intakes for marine gas turbines and diesel engines
- Meet the required salt removal limits set by engine manufacturers

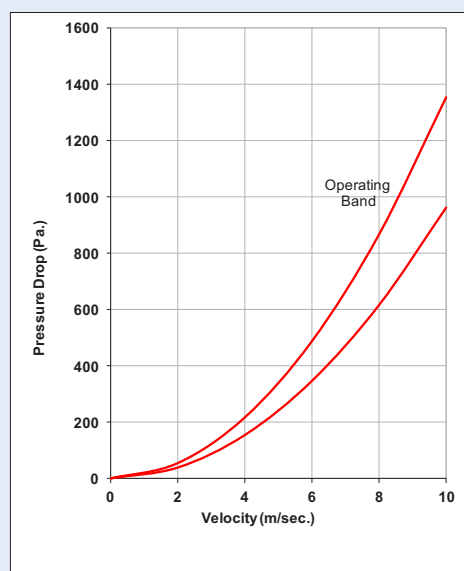
ANCILLARY EQUIPMENT

- Anti-icing systems
- Bypass doors
- Pressure differential monitoring
- Heat tracing
- Wash systems

SEPARATION EFFICIENCY



PRESSURE DROP





Dual vane separator systems

Innovative chevron vane technology combines two banks of separation vanes for high efficiency removal of small moisture droplets and aerosols with low pressure drop.

- High efficiency moisture removal of small droplets and aerosols from HVAC inlets
- Typically, one third of the pressure drop compared to filter/coalesced media
- Compact, easy installation and zero maintenance
- Output salt-in-air content reduced to 0.015ppm or less
- Captures droplets to 5 microns
- Contributes towards compliance with 'green ship' requirements



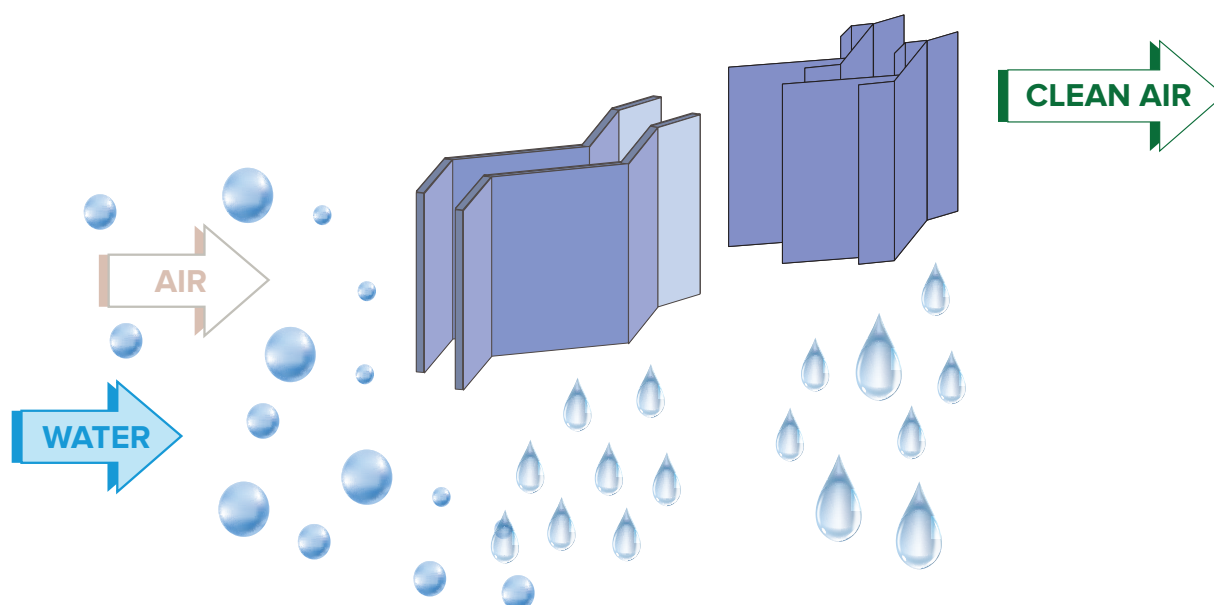
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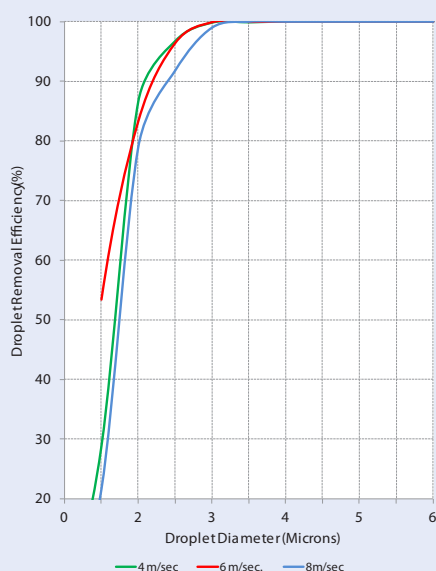
APPLICATIONS INCLUDE

- HVAC applications that require high efficiency moisture droplet and small aerosol removal
- Typically fitted on HVAC and general ventilation intakes on cruise ships
- Ideal for upgrading conventional coalescer/vane systems

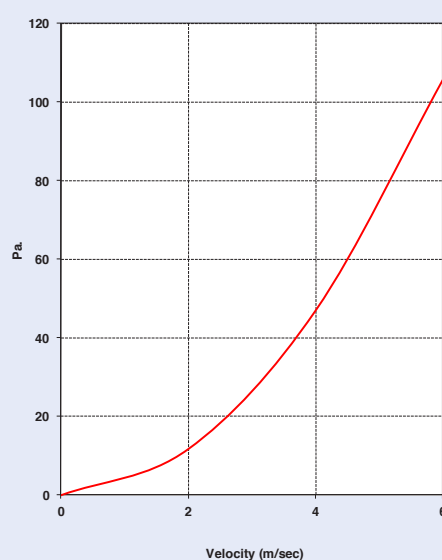
PRINCIPLE OF OPERATION

1. First stage inertial chevron vanes agglomerate smaller aerosols.
2. Second stage inertial vanes remove large moisture droplets

SEPARATION EFFICIENCY



PRESSURE DROP





System 200

High efficiency protection for gas turbines, HVAC plant and other machinery from airborne dust particles, salt water droplets and aerosols encountered in marine, offshore and coastal environments.

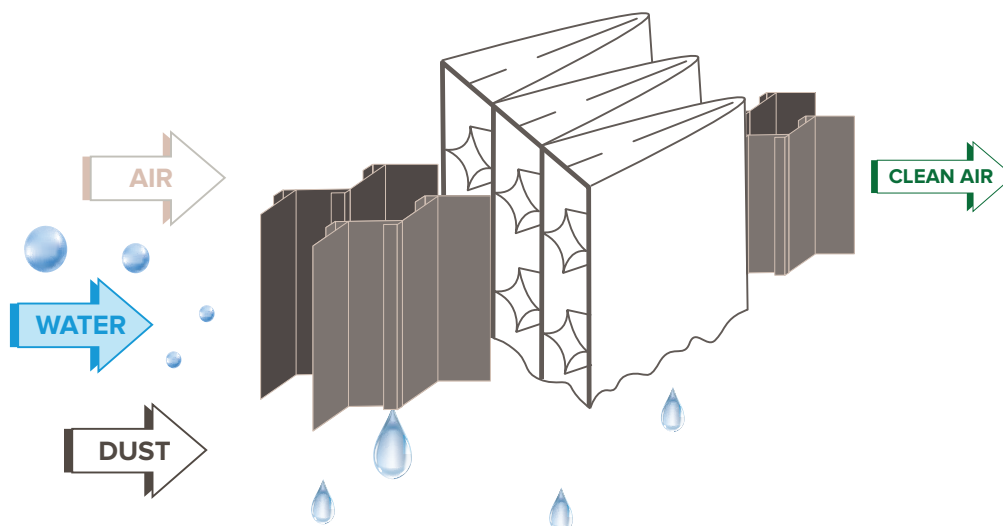
- Three stage filtration and separation system for high efficiency removal of water droplets, aerosols and solid particles
- Suitable for heavy water loadings
- High dust loading capability - effective against cement and drilling mud dust, shot blast residues and other contaminants found on offshore platforms
- Low pressure loss and high operating velocities
- Compact construction, with long maintenance intervals

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EXTENDED-SURFACE FILTER/COALESCERS:

- Made from Monofilament Progressively Structured Fleece, use all-welded construction and are aerodynamically proven
- Virtually indestructible even at very high pressure differentials
- Full fire certification for the filter media can be provided.
- Average arrestance of 99% (using ASHREA Test Dust) combined with high dust holding capacity
- Replacement filter/coalescers are readily available from stock and are simple to replace

MATERIALS AND FINISHES

- Marine grade aluminium alloy
- Stainless steel 316L
- Powder coat available in a wide range of colours
- Optional anodising

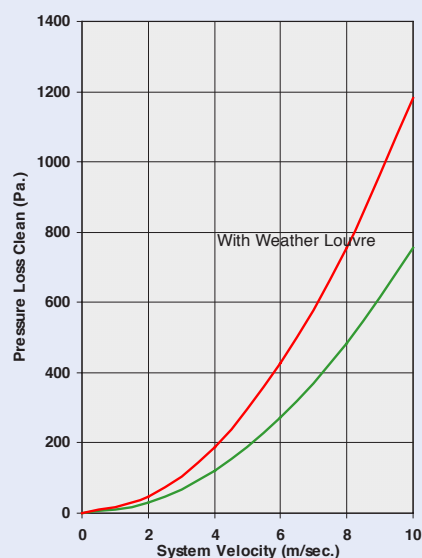
APPLICATIONS INCLUDE

- Marine and offshore oil and gas
- Gas turbine intake installations
- HVAC system inlet protection

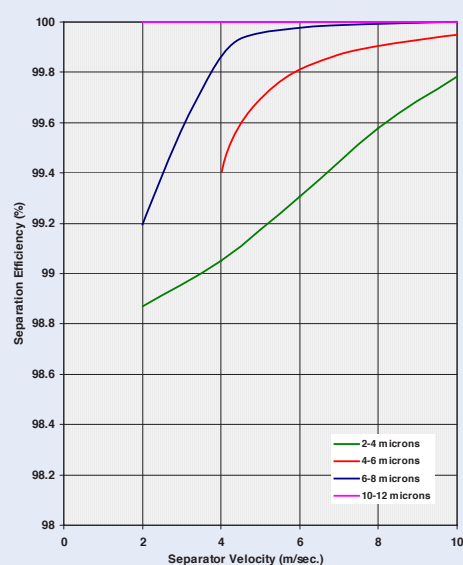
ANCILLARY EQUIPMENT

- Anti-icing systems
- Bypass doors
- Pressure differential monitoring
- Heat tracing
- Wash systems
- Vermin screens

SEPARATION EFFICIENCY



PRESSURE DROP





PH120 Heated droplet separators

Heated air intake separators/mist eliminators that prevent ice and snow build-up on marine and offshore air inlet systems in cold operating conditions.

- High liquid removal efficiency to 15 microns with low pressure drop for a range of droplet sizes and water loading
- Self-limiting electrical heat trace cable within every blade for improved heat transfer Tested to -50°C
- Low noise generation
- Over 40 years' successful field experience
- Cable can be repaired in situ if necessary
- Typical power consumption 2.5kW/m2
- Control panels accessorised and built to customers' specific requirements



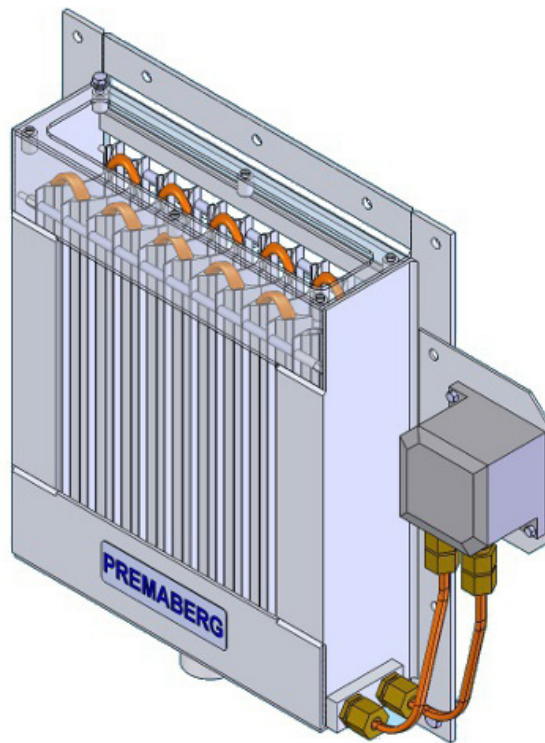
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PREMABERG
SEPARATION FILTRATION SYSTEMS



TYPICAL APPLICATIONS

- HVAC intakes.
- Engine intakes.
- Weather louvres for air intakes, forced and natural ventilation applications

CERTIFICATION

- Fully ATEX-approved
- GOST and COTR as required
- Full certification supplied

MATERIALS

- Marine grade aluminium alloy
- Stainless steel grade 316L
- Powder coat available in a wide range of colours

THERMAL PERFORMANCE

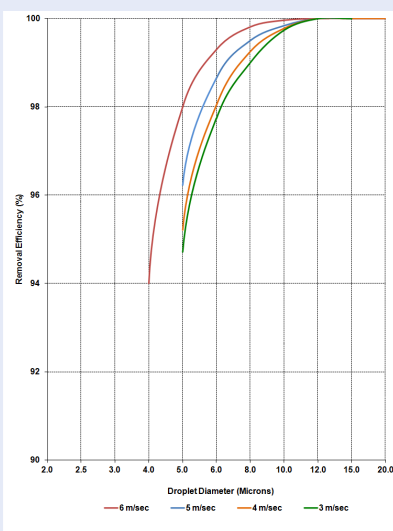
Aluminium

single cable	8-9°C above ambient
twin cable	10-12°C above ambient

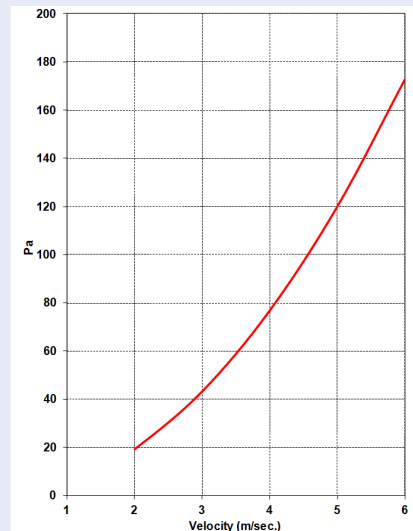
Stainless steel

single cable	6-8°C above ambient
twin cable	8-10°C above ambient

SEPARATION EFFICIENCY



PRESSURE DROP





Weather louvres

High efficiency weather louvres provide good protection for forced and naturally ventilated areas where good water removal from air streams is required. Suitable for operation in weather conditions such as fog frequent heavy rainfall and sea generated spray.

- High moisture separation efficiency (100% of droplets larger than dia 26 microns)
- Low pressure drop
- Good water carrying capacity
- Vertical louvre blades provide multiple change of flow direction
- Good airflow distribution downstream of the louvre minimal changes in performance when wind directions are not perpendicular to louvre face
- Strong, robust yet lightweight modular construction
- Horizontal vein profiles available as an option

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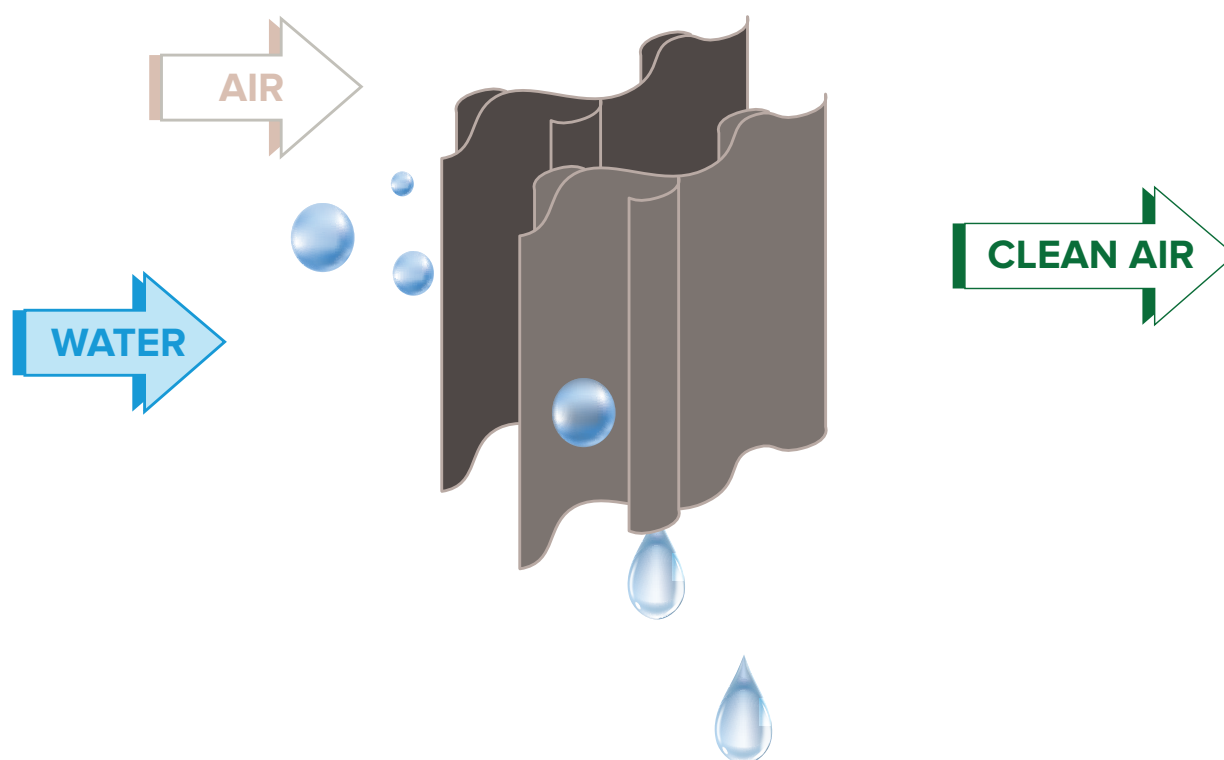
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APPLICATIONS

Normally used as inlet or exhaust protection for:

- Large scale natural ventilation systems
- HVAC systems
- Maritime vessels
- Commercial buildings

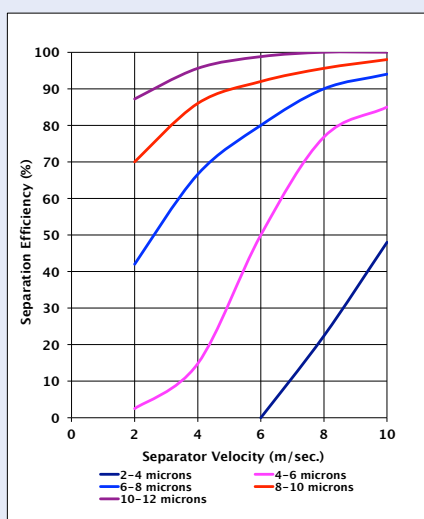
MATERIALS

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- Stainless steel grade 316L
- Powder coat available in a wide range of colours
- Optional anodising

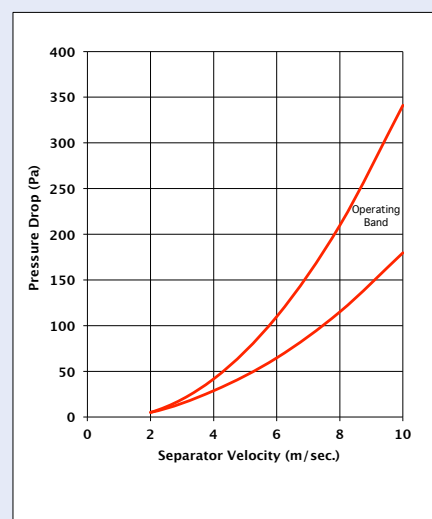
ANCILLARY EQUIPMENT

- Heat tracing
- Water-tight covers
- Vermin screens

SEPARATION EFFICIENCY



PRESSURE DROP



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PREMABERG
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