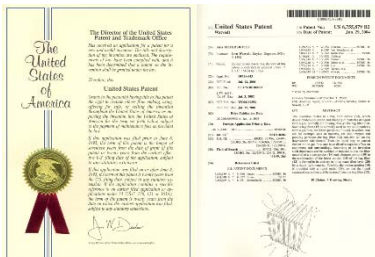
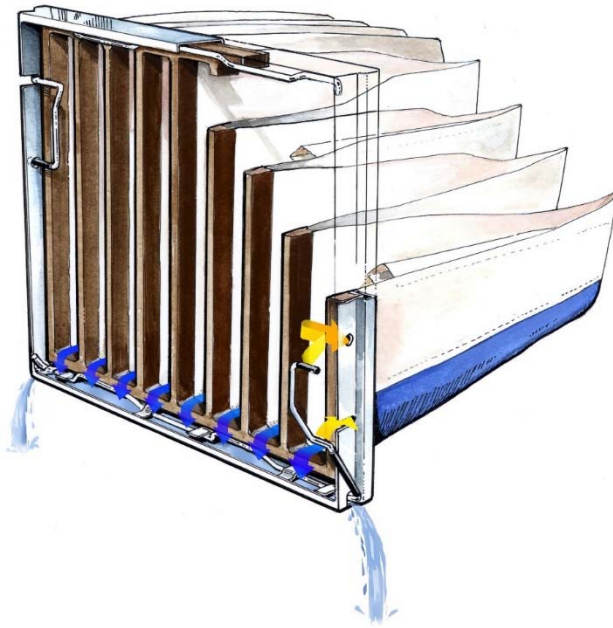


Wide Drop Safe marine filter EN 779:2012: F7 filter



**Patented
Drop Safe
technology**





About the Drop Safe filter:

The Wide Drop Safe product range is a joint development effort by Filtrair and Wide to meet increasing market requirements for cost-effective solutions to salt and water ingress.

This forward-draining, non-reentrainment pocket filter provides highest quality air filtration and water separation in a single unit. In the patented DS filter, the very fine droplets entering the filter is not only coalesced, but also accumulated and drained into the water-sealed bottom of the pocket filter. From there the water is drained forward, and never enters the clean side. This eliminates the problem of saturated droplets entering the clean side and potentially contaminating clean-side air with salt and other water-soluble contaminants.

Filtration of particulate, water and salt contamination in offshore environments

Capacity up to 7 776 m³/hr for full size filter

The Wide water-tight filter Holding Frame, as shown in this illustration, is required for efficient salt removal.

Features:

- Patented sealed boot design – coalesces water inside the pockets, and drains upstream of filter
- For extreme marine environments: High water mist, fog content – high velocity – offshore – marine.
- Combined particle filter, water coalescer and water/salt removal in one unit.
- Self-supporting, leak free welded pockets that keep the pocket shape under increasing pressure loss and also when wet and contaminated.
- Rigid filter pockets that keep the shape under all operating and non-operating conditions, eliminating shedding and reentrainment during stop and restart.
- Filter pockets are water tight integrated in injection molded, impact proof PU frame header. Burst strength > 6000 Pa
- Progressive water resilient filter media manufactured by Filtrair with proprietary hydrophobic treatment.
- Filter range tested as per EN779:2012, see next page.

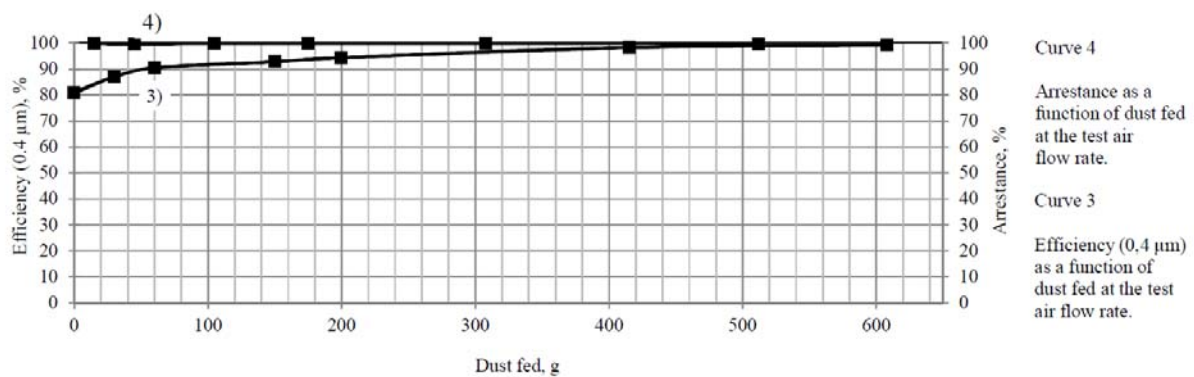
www.wide.no



EN 779:2012 filter classification and performance data for Wide DS-F7

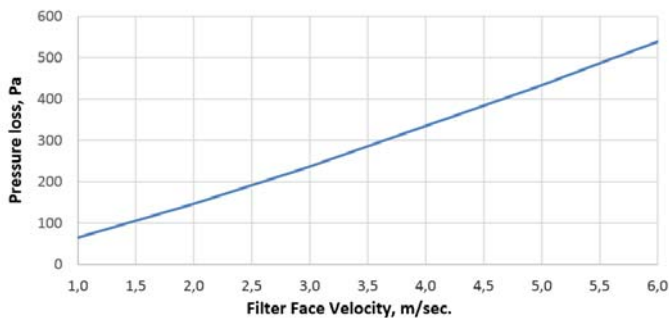
Test report no: VTT-S-05571-15 23-11-2015, VTT Expert Services, Ltd., Finland.

Description	Unit	Drop Safe DS-F7
Filter class per EN 779:2012		F7
Untreated/discharged efficiency of filter material	% for 0,4 um	88 / 38
Initial arrestance at 3400 m3/hr	% ASHRAE	100
Initial efficiency at 3400 m3/hr	% for 0,4 um	81
Final pressure drop	Pa	450
Final averaged arrestance	% ASHRAE	>99
Final average efficiency at 250 / 350 / 450 Pa	% for 0,4 um	91 / 94 / 95



Pressure loss:

Drop Safe DS-F7 filter pressure loss

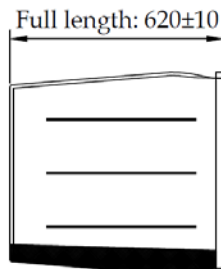
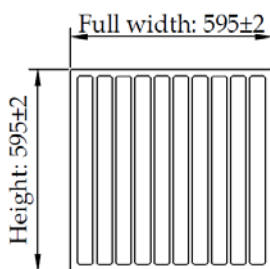


Pressure loss formula:

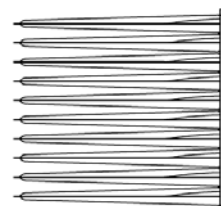
DS-F7: $63,98 \times v^{1,19}$ (Pa)

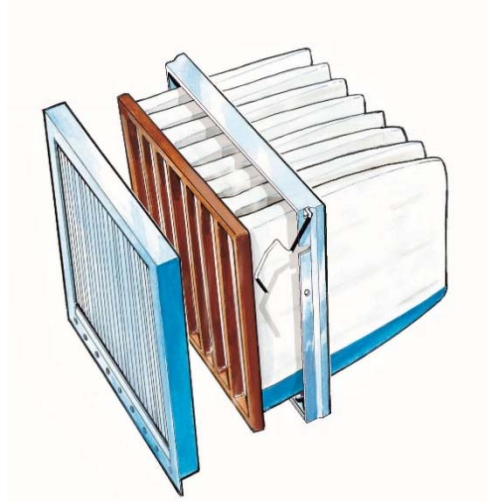
where v = Face Velocity m/sec, calculated for filter face area of 0,36 m²

Filter dimensions:



Top view:





Wide Drop Safe F-class filters for the Wide Infinidry air intake systems:

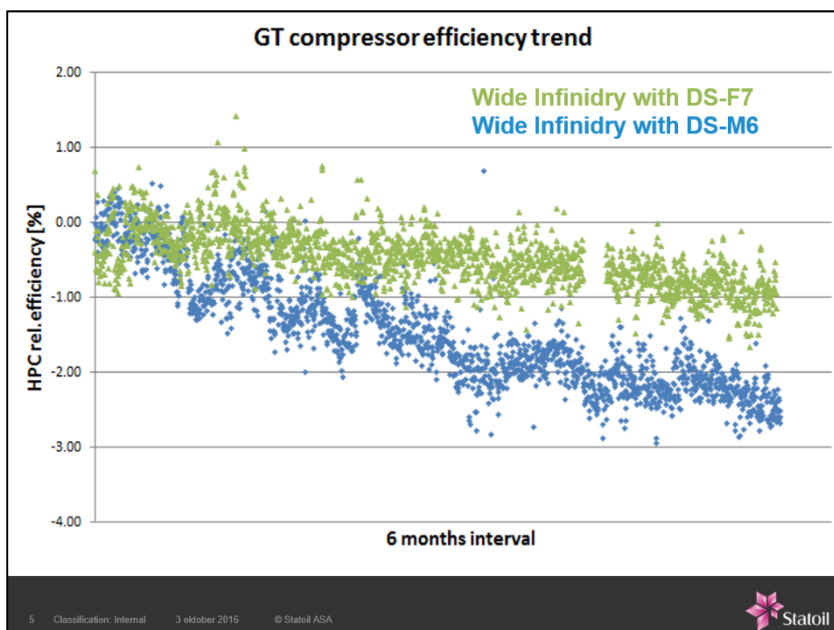
- 1. Wide ME High Efficiency Air Intake Demister**
- 2. Wide Drop Safe filter**
- 3. Wide IFD HF filter holding frame**
- 4. Drain arrangement (by customer)**

Drop Safe F7 filter for ISO 15138 Category I, when used in the Wide Infinidry® air intake system, as described above, ref ISO 15138 Table A.1, used with Wide ME:

Table A.1 — Performance requirement

Intake category	Area/Room	Components (performance)
I	LQ, CCR and areas containing sensitive electrical/control equipment.	Louvre/filter/coalescer assembly (salt content to $0,01 \times 10^{-6}$) plus: Filter (F7 to EN 779 [16]) Filter to be duct-mounted or located in air-handling unit

GE LM2500 application: Performance improvement verification by Statoil:



As part of the upgrade process from Wide IFD DS-M6 to Wide IFD DS-F7, Statoil run extensive side-by-side benchmarking on the Sleipner field in the North Sea during 2015 and 2016 for consecutive real-life testing and verification, with the following performance result, as reported by Statoil.

