



# PROTECTING PERFORMANCE PANELS

High Capacity Water Proof Pre-Filters



Eagle Filters has developed the PanelS Cassette Pre-Filter series especially for gas turbine applications.

## WATERPROOFED FILTER MATERIAL AS A STANDARD

PanelS series is comparable to pocket filter dust holding capacity, is small in size, has a rigid construction and is unaffected by turbulence. The filtration material is treated with a waterproof layer that prevents water droplets passing through the filter.

This Pre-Filter series consists of two grades G4 and F5. Filter material is a non-woven, self-supporting, depth loading polyester mix, which is pleated and supported with spacing combs. The pleats are fixed to a polystyrol frame with polyurethane potting.

The filter material is fabricated specially according to Eagle Filters' specifications, which gives optimum filtration capabilities, high dust holding capacity, low initial pressure drop and rigid pleating.

In both G4 and F5, the material can be waterproofed to prevent airborne droplets (and in the case of pre-filter, coalesced droplets) passing through the filtration material. In this way the main filters can be protected against water generated pressure drop rise and mechanical stress. This waterproof treatment generates minimum additional initial pressure.

**PanelS Pre-Filter** series has a proven record of a long service life and high efficiency at several gas turbine power plants in the most demanding environmental conditions.

In 95% of cases PanelS-Filters can replace existing pre-filters without any change of construction to the existing mounting frame. The frames can be fabricated of polystyrol, steel or stainless steel.

<b>Parameter</b>	<b>PanelS G4</b>	<b>PanelS F5</b>	<b>PanelS G4</b>	<b>PanelS F5</b>
Dimensions	592*592*98	592*592*98	592*592*135	592*592*135
Material	Polyester mix	Polyester mix	Polyester mix	Polyester mix
Filter area	2,0 m <sup>2</sup>	2,0 m <sup>2</sup>	4,0 m <sup>2</sup>	4,0 m <sup>2</sup>
Electrostatic charge	No	No	No	No
Filter class (EN779)	G4	F5	G4	F5
Initial pressure drop@3400 m3/h	70 Pa	74 Pa	42 Pa	49 Pa
Arrestance	>90%	>95%	>90%	>95%
Initial Efficiency@ 0,4 mm	4%	10%	6%	14%
Average Efficiency@ 0,4 mm	-	45%	-	48%
Dust holding capacity@ 450 Pa	447 g	410 g	746 g	608 g
Dust holding capacity/ AC Fine	1624 g	1406 g	2544 g	2085 g
Burst pressure	>5000 Pa	>5000 Pa	>5000 Pa	>5000 Pa
Max temperature	80 °C	80 °C	80 °C	80 °C
Frame material	Polystyrol	Polystyrol	Polystyrol	Polystyrol

DISCLAIMER: The information supplied in this document is for guidance only and should not construed as warranty. All users of the filters are responsible for assuring that it is suitable for their needs environment and end use. All data is subjected to change as Eagle Filters Oy deems appropriate. Please visit [www.eaglefilters.fi](http://www.eaglefilters.fi) for contact information.