

altair[®] System2 High Efficiency Filters

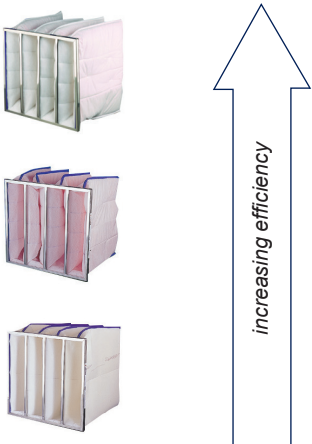
The Parker Hannifin **altair**System2 inlet filtration unit provides a superior level of protection for turbines located in offshore and coastal environments. Optimized to operate at high velocities, the system has a small filter face area resulting in a compact unit.

The three **altair**System2 high efficiency bag filters—HVL, HVX and HVV—have been developed specifically to protect gas turbines against high levels of sub-micron particulate and to provide a barrier against more common contaminants like wet and dry aerosols, drilling muds, grit blasting debris, and hydrocarbons. The use of advanced synthetic media combinations helps ensure that filtration and pressure loss characteristics remain optimized when operating in wet or dry conditions.

As an integral part of the **altair**System2 inlet solution, the filters – in conjunction with marine vane separators – significantly reduce salt concentrations, prolonging turbine life and reducing maintenance downtime. The choice of stainless steel header frames further ensures that materials do not corrode or degrade during normal operation. In heavily contaminated environments, Parker Hannifin recommends using an **altair** high efficiency filter in combination with the PBR prefilter.

Key Benefits

- High volume flow leads to small filter face area (up to 50% smaller than conventional designs)
- High dust-holding capacity and longer filter life help minimize filtration costs
- Excellent salt removal in all conditions helps protect against turbine corrosion
- Low pressure loss helps increase power output and improve fuel efficiency
- Fully stainless steel housing provides long life
- Flat-pack design minimizes spare filter storage space

Filter	Product Name	Performance
	altair HVV	Exceptional performance for very high levels of small particulate; ideal for operators needing to maximize the intervals between compressor-washing shutdowns
	altair HVX	Enhanced level of small particulate efficiency with minimal premium in terms of pressure loss
	altair HVL	High level of turbine protection with exceptionally low pressure loss for increased power output

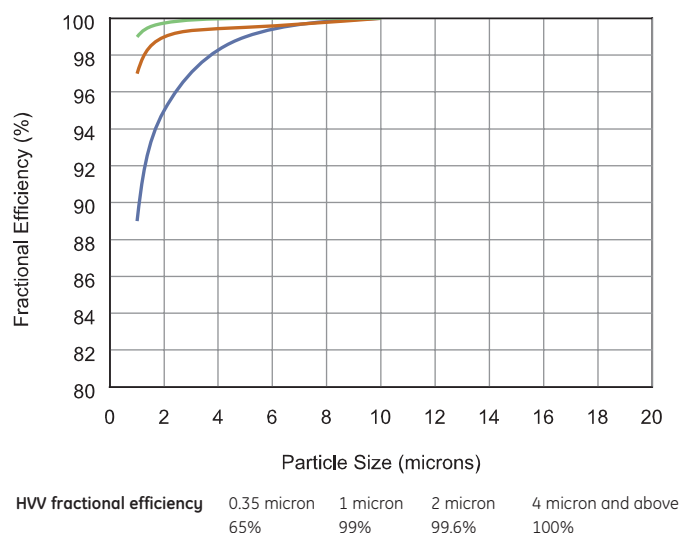
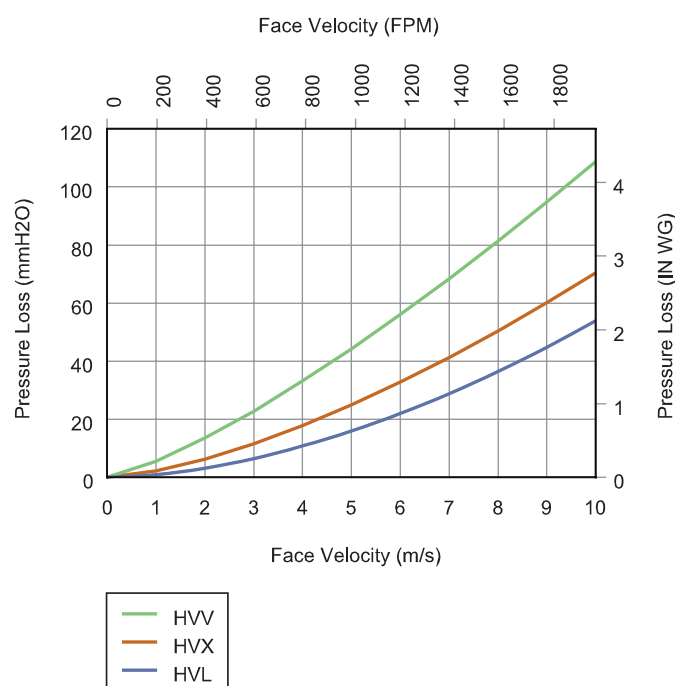


Performance Data

	altair HVL	altair HVX	altair HVV
Gravimetric efficiency (arrestance) vs ASHRAE test dust	98%	99%	>99%
Salt output* vs MMBL**	0.0001 ppm	0.00006 ppm	0.00006 ppm

* when used with rear marine vane separator (MVS)

** 0.1067 ppm



HVV fractional efficiency	0.35 micron	1 micron	2 micron	4 micron and above
	65%	99%	99.6%	100%