## clearcurrent® ASSURE vCell

# Innovative Filters for Advanced Performance Turbines



## Ultimate protection and reliability for highest performing gas turbines

Representing over a decade of experience and innovation, clearcurrent ASSURE filters provide the protection needed for the newest class of advanced turbines, which operate with rigorous demands and within finer margins.

The pioneering clearcurrent ASSURE filters are designed to eliminate particulates that compromise compressor blade aerodynamics and performance, thereby maximizing turbine power and thermal efficiency by blocking even the toughest natural and man-made contaminants that can weaken modern turbine alloys and block intricate cooling passage holes.

Installation of the clearcurrent ASSURE allows operators to focus on maintaining the outcomes that these turbines are engineered to provide.

### Contact Information

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## Pioneering Design

#### **Turbine Component Health**

Hydro/Oleophobic media reduces challenging particulates carried through to the gas turbine in aqueous forms.

#### **Total Filtration Barrier**

Edgeseal technology protects from corrosives bypass typically seen in construction of frame to media.

#### Robust

Advanced high impact glass reinforced ABS protection grids ensure high burst strength.

#### **Longer Maintenance Intervals**

Long-service-life materials enable longer maintenance intervals, in line with advanced gas turbine components.

#### **Designed for the Real World**

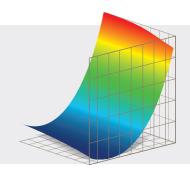
Advanced validation program and third-party testing standards ensure reliability, including testing for extreme weather.



## clearcurrent® ASSURE V17 vCells

## Media Optimizer<sup>™</sup>

The proprietary model shows the impact of pleat spacing, height and depth on Dp and DHC on any given media and its efficiency. It delivers specific information that maximizes the effectiveness and utilization of the media in your required filter.



#### Desired Outcomes with Proven Value

clearcurrent ASSURE™ filters combine technology, experience and people to provide a quantifiable filter lifecycle cost. Your gas turbine equipment and site conditions allow us to calculate and optimize your filtration investments total life cycle costs using different air inlet filter configurations.

#### Filter Comparison

	Industry Norm	clearcurrent PRO	clearcurrent ASSURE
Efficiency	<70%	70 - >99%	70 - >99%
Temperature Range	Basic	-40°C to 70°C, (-40°F to 160°F)	-40°C to 70°C, (-40°F to 160°F)
Humidity Range	Basic	100%	100%
Burst Strength	<3750Pa (15"wg)	>6250Pa (25"wg)	>6250Pa (25"wg)
Media Type	Blend/Synthetic Blend	Synthetic	Synthetic Treated
Media Treatment	Untreated	Hydrophobic	Hydro/Oleophobic
Media Area (Dp)	Basic	PRO	Media Optimizer
Gasket	Basic	CC FIP Polyurethane	CC FIP Polyurethane
Gasket Stop	Negative	Integrated Header	Integrated Header
Potting	Polyurethane	Polyurethane	PU Certified Sealed
vCell Construction	Polystyrene	ABS	High Impact ABS
Protection Screens	None	All Faces	All Faces
Compressor Protection	Particulate	Particulate/Moisture	Particulate/Moisture/Oil
Compressor Health	**	***	***
Heat Rate Stability	**	***	***
Output Stability	**	***	***
Installation Services	Upon Request	Upon Request	Recommended

#### Performance Data

Model	V17-9	V17-10	V17-12
Differential Pressure	120Pa (0.48" wg)	175Pa (0.70" wg)	270Pa (1.08" wg)
Efficiency	≥70% – F9	≥90% – E10	≥99.5% – E12
Rated Airflow	4250 m³/h, 2500 CFM		
Service Interval	HGP 25,000 hrs @0.25ug/m³		
GT ROI Analysis	Available		

### Physical Dimensions

Height x Width x Depth	593 mm x 593 mm x 435 mm (23.4" x 23.4" x 17.1")	
Clean Weight	14kg, 30lb	
Quality	12 Point CIP program	

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