

ALKEGEN

Optimal Performance
Filtration Media Solutions for
Data Centers





Our filter media is not just a component; it is a critical layer of defense for mission-critical facilities where performance, reliability, and protection cannot be compromised.

Data centers operate in environments where even minimal air contamination can have serious consequences. Corrosive gases such as sulfur compounds, nitrogen oxides, and other industrial or urban pollutants can penetrate indoor air systems, leading to corrosion of electronic components, increased failure rates, unplanned downtime, and reduced equipment lifespan. In addition to damaging critical infrastructure, these contaminants can negatively impact indoor air quality and pose long-term risks to human health.

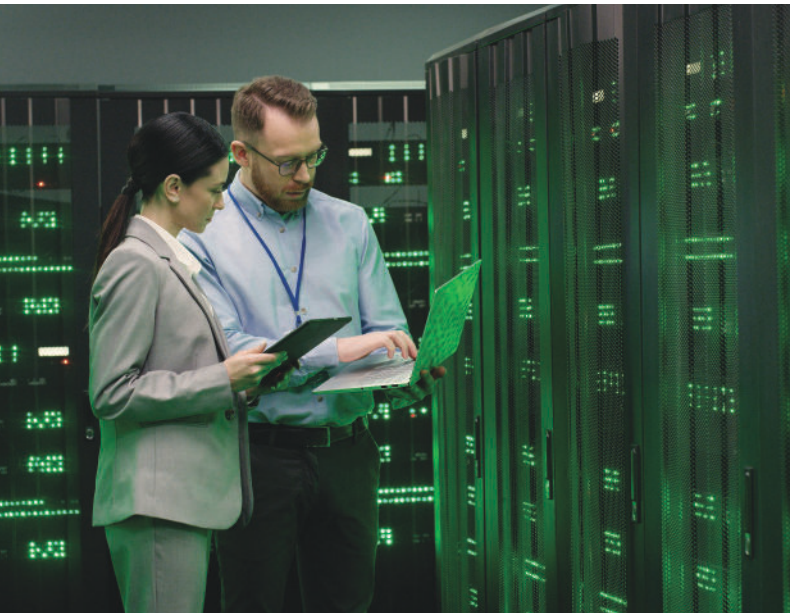
To address these challenges, we have developed a high-performance filter media engineered specifically for data center applications. By integrating our filter media into your HVAC and air handling systems, data center operators can significantly reduce corrosion risks, improve system reliability, extend equipment life, and support compliance with recognized data center air quality guidelines. The result is a cleaner, safer, and more stable operating environment—protecting both your technology investment and the people who rely on it.



High-Performance Air Filtration Media for Data Centers

Our solution provides comprehensive protection by combining gas-phase filtration with high-efficiency particulate removal in a single, optimized media structure. This dual-function approach ensures effective removal of both corrosive gases and fine particles before they reach sensitive IT equipment or occupied spaces.

The filter media utilizes advanced adsorption technology to neutralize harmful gases while maintaining low pressure drop and consistent airflow—key requirements for energy-efficient data center operations. At the same time, the particulate filtration layer captures dust, fibers, and fine airborne contaminants that contribute to equipment fouling and airflow restriction.



- **Superior Efficiency:** Achieve 20–30% higher performance per gram of media.
- **Reduced Pressure Drop:** Benefit from a 15–30% lower pressure drop at equivalent basis weight.
- **Exceptional Pleatability:** Designed for ease of use in manufacturing processes.
- **Optimal Distribution:** Ensures a well-distributed sorbent on nonwoven materials.

Higher Performance, Superior Efficiency for SO₂ and VOC Removal

Advanced Composite Engineering

Our filter media features state-of-the-art composite engineering, combining sorbent and synthetic non-wovens for superior performance.

Optimized Sorbent Selection

Alkegen expertise ensures selection of the best sorbents with the right chemical affinity, enhancing filtration efficiency.

Precise Basis Weight

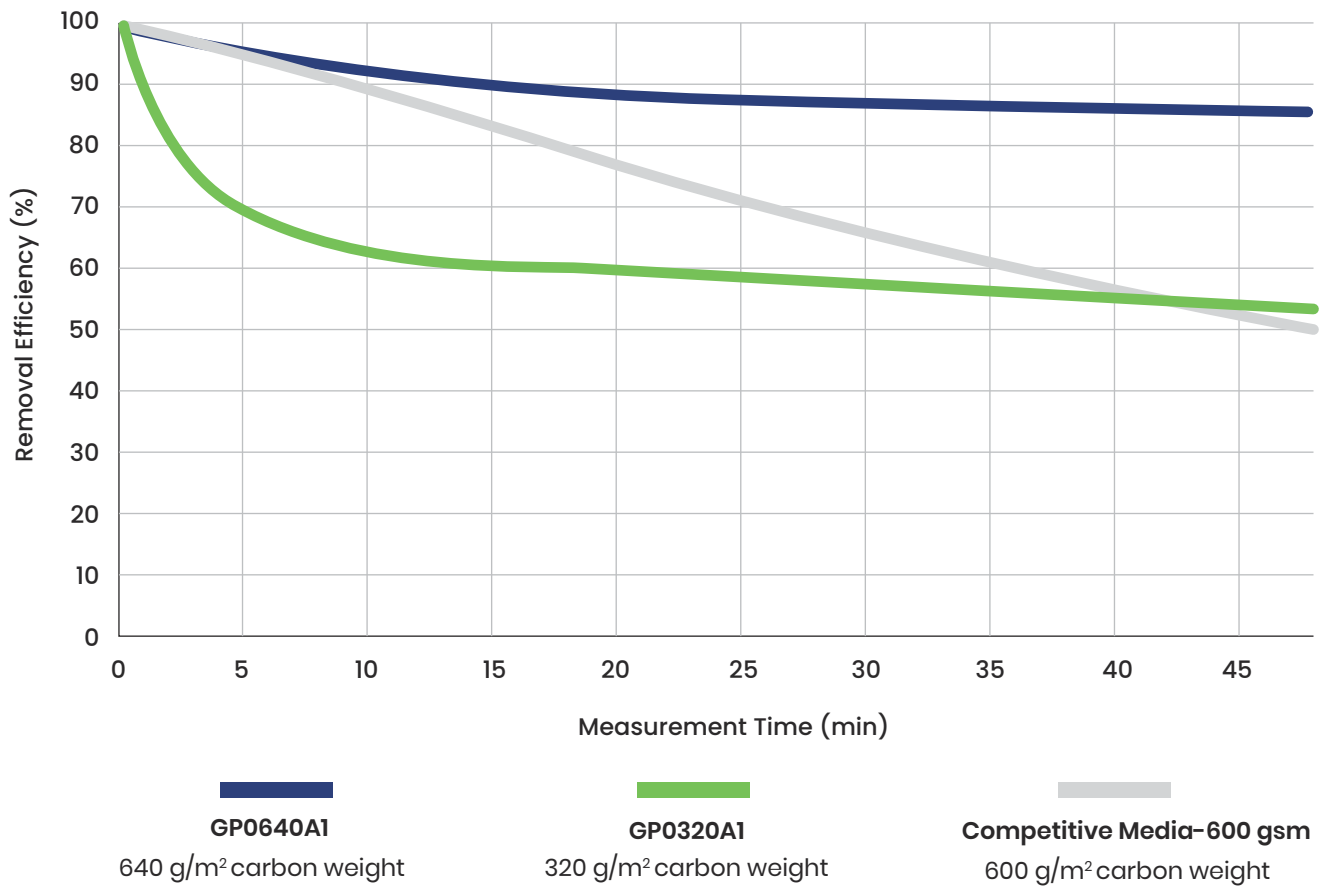
Achieve optimum performance with carefully calibrated basis weight, minimizing pressure drop and maximizing product lifespan.

Reliability and Longevity

Many filter media with activated carbon fall short in cleanroom requirements. Alkegen's filter media guarantees high performance, extended lifespan, and lowered maintenance costs.



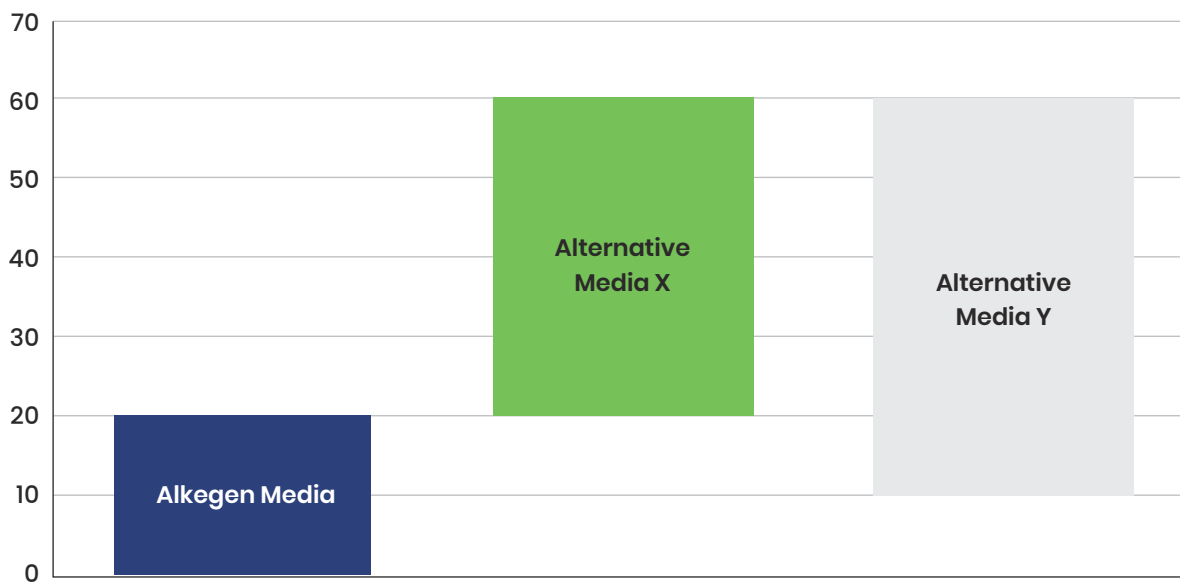
Carbon Media Test – Tracer Gas SO₂ Concentration: 30ppm 10cm/s 23°C, 50% RH



The Alkegen filter media provides, on average, 30% higher efficiency and reaches 50% breakthrough later. This translates into higher capacity while maintaining superior efficiency throughout the filter's lifetime.



Air Resistance Range (Pa) 0.3um NaCl @5.33cm/s

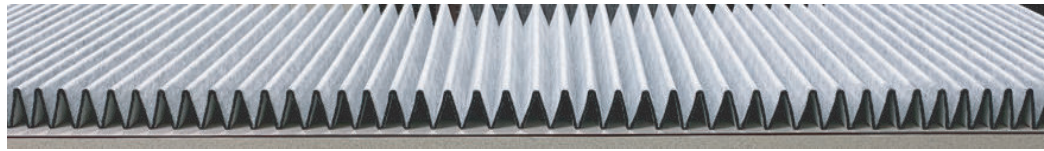


Alkegen media provides lower air resistance and reduced pressure drop, along with higher air permeability. This can reduce power consumption and extend the filter's lifetime.

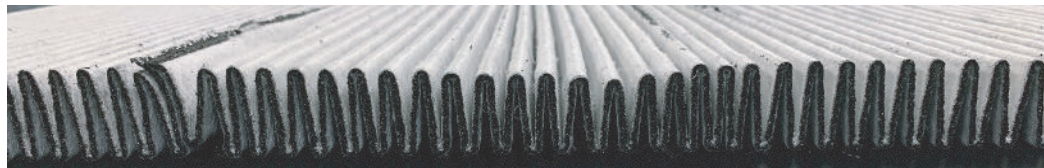
Exceptional Pleatability

Precisely formed sharp pleats optimize media exposure and minimize pressure drop, resulting in lower energy consumption and longer filter service life.

Alkegen



Other Media



Product Offering

Target Gases	Grades	Carbon Weight g/m ²	Total Basis Weight g/m ²	Particulate Filtration Layer
VOC	GP0480C1-9/6	480	649	-
	GP0480C1-9/S1	480	667	Merv 15 ISO ePM10 80%
	GP0640C1-9/6	640	839	-
	GP0640C1-9/S1	640	855	Merv 15 ISO ePM10 80%
Acids (SO ₂ , H ₂ S)	GP0480A1-9/6	480	649	-
	GP0480A1-9/S1	480	665	Merv 15 ISO ePM10 80%
	GP0640A1-9/6	640	839	-
	GP0640A1-9/S1	640	855	Merv 15 ISO ePM10 80%
	GP0640A1-9/S2	640	871	Merv 16 ISO ePM1 75%
Multiple Fugitive Gases	Advanced & Multi Sorbents	Please consult with our sales representatives for advanced grades: dual, triple sorbents & high CTC adsorbents with higher performance in equivalent basis weights		

Industries We Serve



FILTRATION
& CATALYSIS



INSULATION



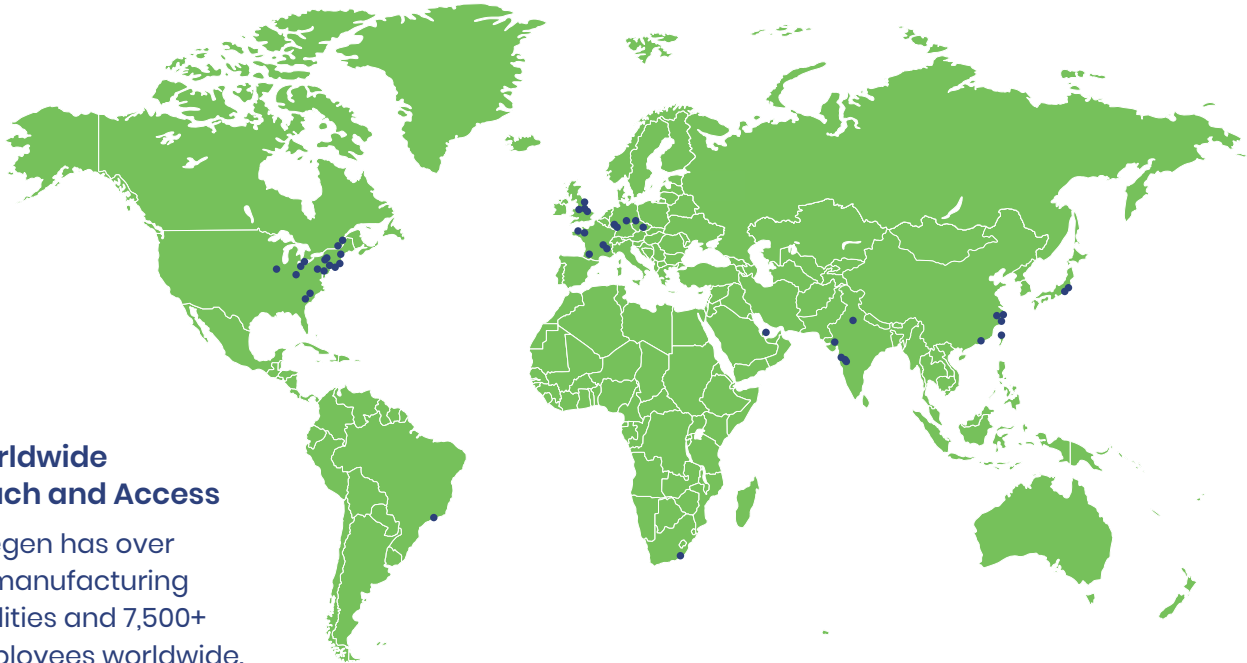
TRANSPORTATION
& OFF-ROAD
EQUIPMENT



BATTERY



CONSTRUCTION &
FIRE PROTECTION



Worldwide Reach and Access

Alkegen has over 60 manufacturing facilities and 7,500+ employees worldwide.

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