



REDClean™

Cartridge Filtration with Enhanced Performance
and Exceptional Filtration Efficiency

| Leading the Way in Dust Collection Technology



POWERED BY
REDClean™ Technology



BETTER AIR IS OUR BUSINESS®



REDFiltration™

Reliable Efficient Durable™

Reliable Efficient Durable™

Dependable.

High Quality.

Ease of Maintenance.

Cost Effective.

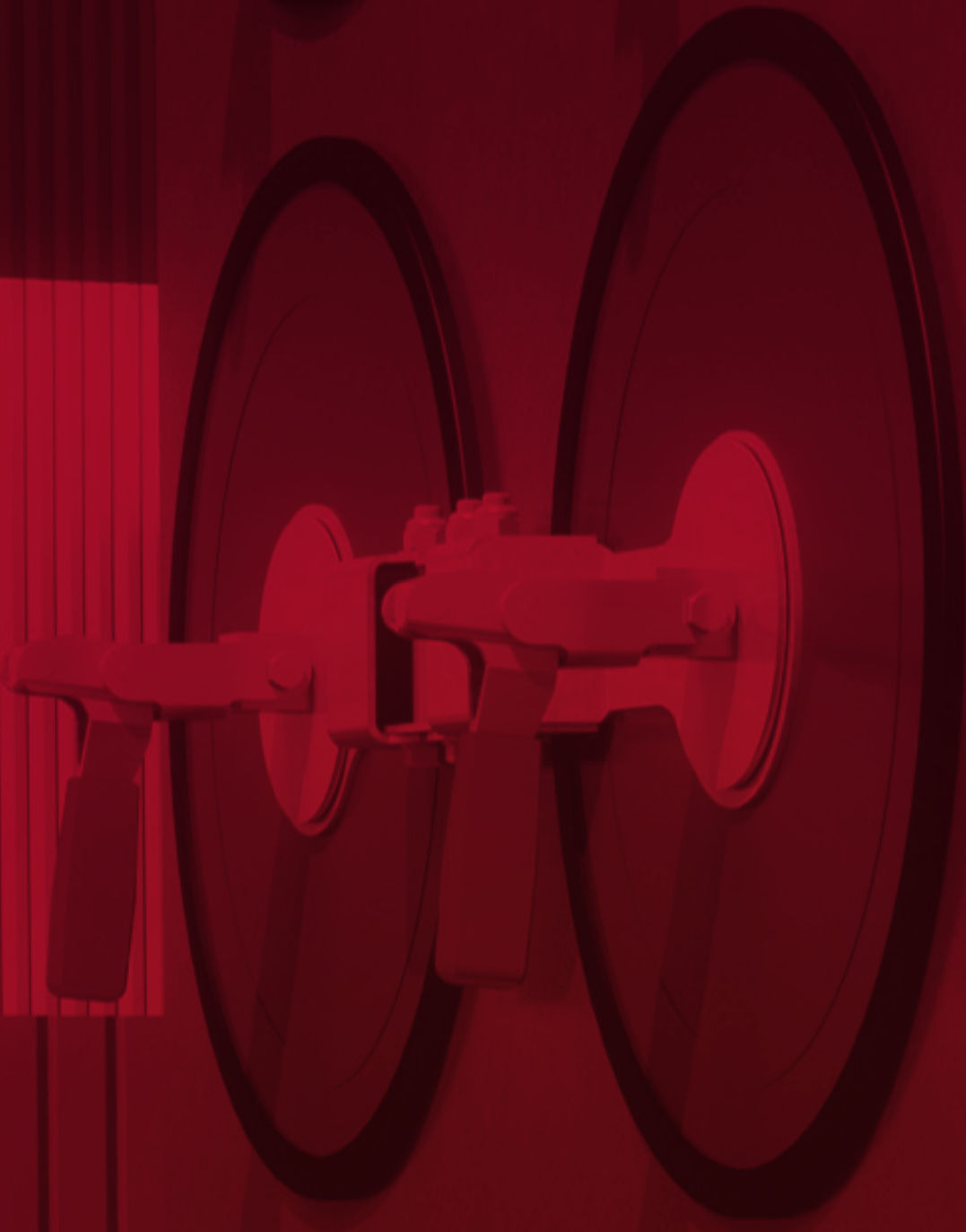
Optimal Productivity.

Least Environmental Impact.

Long Lasting.

Tough.

Resistant to Elements.



AAF[®]
INTERNATIONAL

REDFiltration™



The Evolution of REDFiltration™

For more than 90 years, AAF International has been providing filtration solutions for industrial processes around the world.

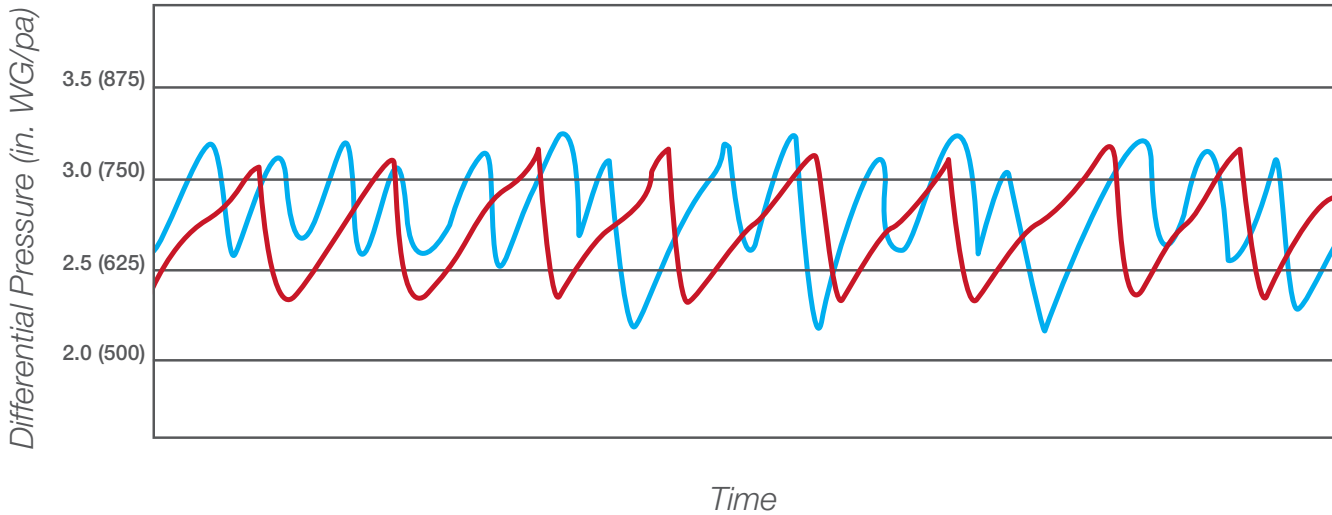
Throughout our rich history, AAF International has pioneered many of the techniques used today to control airborne dust, fume and vapor in virtually every production process. Our constant passion for innovative solutions has led us to offer the most reliable, efficient and durable products available on the market today.

AAF International, a member of DAIKIN Group, also believes in valuing our people, communities and environment. Our ISO 9001 certified facilities utilize lean and green manufacturing to deliver products with short lead times and minimal environmental impact. Our people centered management philosophy enables us to deliver the best customer service and also give back to the communities in which we serve and live.



Trust the Power of RED

Differential Pressure Across AAF and Leading Competitor Cartridges



NOTES

1. Dust loading at 2.3 grams/cubic meter
2. Above graph is after an endurance pulse test of over 8,600 pulses

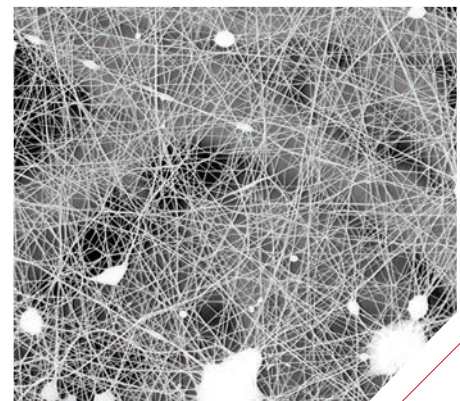
— AAF cartridge
— Leading competitor cartridge

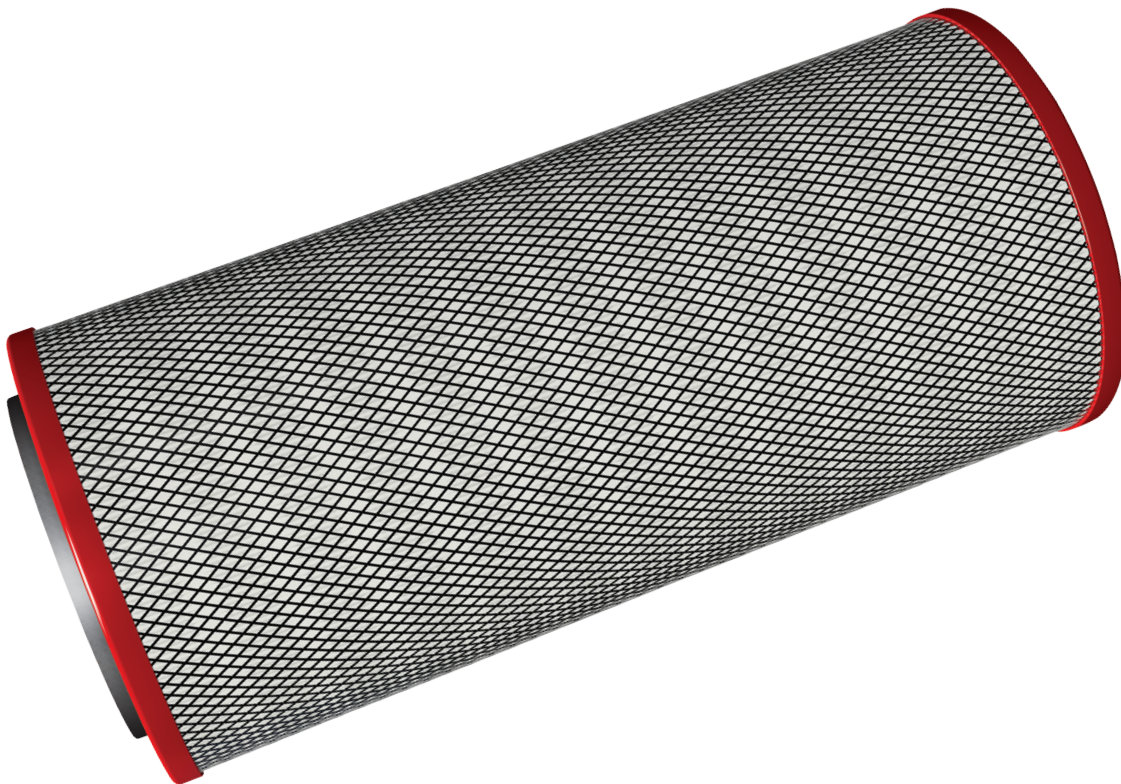
Engineered to Save You Money

Since every operator understands the importance of return on investment, AAF is able to correlate functionality versus cost.

AAF product designs are focused on life cycle cost so operators are able to easily quantify the total cost of plant ownership to fully appreciate and evaluate product performance against known criteria. Through our extensive research and development program, we are able to quantify the improvement versus alternate suppliers. Switching to AAF's range of cartridges allows customers to maximize customer investment and value for money.

Standard testing has proven that switching from competitive medias to AAF REDClean™ will result in more than double filter life, while at the same time halving compressed air usage and reducing operational differential pressure to deliver maximum filtration performance.





The REDClean™ Value

AAF cartridge technology allows operators to realize substantial cost savings in their total plant ownership by reducing power consumption, enhancing efficiency and extending the time between change-outs, even in the most difficult industries and applications.

Benefits

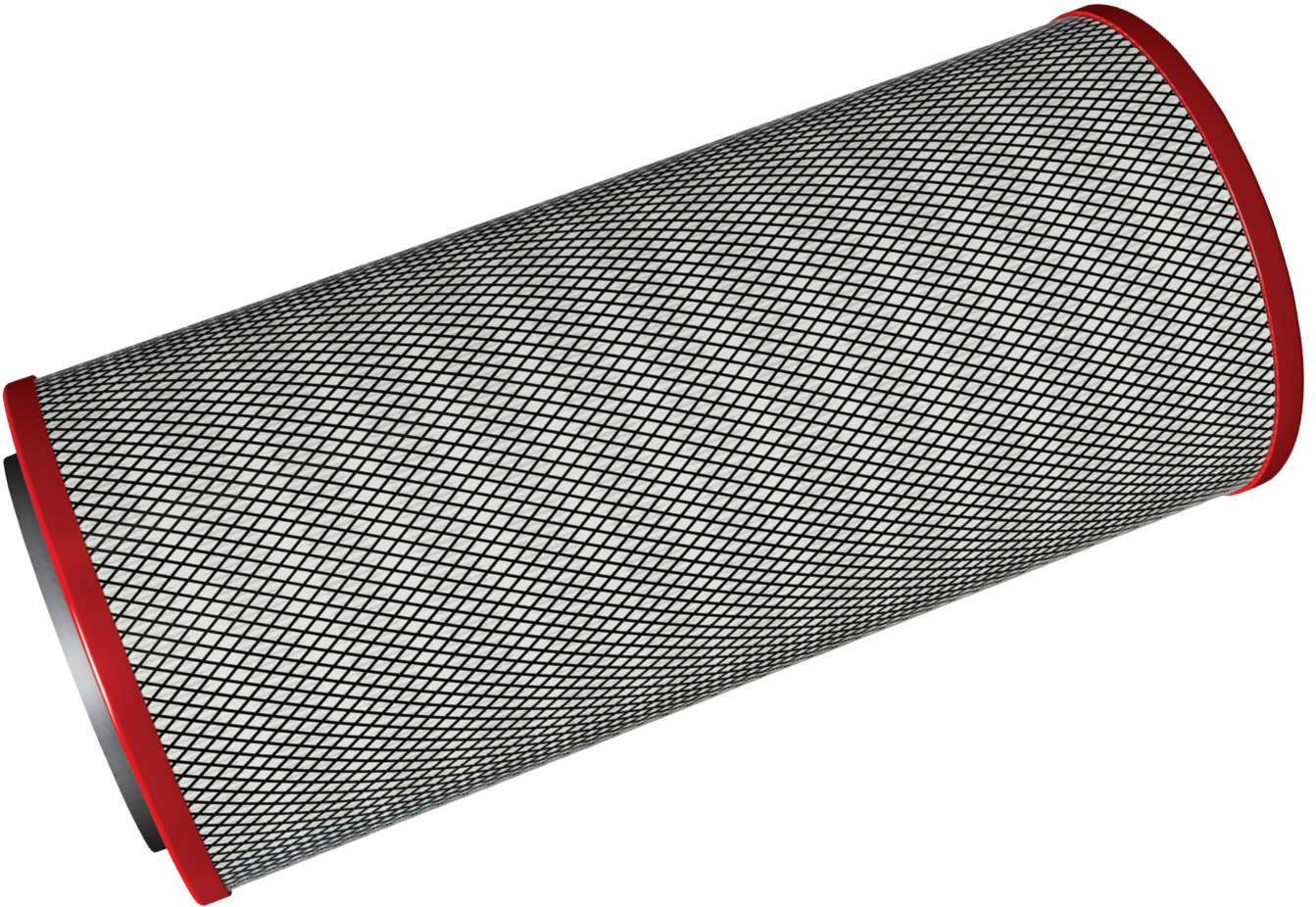
- Increased efficiency MERV 15 & F9 EN 779
- Increased life – lasting more than double the life of standard media
- Reduced compressed air usage – resulting in reduced cleaning and longer cartridge life
- Lower stable operating pressure – reducing the cost of operation
- Lower total cost of ownership – reducing the cost of providing clean air

The AAF REDClean™ media has been specifically developed to withstand the rigors of pulse cleaning with superior dust release, and in trials, outperforms all standard media. When the REDClean™ media is then packaged into an AAF optimized filter cartridge, the operational life can more than double for most applications, making switching to REDClean™ the quickest and simplest way for operators to maximize savings and improve their bottom line.



Better by Design

With an extensive list of references spanning more than 90 years, AAF International has tackled some of the most difficult applications in almost every industrial sector. From wet, sticky, oil-laden air to hygroscopic and explosive dusts, AAF International has products and solutions to complement your operation.



More than Just a Filter

AAF's extensive development program has allowed us to perfect our filter construction, combining advanced substrates with our range of special medias and coatings, to create an unbeatable blend of high performance filtration and strength.

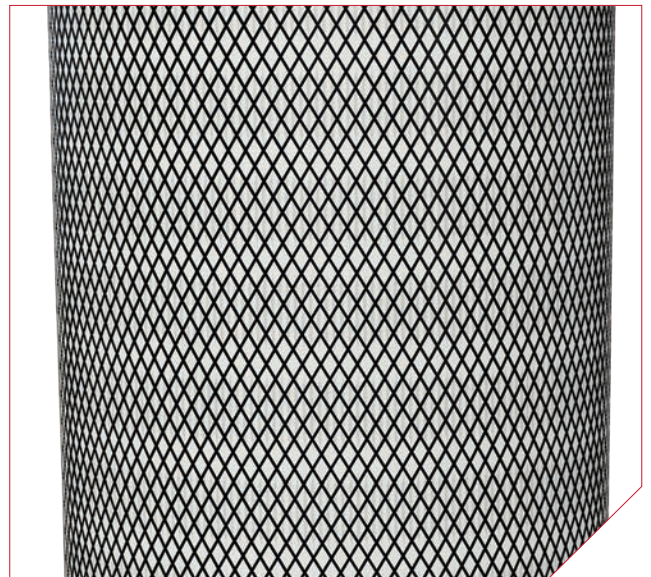
End Caps

Traditional open-ended cartridges can be supplied in a variety of materials and finishes from galvanized and powder coated steel to plastic. AAF is also able to offer a variety of end cap designs to suit the majority of original manufacturers' equipment, including trays, lugs and twist locks.



Liners and Banding

The strength of any cartridge comes from its carefully engineered construction. At AAF, we maximize the strength of the canister through carefully designed mesh and banding engineered to be unobtrusive to the cartridge's filtration performance and dust release.



Media



REDClean™ N

A high-performance grade constructed of a proprietary blend of high-strength synthetic reinforced base media with a nanofiber outer layer.



REDClean™ NFR

A high-performance grade constructed of a proprietary blend of high-strength synthetic reinforced base media with a nanofiber outer layer and flame retardant finish.



REDClean™ D

A commercial grade constructed of a proprietary blend of high-strength synthetic reinforced base media. Suitable for general low dust efficiency challenges.



REDClean™ DFR

A commercial grade constructed of a proprietary blend of high-strength synthetic reinforced base media with a flame retardant finish. Suitable for general low dust efficiency challenges.

Benefits & Features		REDClean™ N	REDClean™ NFR	REDClean™ D	REDClean™ DFR
Media Type	Substrate	Synthetic/Cellulose Blend	Synthetic/Cellulose Blend	Synthetic/Cellulose Blend	Synthetic/Cellulose Blend
	Dust Release	Surface Loading	Surface Loading	Depth Loading	Depth Loading
	Nanofiber	Yes	Yes	No	No
Typical Life		16-24 Months	16-24 Months	8-12 Months	8-12 Months
Maximum Operating Temp	F° (C)°	180° (80)°	180° (80)°	180° (80)°	180° (80)°
Initial Resistance		Excellent	Excellent	Good	Good
Abrasion Resistance		Good	Good	Good	Good
Efficiency Classification	MERV	15	15	11	11
	EN779	F9	F9	F6	F6
Humidity Resistance		Fair	Fair	Fair	Fair
Chemical Resistance		Fair	Fair	Fair	Fair
Flame Retardant		No	Yes	No	Yes

*Based upon AAF recommended test conditions Other media available for specialist applications



REDClean™ S

A blend of 100% synthetic fibers, providing a media which offers exceptional resistance to abrasion, temperature and humidity.



REDClean™ SA

A blend of 100% synthetic fibers, providing a media which offers exceptional resistance to abrasion, temperature and humidity. The antistatic finish aids in dust release and is ideal for explosive applications.



REDClean™ C

A proprietary blend of high-strength natural and synthetic reinforced base media with an antistatic finish. Suitable for general low dust efficiency challenges in explosive applications.



REDClean™ M

Washable, proprietary blend of synthetic filters. Excellent resistance to humidity.

REDClean™ S	REDClean™ SA	REDClean™ C	REDClean™ M
100% Spunbond Polyester	Polyester with Aluminized Finish	Carbon Impregnated	Polyester/Fiberglass Blend
Depth Loading	Depth Loading	Depth Loading	Depth Loading
No	No	No	No
8-12 Months	8-12 Months	8-12 Months	8-12 Months
270° (130)°	270° (130)°	180° (80)°	275°
Good	Good	Good	Good
Excellent	Excellent	Good	Good
11	11	11	11
F6	F6	F6	F6
Tolerant	Tolerant	Fair	Excellent
Excellent	Excellent	Fair	Excellent
No	No	No	No

Adhesives and Gaskets

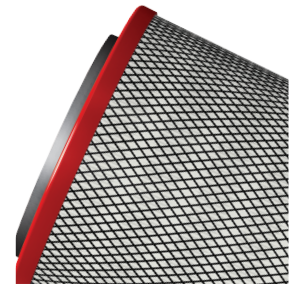
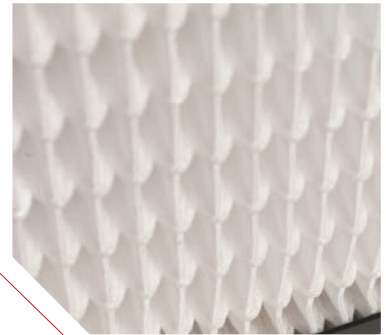
Adhesives

Unlike more traditional static filters, the cartridges used in reverse pulse cleaned cartridge collectors are required to be more robust to withstand the stresses from the pulse cleaning operation through the full life cycle of the product.

AAF only selects adhesives and potting compounds specifically designed to withstand the rigors of the pulse cleaning operation.

Gaskets

Any cartridge or filtration product is only as good as its effective sealing technology. As many maintenance managers understand, an incorrectly designed simple gasket can result in substantial losses in production, high emissions and penalties. Through extensive trials, AAF has optimized gasket performance to ensure filtration performance is not impaired by inadequate gasket shape molding and splice design.



Coatings and Treatments

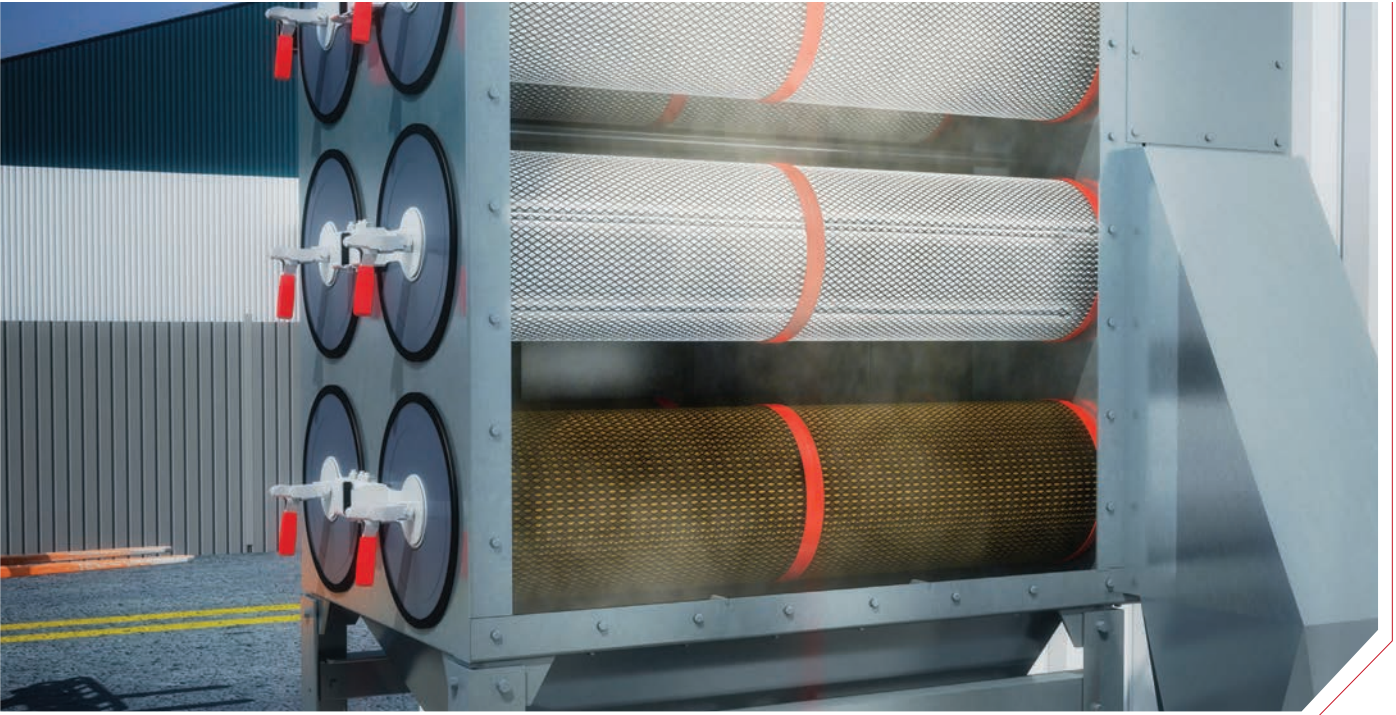
Simple cellulose/synthetic blended media will only achieve a basic level of filtration efficiency for standard applications. To ensure optimum plant performance and minimum operational life cycle cost, AAF has developed a range of class-leading products based upon our proven nanofiber technology, supplemented for more specialist applications with our range of coatings and treatments.

Antistatic **For explosive applications**

Hydrophobic **For high humidity**

PTFE **For Ultra filtration performance**

Whatever the application, AAF has a cartridge to match your requirements.



Media Selection

At AAF, we understand that every application is different, and while many medias look similar, their performance can vary significantly. Only through the micro examination of any original cartridge can substandard media selections be identified that will ultimately result in the premature failure of a filter leading to unscheduled downtime and cost to the operator.

The knowledgeable engineer, however, understands that to ensure filtration performance and longevity of life, only a high performing media should be chosen, supported by selection knowledge gained through industry, application and operating experience. Any dust collector is only as good as its filtration medium.

As one of the largest suppliers of cartridge collectors in the world today, AAF has years of experience in selecting products based upon applications' operating knowledge and provides a general guide on media selections as detailed in the table. We would, however, always recommend contacting your local representative for optimum product selection to suit your exact application requirements.



Media Selection

INDUSTRY	MARKET	REDClean™ DFR	REDClean™ NFR	REDClean™ S	REDClean™ SA
Industrial Minerals	Formica	●	●		●
	Rockwool/Insulation	●	●	●	
	Solar Panels	●	●		
	Cement/Lime/Gypsum	●	●	●	
	Glass	●	●	●	
	Asphalt	●	●		
	Concrete	●	●	●	
	Quarry	●	●		
	Mining	●	●		●
	Pottery/Ceramics	●	●	●	
	Tiles/Porcelain/Bricks	●	●	●	
Primary Metals	Coke Ovens				●
	Ferrous/Non-Ferrous	●		●	
	Ferro Alloys	●		●	
	Foundry	●	●	●	
	Galvanizing		●		
Metalworking	Powder Coating				●
	Shot Blasting		●	●	
	Plasma/Laser Cutting			●	●
	Welding		●	●	
	Flame Spray			●	●
	Grinding		●	●	
	Buffing		●	●	
Paper Industry				●	
Woodworking				●	
Food & Beverage	Production/Farms				●
	Collection/Transfer				●
	Processing				●
Chemicals	Fertilizer	●	●	●	●
	Pharmaceutical	●	●	●	●
	Cosmetics	●		●	●
	Battery	●	●	●	●
	Petrochemical				●
	Refinery	●	●	●	●
	Tires/Rubber	●		●	●
	Plastic	●	●	●	●
	Semi-Conductors	●		●	●
	Specialist Chemicals	●	●	●	●
	Detergents	●	●	●	●
	Paint/Coatings/Pigments	●	●	●	●
	Pesticides				●



Assembly

While many companies can pleat media and produce standard cartridges, very few understand the technology of pleating and the importance of assembly to overall filtration performance.

Through our extensive research into pleat optimization, AAF has been able to quantify significant improvements to our range of cartridges.

Any cartridge is only as good as the assembly of its individual components, and through consistent, repeatable assembly through our ISO certified production facilities, AAF is able to guarantee performance.



Is Your Dust Collection Equipment Operating At Peak Efficiency?

All Replacement Parts Are Not Alike

Many of the technologies used to control air pollution were originally developed by AAF. Today, American Air Filter and AAF brand fabric collectors, wet collectors, mechanical collectors and electrostatic collectors can be found in thousands of installations in every industrialized country.

To protect your investment and ensure maximum performance, insist upon genuine AAF replacement parts and service. Each AAF air pollution control product and component is designed for cost-effective, reliable performance. AAF replacement parts maintain the integrity of your AAF equipment and are guaranteed to fit and work perfectly.

Protect your investment. Ensure peak performance and meet Clean Air standards with precision engineered AAF quality replacement parts.

Protect Your Employees and Safeguard Your Process with AAF Brand Quality Parts

Equipment and components wear over time, and preventative maintenance is the key to avoiding a crisis. Your choice of replacement parts plays a critical role in efficient dust collection performance and regulatory compliance. Why take chances? Don't settle for less. Now, more than ever, you need AAF original replacement parts.

Looking for Ways to Increase the Efficiency of Your AAF Dust Collectors? We Have Them!

AAF replacement parts are manufactured to the same high-quality ISO 9001 standards as our original equipment, and include:

- Filter bags
- Slide gates
- Gauges
- Cartridge filters
- Gaskets
- Clamps
- Venturis
- Cages
- Diaphragm valves
- Fan
- Impellers
- Flanges
- Insulators
- Capacitors
- Rotary valves
- Blowers
- Couplings
- Controls
- Collector cells
- Switches
- Ionizer wires

Call our Toll Free AAF Answer Center today at 1.800.477.1214 to get the name of your local AAF technical sales representative or to place an order. Fax your parts order to: 502.637.0148.



Reliable, Efficient, Durable

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