



BHA[®] Cartridge and Pleated Filters for Dust Collection

CLARCOR
Industrial Air

Clean air. It's what we do.[®]

Discover the Difference in Performance and Value of our BHA Cartridge Filters

Always leading technology and innovation, CLARCOR Industrial Air develops and manufactures the new standard in filtration technology — patented BHA ProTura® advanced nanofiber filtration technology.

BHA ProTura advanced nanofiber technology has been independently proven to achieve higher initial efficiency, cleaner air, lower pressure drop and greater energy savings than commodity filter media.

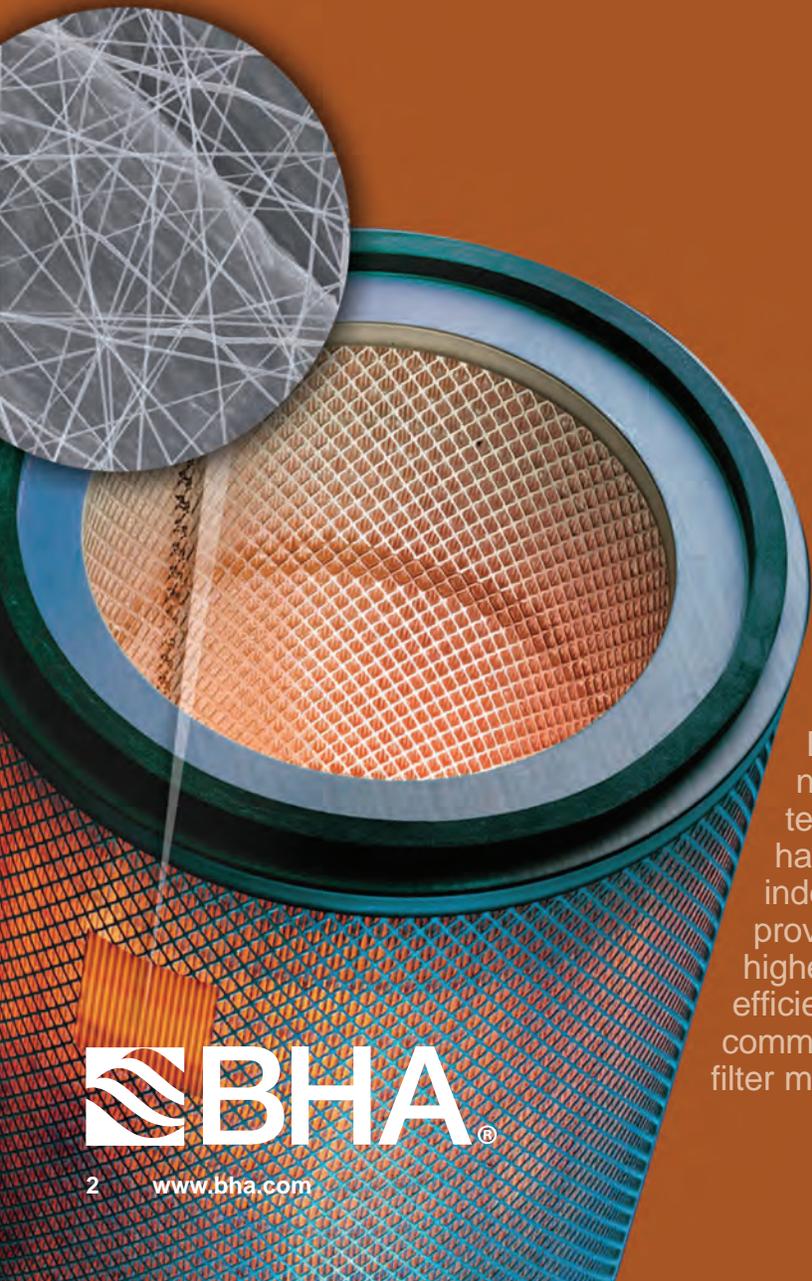
Surface Loading Is Key

BHA ProTura filters feature a special surface nanofiber layer made from synthetic polymers so extremely fine, they are measured in fractions of a micron (nanometers). This ultra-thin layer traps dust and fume particulate on the surface of the filter before it can embed deeper in the media— leading to better cleaning efficiency with fewer pulses and significantly less compressed air use.

As a result, customers benefit from several advantages, including:

- **MERV 15 filtration efficiency** ensures capture of submicron particles and reduction of dust collector emissions for cleaner and safer workplace air
- **Lower energy costs with reduction** in compressed air from fewer pulses and filter pressure drop
- **Nanofiber technology** means superior surface loading to enhance dust cake release and longer filter life

Nanofiber filtration technology at 5000x



BHA ProTura nanofiber technology has been independently proven to achieve higher initial efficiency than commodity filter media.

Our BHA ProTura filters (MERV 15) have an exceptionally high level of filtration efficiency in capturing sub-micron particles from a contaminated air stream. With nanofibers smaller than competitive fibers and an industry highest MERV 15 efficiency rating, and true surface filtration, you get 99%+ efficiency on 0.3-0.4 micron particulate.*

Although MERV is important, it can also be misleading. A filter may achieve a high MERV rating but result in higher pressure drop. So be aware of filters that use restrictive surface layers to boost efficiency as they ultimately lead to an increase in pressure and frequent filter replacement.

BHA ProTura nanofiber cartridge filters not only offer a MERV 15 rating but also deliver the ultimate combination of high efficiency, low operating costs and longer filter life.

BHA ProTura nanofiber outperforms.

*In operation, at about 1" DP



BHA Cartridge Filters Stocked with Performance and Value

Keep your dust collectors running efficiently and energy smart with high-quality BHA cartridge filters.

Cylindrical Cartridges

Our round cylindrical cartridge filters rank among the highest in performance, efficiency and value. We stock a wide range of cylindrical replacement cartridge filters for use in nearly all major brands of dust collection systems and industry applications. They are available in an assortment of media, including our proprietary BHA ProTura nanofiber filters.

Oval Cartridges

Our oval cartridge filters also provide superior filtration with our advanced proprietary BHA ProTura nanofiber filtration technology. This technology is scientifically proven to achieve higher efficiency, cleaner air, lower pressure drop, longer filter life and greater energy savings than any other media used in cartridge filters.

Custom Cartridges

Should you require a custom filter to meet a special application need or as an aftermarket filter for another brand, we can design and manufacture the right filter to meet your specified requirements. Our specialists will help you select the best media and filter configuration to fit your unique application.

OEM Dust Collector Cartridge Filters

We make cartridge filters for many of the OEM's: Donaldson AAF, Airflow Systems, Donaldson Torit, Camfil Farr APC, FlexKleen, ITW/Gema, Nordson, Micro Air, Pnuemafil, UniWash/Polaris, Robovent, Sly, Steelcraft, Wheelabrator and more.*

*Trademarks are the property of their respective owners.



BHA Pleated Filters Provide Maximum Benefits Through Increased Production And Reduced Operational Costs

With today's demands of increased production and tighter emission controls, dust collectors can be pushed beyond their design limits. If they fail to keep up, production and profitability suffer.

As an alternative to traditional filtration technology, CLARCOR Industrial Air produces an innovative and extensive family of pleated filter elements that offers proven performance and durability. With more than 4 million units sold to date, BHA PulsePleat® filter elements along with BHA ThermoPleat® options deliver valuable benefits:

- Provide superior filtration efficiency
- Promote better airflow for increased throughput
- Reduce air-to-cloth ratios
- Reduce operating differential pressure
- Reduce compressed air consumption
- Eliminate the need for cages
- Are easily installed and removed
- Top and bottom load options
- Double the filtration area increases capacity
- Shorter filters reduce abrasion



Whether used in new systems or serving as retrofits to existing dust collection equipment, BHA PulsePleat filter elements prove to be a versatile and cost-effective solution.

Best of all, installation typically requires no modification to existing equipment. With CLARCOR Industrial Air, you can enjoy improved performance and energy savings without the expense of costly modifications... plus installation is much quicker and easier than traditional filter elements.

OEM Dust Collector Pleated Filters

We make pleated filters for many of the OEM's: Donaldson Torit RF, Flex Kleen, MikroPul, United Conveyor, Wheelabrator, Dantherm and others.*

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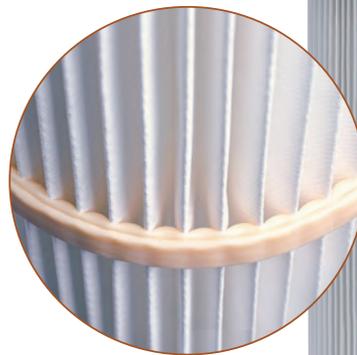
Visit www.BHA.com to calculate your Baghouse Energy Savings.

The Original Pleated Technology

Each element is custom manufactured to maximize the benefits of your unique process.

We offer many various tops, inner cores and bottoms with several material alternatives and sizes, plus a variety of media options:

- Spunbond polyester (standard)
- Spunbond polyester with oleophobic treatment
- Spunbond polyester laminated with BHA Preveil® ePTFE membrane
- Conductive media available
- Spunbond polypropylene
- Stiffened aramid felt (available with BHA Preveil ePTFE membrane lamination)
- Stiffened PPS felt (available with BHA Preveil ePTFE membrane lamination) Specialty finishes available to fit particular applications.



BHA iPLAS is available only with CLARCOR Industrial Air pleated filter elements.



Molded polyurethane top is available in a variety of styles and sizes to fit a wide range of tubesheet holes. Other materials or designs are available for higher temperatures and unique applications.

One-piece design eliminates the need for filter bags and cages, significantly reducing installation time.

Spunbond polyester media provides 99.99+% filtering efficiency.

Inner core (BHA PulsePleat and BHA ThermoPleat) is constructed from polypropylene or metal, depending on your application needs.

Pleat depth and spacing are customized for specific applications to allow for improved dustcake release. The pleated design increases filtration surface area up to 3-4 times.

Specialty finishes available, including BHA Preveil® ePTFE membrane.

iPLAS "formed-in-place" design anchors pleat tips firmly, keeping them evenly spaced and straight pleats aligned while element is in operation.

Molded bottom helps resist abrasive wear at the bottom of the elements.



Your Complete Resource

Baghouse Accessories

Access Doors
AC Tensioning Tool
Bag Cups/Venturis/Thimbles/Clamps
Diaphragm/Solenoid Valves/Valve Repair Kits
Differential Pressure Monitors and
Magnehelic/Photohelic Gauges
Door Seal
Gauge Line Cleaners - Surge Valve
BHA Neutralite® Conditioning Agent
Tensioning Assemblies
Tubesheets/Blowpipes
Vacutrans Vacuum Cleaning Systems
BHA Visolite® Leak Detection System

Baghouse Filters

BHA Preveil® Expanded PTFE Membrane Filters
Cartridges - Paper and Spun Bonded Media
Filter Bags and Cages
BHA ProTura® Filter Elements
BHA STS® SpiroTube Filter System
BHA PulsePleat® Pleated Filter Elements
BHA ThermoPleat® Pleated Filter Elements

Acoustic Cleaners and Replacement Parts

Systems and Services

Technical Services
Installations/Refurbishings/Inspections
Maintenance Programs
Fabric Filter Rebuilds/Conversions/Cleaning System
Upgrades
Troubleshooting and Maintenance Seminars
Blowpipe Design
Tubesheet Upgrades

Contact us at 800-821-2222 to discuss the filter solution best suited to your application.



CLARCOR Industrial Air brings together the strengths of BHA®, United Air Specialist's (UAS) and the dust collection portion of Clark Filter. Dust. Mist. Fumes. No matter the application, from power gen to pigment. CLARCOR Industrial Air is the strongest global filtration company in the market with 850 employees and 12 rooftops delivering the most comprehensive selection of products and solutions to best optimize air stream and plant operations for our customers.

Innovative design. Top-quality manufacturing. And the most responsive customer service in the business. All of it focused on delivering the best quality products for your applications, with the follow up service you need, anytime, anywhere.

The BHA advantage means:

- Innovative industry solutions for your toughest filtration challenges
- Proprietary filter media technologies and advanced research capabilities to ensure the latest developments are in our newest filters
- Quality cartridge and pleated filters utilizing state of the art production processes
- 24 X 7 customer service that is unmatched anywhere in the industry

The CLARCOR Industrial Air Difference:

Industry leading filter designs combined with world-class customer service.

Clean Air. It's what we do.®

Applications

Here are a few of the many different applications where BHA filter elements have improved system performance. Contact your CLARCOR Industrial Air sales representative to discuss your particular application. We custom manufacture BHA filter elements to fit nearly any OEM style or dust collector. CLARCOR Industrial Air engineers can help you select the right media, size and construction to fit your collector without capital modifications.

Cement and Rock Dust
Bentonite Crushing
Clay Grinding
Clinker Cooler
Coal Mill
Crushing/Grinder
High-Efficiency Separator
Kaolin Processing
Material Handling/Transport
Packing Machines
Raw Mill/Finish Mill

Chemical
Calcium Hypochlorite
Catalyst Manufacturing
Cellulose Fibers
Coke-Briquetting Process
Fertilizer Spray Dryers
Packaging
Plastic Fibers
Polyethylene Resins
Polystyrene Fluff
PVC
Tire/Specialty Rubbers

Combustion
Boiler
Coal Handling
Fly Ash Handling

Food/Pharmaceutical
Animal Vitamins
Cereal Drying
Flour Milling
Food Additive Processing
Grain
Mixing/Blending
Pharmaceutical Pill Coating
Spray Drying

Metals
BOF Furnace
Caster
Desulphurization Furnace
Electric Arc Furnace
Induction Furnace
Ladle Melt Furnace
Mold Cooling Lines
Sand Shakeout/Sand
Reclaim
Shot Blast/Grinding

Paint/Pigments
Micronizers
Packaging
Paint Mixing
Pigment Blending
Pneumatic Conveying
Spray Drying
Toner Mixing/Blending

Primary Aluminum
Alumina Handling/Unloading
Anode Crushing Ventilation
Carbon Bake Dry Scrubbers
Fluid Bed Dry Scrubbers
Green Mill Carbon Handling
Reacted/Unreacted Ore
Silos
Venturi Injection Dry
Scrubbers

For more information please contact your CLARCOR Industrial Air representative.

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