AmericanAirFilter®

Air Pollution Control Products

Better Air is Our Business®

AAF® INTERNATIONAL

AmericanAirFilter®

Air Pollution Control Products

Industry Leader

Unmatched Product Line and Application Experience

Modern industrial processes produce large quantities of airborne pollutants in all forms – particulates, gases, vapors, fumes, and mists. Many pollutants are toxic and concentrations can easily exceed safe levels of exposure to workers. Reducing the concentration to acceptable levels identified by the American Conference of Governmental Industrial Hygienists (ACGIH) is a critical factor in the operation of any industrial process.(1)

Design of the overall plant ventilation system must take into consideration a complex series of factors:

- ***Controlling the level of process generated contaminants***
- ***Employee health and comfort***
- ***Temperature and humidity control***
- ***Supply and exhaust air balance***
- ***EPA regulations for discharging polluted exhaust air***
- ***The risk of dust generated explosions***
- ***Cost of the air pollution control equipment***
- ***Cost of the HVAC equipment***
- ***Operating costs of the system***

AAF International has an unmatched capability to understand complex air pollution control problems and to develop effective solutions from conception through final installation. Our complete line of equipment allows us to recommend the most efficient and economical solutions ranging from a completely packaged unit to solve small in-plant dust control problems up to large, complex, custom engineered systems for major air pollution control projects.

AAF International has pioneered many of the techniques and equipment used in air pollution control applications today. AAF's dust, mist, vapor, and fume control products can be found in thousands of installations in virtually every industry and in most industrialized countries around the world.

(1) Refer to the ACGIH Industrial Ventilation Manual and 2002 TLVs and BEIs, copyright 2002 Cincinnati, OH

OptiFlo®

N RotoClone®

W RotoClone®

OptiFlo®

Wet Collectors

AAF International pioneered the development of wet collectors, devices designed to remove particulate matter from the air by passing them through a liquid medium. AAF supplies wet collectors for a wide range of applications from small nuisance dust problems to extremely large gas cleaning systems.

Type N RotoClone®

The Type N RotoClone cleans the air by the combined action of centrifugal force and a thorough intermixing of water and dust-laden air. It has no moving parts, pumps, or other auxiliary equipment. It requires minimum space and is easy to install. The collector is furnished in three arrangements – manual sludge removal, continuous sludge ejection (shown below), and continuous sludge sluicing. The Type N satisfies NFPA requirements for collection of explosive materials such as aluminum, titanium, and magnesium. Sizes available for volumes of 900 to 57,600 CFM.

Brochure APC-1-511

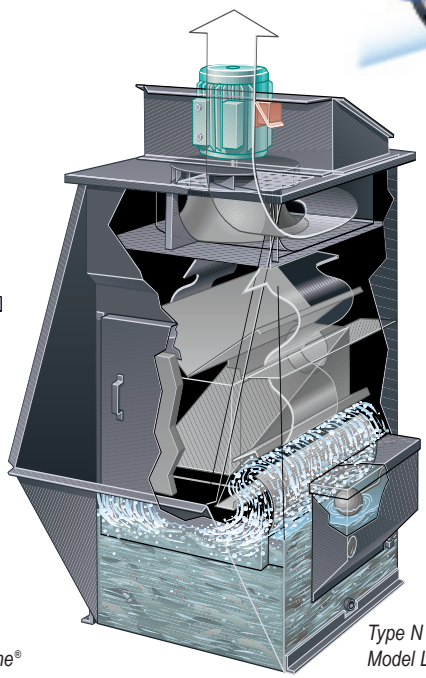
Type N RotoClone® Model LV

The Type N RotoClone Model LV dust collector is specifically designed for the ventilation and pollution control of dust emitting machines that require air volumes under 2,000 CFM. It is available in two standard sizes: 1,000 and 2,000 CFM. The Model LV collector can be close coupled to the dust sources or remotely located with connecting ductwork.

The Model LV is a completely self-contained dust collecting device, including fan, motor, and water level controls. When coupled with its optional downdraft bench, it provides an industrial worktable that is suitable for explosive metal (Al, Ti, Mg) grinding and polishing.

Brochure APC-1-519

Type N RotoClone®



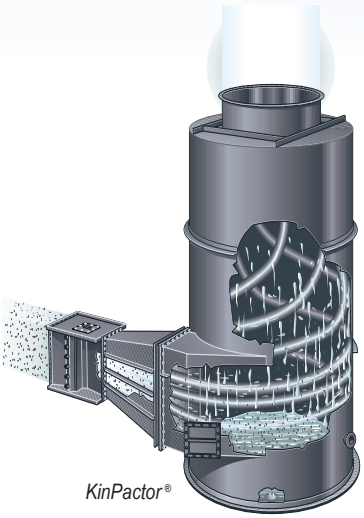
Type N RotoClone® Model LV

KinPactor®

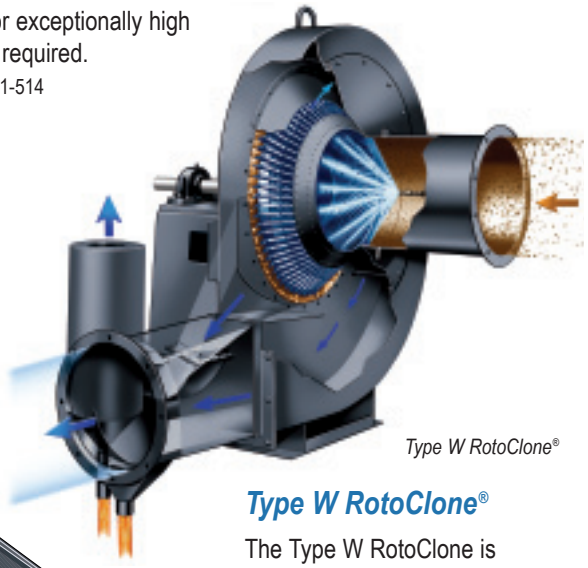
The KinPactor scrubber uses a venturi-type orifice for intermixing of dust particles and water. This intermixing is accomplished by rapid contraction and expansion of the airstream and a high degree of turbulence. Dust is collected through the principle of impaction. The KinPactor is generally designed to use 8 GPM of scrubbing water per 1,000 CFM of saturated gas at the throat. Sizes available to throat volumes of 1,000 to 60,000 CFM.

The KinPactor is used wherever high pressure drop venturis are necessary to collect submicron particulate or exceptionally high efficiency is required.

Brochure APC-1-514



KinPactor®



Type W RotoClone®

Type W RotoClone®

The Type W RotoClone is designed to combine the scrubbing effect of water with the principle of dynamic precipitation. It is a highly effective wet-type collector which discharges collected materials as a slurry with a minimum water requirement (only 1/2 to 1 gallon per 1,000 CFM of air). The Type W collector is effective in applications such as chemical processing, mining, coal processing, food and pharmaceutical dust capture. Available in sizes to handle 1,000 to 50,000 CFM.

Brochure APC-1-512

Fabric Collectors

One of the universally applied air pollution control devices is the fabric collector which removes particulate matter from the gas stream via filtration through special fabric materials.

ArrestAll® AR Series

The AAF ArrestAll self-contained dust collector is a shaker-type fabric collector which offers an inexpensive, compact solution to dust control problems. It is economical to operate, simple to maintain, and requires minimum floor space in addition to providing air cleaning efficiencies of 99+% by weight. This extremely high collection efficiency permits recirculation of the air back to the work area in almost all cases, resulting in considerable savings by eliminating the need for additional make-up air.

Brochure APC-1-240

ArrestAll®

Design M FabriPulse®

Design M FabriPulse®

The Design M FabriPulse pulse-jet fabric dust collector was designed to fill the need of those industrial dust collection applications that require small, compact filter sizes and low air volumes. It is suitable for low headroom indoor applications as well as for outdoor installations. Available in sizes from 100 to 1,500 square feet of cloth area, the Design M collector is suitable for pharmaceutical, powder paints, woodworking, metal machining, and other dust producing applications.

It features bag lengths of 4 or 6 feet, a housing and hopper constructed of 12-gauge steel, and a specially designed bag in a cartridge assembly that can be easily changed. Installation worries are eliminated since the collector ships with bags installed on all sizes through size 6-252.

Brochure APC-1-411

Millennium™

Millennium™

The Millennium combines the most outstanding features of typical baghouses with AAF product development ideas to meet the ever increasing demands for higher quality air for people, products, processes, and equipment in the 21st century.

The Millennium is modular in design. The modules are available in different heights and can accommodate a range of fabric bag lengths, as well as pleated bags. Since each Millennium will be constructed from modules, there is almost no limit to the size of the collector.

Brochure APC-1-405

Cartridge Collectors

Cartridge collectors utilizing multiple cartridges made of pleated media in a cylindrical configuration are among the most popular collector designs currently on the market. They are highly effective on dry particulate.

All OptiFlo products use AAF manufactured filter cartridges for maximum performance.

OptiFlo®

OptiFlo®

The OptiFlo cartridge collector system is a completely modular design that allows an unlimited range of sizes. Modules can be interconnected to accommodate the largest air cleaning task. The compact modules conserve valuable space.

OptiFlo units have the lowest flange-to-flange pressure drop, allowing up to 10% greater airflow with lower fan horsepower than competitive models. The OptiFlo design permits free-fall of dislodged particulate into the hopper without direct impingement of contaminant on the cartridges, minimizing abrasion and dust build-up.

A wide selection of cartridge types, options, and accessories enable the collector to be tailored to specific application requirements. Choose from top or front inlet and side or bottom outlet arrangements.

Brochure APC-1-102

OptiFlo DustCatcher®

The DustCatcher is a compact, self-contained cartridge collector designed for lower air volume applications. The cartridges are automatically cleaned by reverse pulsing, allowing continuous duty operation.

A wide variety of arrangements and sizes are available with capacities up to 2,300 CFM. The units handle up to 35% more airflow capacity, and use up to 1/3 less horsepower, than competitive models. The DustCatcher is designed to serve a single source or a ducted system of multiple sources.

The high-efficiency pleated filter cartridges are available in several application specific media. Cartridge replacement is an easy task with full size doors, allowing complete access to the cartridge compartment. High-efficiency final filters are also available for recirculating processed air back into the plant environment.

Brochure APC-1-130

OptiFlo DustCatcher®

DownDraft Benches

AAF DownDraft Benches are designed to capture fumes, smoke, and nuisance dust from many industrial applications including sanding, grinding, and de-burring operations. Work surfaces are available in several materials with open area optimized to provide excellent capture velocity.

The benches come in a number of size configurations and with high efficiency cartridge filters for particulate collection. A built-in pulse system is standard for cleaning the cartridge filters. Optional back and side walls are available.

Brochure APC-1-262

DownDraft Bench

Portable Weld Fume Extractors

The AAF Portable Weld Fume Extractors are self-contained, portable units that capture welding smoke and fume at the source. They are convenient and flexible solutions for multiple sources of weld fume/smoke and can be moved around your facility to suit the changing demands of your operation.

All units feature high-efficiency cartridge filters and the ability to recycle cleaned air back into the plant. Depending upon the model, the products can also be obtained with pulsed cartridge cleaning, activated carbon filters for gas absorption, and in one or two arm configurations. Capacities range from 700 CFM to 1,530 CFM and come in 1.5 and 3.0 horsepower models.

Brochure APC-1-265

Brochure APC-1-267

Mist Collectors

DynaPure®

The DynaPure mist collector is a self-contained filtration system for source control of mist created by wet machining, spraying, and lubrication systems. It is a unique, simple method for the elimination of mist problems. A rotating drum collects and agglomerates the mist particles – even submicron particles – in its filtering element. Centrifugal force then drives these particles from the airstream. Units with capacities from 25 to 1,000 CFM are available.

Brochure APC-1-222

DynaPure®

OilPak®

The OilPak is a self-contained oil mist filtering system consisting of an (optional) inlet plenum, agglomerating filter, drainable bag-type final filter, and integral fan. Proven in hundreds of applications on wet machining and spraying applications, the OilPak is available in sizes to handle 500, 1,000 or 2,000 cubic feet of mist laden air per minute.

Liquid mist and smoke is collected inside the filter cartridge pockets during operation, and liquids drains back to the machine or to the inlet plenum, depending on the arrangement. The OilPak collector maintains a constant efficiency over the entire life of the cartridge.

Brochure APC-1-223

OilPak®

OMC

The OMC mist collector is a 3-4 stage unit utilizing inertial separation, coalescing filters, and either 95% (on 0.3 um particles) or 99.97% HEPA filters for the optional fourth stage. The OMC has airflow capacities from 2,000 to 24,000 CFM. Optional, stand alone fans are available for a complete mist evacuation and control package.

Brochure APC-1-225

OMC

Gas-Phase Filtration

AAF has re-invented Nuclear, Biological, and Chemical (NBC) filtration. Taking an industry-leading position, we are enhancing existing particulate and gas-phase filtration products by offering new methodologies that provide unique and innovative air purification solutions.

Brochure GPF-1-100

SAAF™ Air Purification Systems(SAAF-RU)

SAAF™ Side Access Housings (SAAF:PRU)

Secure Advanced Air Filtration (SAAF™) Air Purification Systems

SAAF Air Purification Systems are stand-alone units with complete air purification media elements, suitable for in-room use or sheltered outdoor installation. These systems can be combined with AAF's patented technologies to provide air free of particulates and problem gases, and are the best in-room solution for complete protection from Nuclear, Biological, and Chemical (gaseous) hazards. Systems available include: Recirculating Units (SAAF-RU) and Pressurization and Recirculation Units (SAAF:PRU).

Brochure GPF-1-107

Secure Advanced Air Filtration (SAAF™) Compressor Intake Filter Systems

SAAF Compressor Intake Filter Systems combine AAF's patented air filtration technologies into an integral unit for the intake of air compressors, clean-air processes, and catalysts intakes. Systems are versatile, and especially effective in applications requiring low pressure drop and high removal efficiency.

Brochure GPF-1-105

Secure Advanced Air Filtration (SAAF™) Deep-Bed Systems

SAAF Deep-Bed Systems are suitable for the most challenging applications where heavy particulate and airborne molecular contaminant loading is anticipated. These systems are the best solution for total protection from particulate, Nuclear, Biological, and Chemical (gaseous) hazards, providing the largest media volume holding capacity. Systems available include: Deep-Bed Adsorbers (SAAF:DBA), Deep-Bed Scrubbers (SAAF:DBS), and Deep-Bed Type III Nuclear Grade.

Brochure GPF-1-105

SAAF™ Airborne Molecular Containment (AMC) Media and Catalysts

SAAF AMC control media and catalysts provide high efficiency filtration for effective removal of AMC's encountered in Nuclear contamination, Bio-Hazard contamination, and Chemical (gas) contaminated air stream. SAAF AMC Media are suitable for use in any of the SAAF system modules. SAAF AMC chemical media are available as Gas Specific Solutions and Custom Blends. Powerful enough for high capacity industrial applications and specific mission critical applications.

Brochure GPF-1-103

SAAF™ Delivery Systems for Airborne Molecular Containment (AMC) Chemical Media and Catalysts

SAAF chemical media delivery mechanisms include SAAF deep-bed type systems, cassettes, cartridges, multiple-panel V-banks, pleated filters, and mini-pleat, high-efficiency, gas removal filters. AMC delivery mechanisms can be easily incorporated in to existing HVAC systems. Pressure drop friendly and fail-safe delivery mechanisms hold SAAF AMC chemical media.

The new SAAF cassettes (patent pending) are made from High Impact Polystyrene and employ unique design features to ensure maximum media utilization.

Brochure GPF-1-108, GPF-1-109, and GPF-1-111

AmericanAirFilter®

Air Pollution Control Products

Other Products

Environmental Control Modules

The AAF OptiFlo ECM Series is designed to pull air through the work area and into the filtration system and recycle the air back into the plant. The high-efficiency cartridge filters trap the dust from manufacturing operations, like sanding, routing, sawing, polishing, and welding. Automatic pulse cleaning is standard, and the pulse timing is adjustable. The booth can be ordered in a variety of configurations and CFM ratings to meet your needs.

Cyclones

AAF Cyclones have integral fans located on the clean air side for safety and ease of maintenance. High inlet velocity and a long tapered cone design provide excellent performance for removal of airborne dusts generated in woodworking, plastic cutting, grinding, and polishing operations. Models are available from 800 to 12,000 CFM.

Brochure APC-1-271

AmerDuct

AAF offers a complete line of quick-fit, clamp together duct and fittings to connect the dust collector to the process hooding with built-in cleanout capability. Available in galvanized and stainless steel construction, the clamp together ducting simplifies installation and fit, while providing the customer with an easily changeable and moveable installation. Duct and fittings are available in sizes 3" to 24" diameter. Larger, flanged ducting is also available.

Side Access Filter Housing

Side Access Filter Housings

AAF makes a variety of Side Access Filter Housings and systems for removing airborne particulate. The housings are designed to address many diverse applications: protection of heating and cooling coils, protection of electrical control rooms, after-filters for dust collectors, preventing the spread of bacteria, or removing odors or gases from the air-stream, just to name a few. The housings are designed to be used in conjunction with AAF's wide variety of filters with varying efficiencies. AAF can match the application with the proper housing and filter to ensure that the correct degree of efficiency is provided.

Replacement Filters and Cartridges

AAF brand replacement filters are available for most types of industrial dust collectors, regardless of manufacturer. Whether cartridge, bag, or panel type, AAF can satisfy your needs. Manufactured from the finest, scientifically developed media, you can be sure that the replacement filter you purchase from AAF will be best suited for your specific application requirements. All AAF filter elements are manufactured to strict ISO 9001 quality standards and are engineered to withstand the rigors of rugged industrial environments. AAF International's global filtration technology and expertise assure you of the optimum filtration efficiency and long-lasting filter life. Enhance the performance of your dust collection equipment with AAF brand industrial filters.

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