

# Nuclear Environmental Systems

AAF International has been a leading supplier of clean air solutions for the nuclear sector since the industry first began. Most US nuclear power plants contain products manufactured by AAF, which are all qualified and dependable solutions to support operating license renewals, power uprates and new construction.

- | Bag In/Bag Out
- | Walk-In Housings
- | Side Access TSC
- | Cooling Coils
- | HEPA Filters
- | Carbon Filters
- | Fans
- | Air Handling Units
- | Retrofit HVAC Solutions
- | Chillers
- | Replacement Parts
- | Electric Heaters
- | Commercial Grade Dedication
- | Containment Coolers
- | Dampers
- | Controls & Instrumentation

AAF serves the nuclear industry in a number of ways:

- | As an active member in ASME AG-1 Code on Nuclear Air and Gas Treatment.
- | By providing products and services to nuclear power generation stations, DOE, DOD, Uranium Enrichment Facilities and Corporations providing decommissioning services.
- | By maintaining an established NUPIC audited quality management system meeting the requirements of ASME NQA-1, 10CFR50 APP. B, and 10CFR21.

## Equipment

### Bag In/Bag Out (BIBO)

The AAF Bag In/Bag Out side access filter system is a safe, simple, reliable method for removing contaminated particulate filters and/or gases in hazardous environments. All housings are built and tested per ASME N509 and ASME AG-1 Section HA.

With this system, maintenance personnel are protected from direct contact with the interior of the housing and hazardous contaminants during filter change-out.



### Minimize Modifications

Like-for-like replacement equipment is available by focusing on footprint and performance. AAF provides a solution that requires the least possible amount of change to your existing HVAC system.



Original installation - 1977



Like-for-like Replacement - 2010

### Side Access TSC

Designed for smaller systems and confined spaces. The AAF TSC housing is in use in over 90% of the nuclear power plants in the US today.



### Walk-In Filter Housing

AAF's Walk-In Filter Housing is designed for high airflow intake systems, up to 30,000 CFM.



### Nuclear Cooling Coils

AAF's nuclear coils are custom designed to meet any application. Built and tested to ASME "N" stamp requirements.



Bringing clean air to life.®

# Filtration

## Adsorber Filters

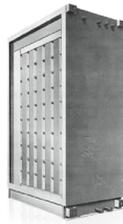
### Type II

Reuseable Type 304 trays. Meets the requirements of ASME AG-1 Section FD and N509. Filled with impregnated carbon that adsorb radioactive Iodides and other gases. Each Type II tray is rated for 333 CFM.



### Type III

A flexible system in which the carbon can be replaced without removing the tray or filter. Suitable for systems 2,000–30,000 CFM. Meets the requirements of ASME AG-1 Section FE.



### Type IV

This carbon filter is a BIBO filter rated for 1,000–1,250 CFM. Meets the requirements of ASME AG-1 Section FH.



## Adsorbent Test Canisters

Used to determine remaining operating life in a given bed of adsorbent. Since it is not practical to take samples from an adsorbent bed, small canisters are piped up in parallel to the main beds to pass a proportional from the system for analysis of remaining life.



## ASHRAE Filters

### AAF VariCel®

- | Nuclear grade prefilter meeting the requirements of ASME NQA-1 and 10CFR50 App.B
- | Meets requirements of ASME AG-1 Section FB
- | Standard galvanized frame or optional type 304 or 409 stainless steel cell sides
- | Available in ASHRAE 52.2 MERV 11, 13, or 14 ratings
- | Available in ASHRAE 52.1 dust spot efficiency 60-65%, 80-85%, 90-95%
- | UL900



VariCel Nuclear Grade Prefilter

## HEPA Filters

- | Designed, manufactured and tested under a Nuclear Quality Assurance Program, meeting all requirements of ASME NQA-1 and 10CFR50 App. B.
- | Meets the requirements of ASME N509. Qualified to ASME AG-1 Section FC (Formerly MIL-F-51068) and to UL 586. Capacity of up to 1500 CFM in a variety of sizes.
- | Neoprene gasket or gel seals.
- | Available in type 304 or 409 Stainless Steel Cell Sides & Fire-Retardant Plywood Casing



Stainless Steel Casing



Fire-Retardant Plywood Casing

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ISO Certified Firm | NES-1-705D | NQA-1 | 10 CFR 50 App. B | 10 CFR Part 21  
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