



**AmericanAirFilter®**  
**SAAF™ Machine Intake Filter**  
**(SAAF:MIF)**

# SAAF™ Machine Intake Filter (SAAF:MIF)

## Multi-Stage Total Clean Air Systems

- *Specifically designed for machine air intakes within hostile air quality environments, such as industrial manufacturing facilities, mining, smelting, petrochemical, and pulp and paper processing.*
- *Combines decades of AAF air filtration expertise in gas turbine and complex machine air intakes.*
- *Incorporates AAF low pressure drop, enhanced performance air filtration technologies for high efficiency, high-capacity, maintenance-effective solutions.*
- *Patent-pending SAAF™ Seal provides the best seal available and superior filtration efficiency.*



### Air Intake Filtration Reduces Machine Operating Costs!

SAAF Machine Intake Filter (SAAF:MIF) solutions are designed to scrub air prior to the intake of any machine that compresses air or uses air for cooling. By limiting corrosion and fouling of sensitive internal components, machine life and performance are increased and maintenance costs are reduced.

The adverse effect of contaminated ambient air drawn into machine air intakes is well documented. Airborne particulates and gases drawn into machine air intakes, with poorly cleaned air, will cause machine reliability problems. Typical examples are:

- Contaminated air is known to cause premature failure of DC windings in motors in paper mill environments.
- Air compressors often have intercoolers constructed of copper and housings from cast iron. These metals will corrode quickly when exposed to environments such as those that are typical at petrochemical refineries, steel mills, mines, smelters, and other industrial plants.

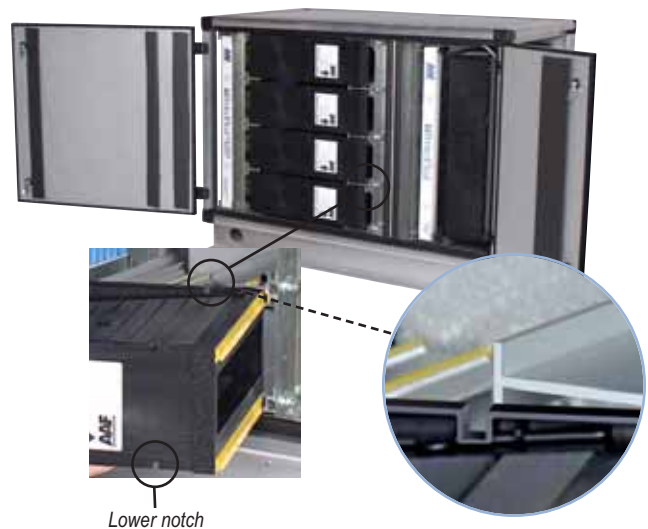
SAAF Machine Intake Filter (SAAF:MIF) is a complete air filtration solution for machine air intakes. The particulate filters are chosen to provide high capacity, high efficiency particulate removal in the most polluted environments. The SAAF Cassettes included with a SAAF:MIF efficiently remove corrosive gases from the airstream. The air delivered into the machine after passing through a SAAF:MIF is thoroughly cleaned and will enable the machine to function at high efficiency and with longer maintenance cycles.

### Sealing System Prevents Filter Bypass

AAF's patent-pending filter sealing system prevents bypass of unfiltered air. Cassettes and filters are locked in place by a combination of cassette notches and cassette locator bars.

### Revolutionary High Efficiency Gas Phase Filter Sealing System

Designed to maintain optimal positioning of the cassettes, the locator bar compresses the cassette into the sealing gasket. This unique system is completely effective and ensures exceptional filter efficiency.



Lower notch

Enlarged view of cassette locator bar and upper notch

Rain louver/birdscreen at the inlet is available as an option for outdoor installation.



Weather cover with drip-edge is available as an option for outdoor installation.



2" Prefilter track



Heavy-duty channel base



The cassette support track (non-sealing face shown above) is constructed of extruded aluminum with plastic strips to reduce friction.



The cassette support track (sealing face shown) is constructed of extruded aluminum with the cassette locating bar, gasket for sealing, and plastic strips to reduce friction.

AAF's track installation method provides trouble-free filter installations and changeouts. Precise connections between support tracks and the track support post ensure accurate filter spacing for superior efficiency.



Metal mesh screen and cone protection



Outlet flange

## Built for Strength, Performance, and Energy Efficiency

SAAF:MIF is constructed of heavy-duty industrial grade stainless steel, aluminum, painted steel, or corrosion-resistant Galvalume® for maximum protection and durability. Ultra-modern, double-walled panels and doors provide whisper quiet operation. Each housing is leak tested and certified for energy efficiency. SAAF:MIF configurations typically operate at a significantly lower pressure drop than similar products using inferior technologies.

# SAAF™ Machine Intake Filter (SAAF:MIF)

## High Capacity Prefilters

PerfectPleat® ULTRA (MERV 8), PerfectPleat® HC (MERV 7), PerfectPleat® (MERV 7), and DriPak® 2000 filters are ideal prefilters used to prevent the buildup of lint and dust on the face of the SAAF cassettes and high efficiency filters.



## SAAF™ Chemical Media Cassettes

SAAF:MIF is designed to hold SAAF chemical media cassette filters: Medium Duty (SAAF:MD) and Heavy Duty (SAAF:HD)

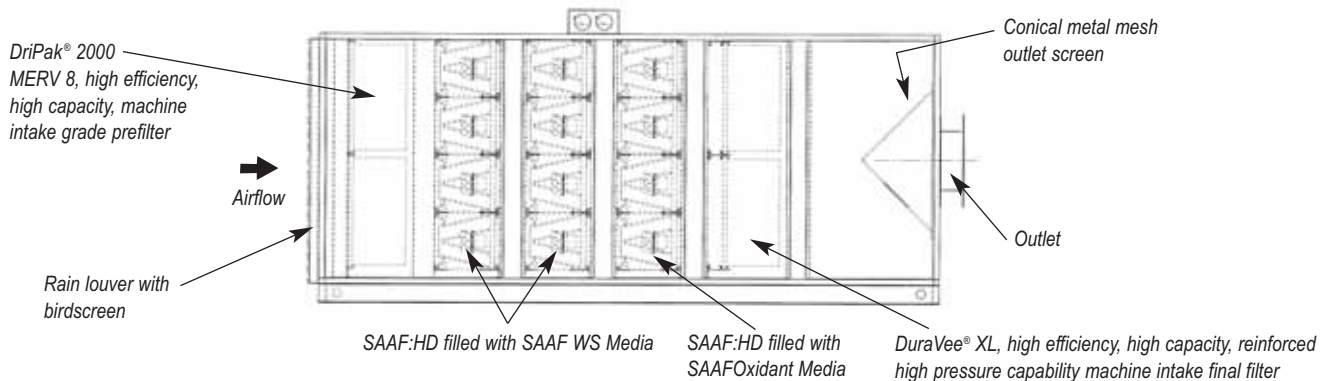


## High Efficiency Final Filters

SAAF:MIF will accommodate a high efficiency machinery air intake grade particulate filter, such as DuraVee® XL and VariCel® M-Pak, in the final filter bank to ensure that filtered air meets the highest levels of efficiency.



## Sample Schematic Arrangement



## Product Model Designations

**MIF - 604 - RL/BS - 12P - HD - HD - HD - 2P - 12F - P/MF**

