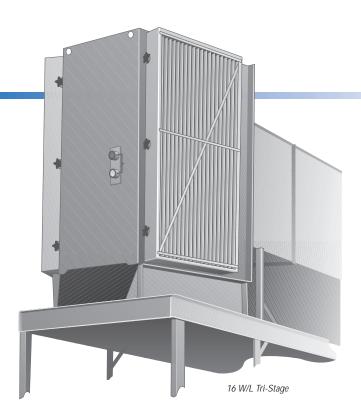


# **Tri-Stage**

## Intake Air Filter System



#### UNSURPASSED IN THE INDUSTRY

The Tri-Stage filter system is unsurpassed in efficiency and economy for rotating machinery filtration. Compact and versatile, the Tri-Stage meets the individual clean air needs of a range of rotating machinery applications, in any environment.

- 3 Sizes with capacities of 6,000 to 40,000 cfm
- Hinged louver section allows easy access to change filter elements
- 7 Gauge plate welded construction
- Compact size
- Choice of weather louver section or dust louver inertial separator as first stage
- Galvanized weather louver and filter holding frames
- Draft gage and pressure switch, standard

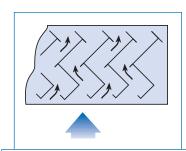
### **CONSTRUCTION**

The Tri-Stage intake air filter system is factory assembled, leaving only installation of filter pads and elements plus connecting to the intake ducting for on-site completion.

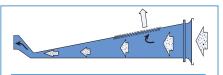
Louver sections are hinged at the housing and swing away for easy filter access.

#### **FIRST STAGE**

For locations that do not have heavy concentrations of natural or process generated particulate in the atmosphere, the weather louver section is recommended as the first stage. It provides excellent weather protection, preventing the ingestion of moisture under conditions of heavy precipitation. For areas with heavy dust concentrations (higher than .04 grams per thousand cubic feet), the dust louver inertial separator section should be chosen as the first stage.



Because of the torturous path that must be followed, the 2½ pass weather louver effectively removes sensible moisture from the incoming airstream.



Heavy dust particles are carried to the secondary exhaust slot by inertia. The cleaned air turns through the slots in the louver panel and continues onto the second and third stage filters for further cleaning.

#### **SECOND STAGE**



AAF AmerKleen M-80

The second stage of filtration in the Tri-Stage is either the AAF AmerKleen M-80 prefilter pad or the M-81 coalescing pad. The M-80 pad is used for applications where particulate is the primary concern. In applications where salt or moisture ingestion is the problem, the M-81 coalescing pad is used.

#### **THIRD STAGE**

The third and final stage of filtration is the high efficiency AAF DuraCel XL barrier filter.



AAF DuraCel XL





# Tri-Stage Intake Air Filter System

#### **Capacities and Dimensions**

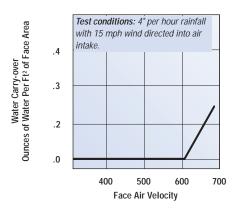
Size	Weight (Lbs.)	Capacity (CFM)	Standard Outlet (Ft.)
6 W/L 6 D/L	1,150 1,735	6,000-15,000 6,000-15,000	2 x 4 Horizontal 2 x 4 Vertical 3 x 3
12 W/L	2,050	12,000-30,000	4 x 4
12 D/L	2,770	12,000-30,000	4 x 6 Vertical
16 W/L	2,450	16,000-40,000	4 x 6 Horizontal
16 D/L	3,290	16,000-40,000	4 x 6 Vertical

6 W/L denotes 6 filters with Weather Louver as the first stage.

12 D/L denotes 12 filters with Dust Louver Inertial Separator as the first stage.

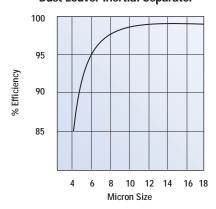
#### **PERFORMANCE**

#### 21/2 Pass Weather Louver

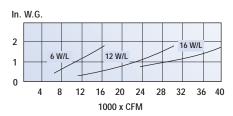


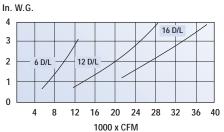
This graph shows that the 2½ Pass Weather Louver allows no moisture carry-over at up to 610 fpm velocity. Design intake velocity of the Tri-Stage intake filter system is 500 fpm.

## **Dust Louver Inertial Separator**



#### Initial Resistance vs. Airflow

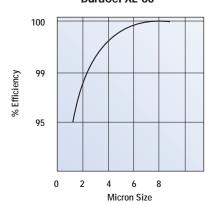




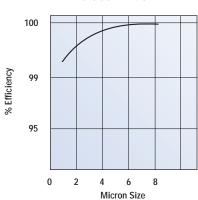
#### **WORLD CLASS QUALITY**

Our facilities are specifically designed to manufacture and test air filtration and acoustic products. During the entire production process, our operations are governed by our ISO 9001 certified system.





### DuraCel X-L90



For Additional Information On AAF Products, Call The Answer Center **800.477.1214** 



