

## Features

Top access for easier bag installation and replacement

Explosion and fire suppression systems are included so unit doesn't need to be located near an outside building wall

Unlike a pulse jet filter the RACF doesn't send a compressed air shock wave back through ductwork

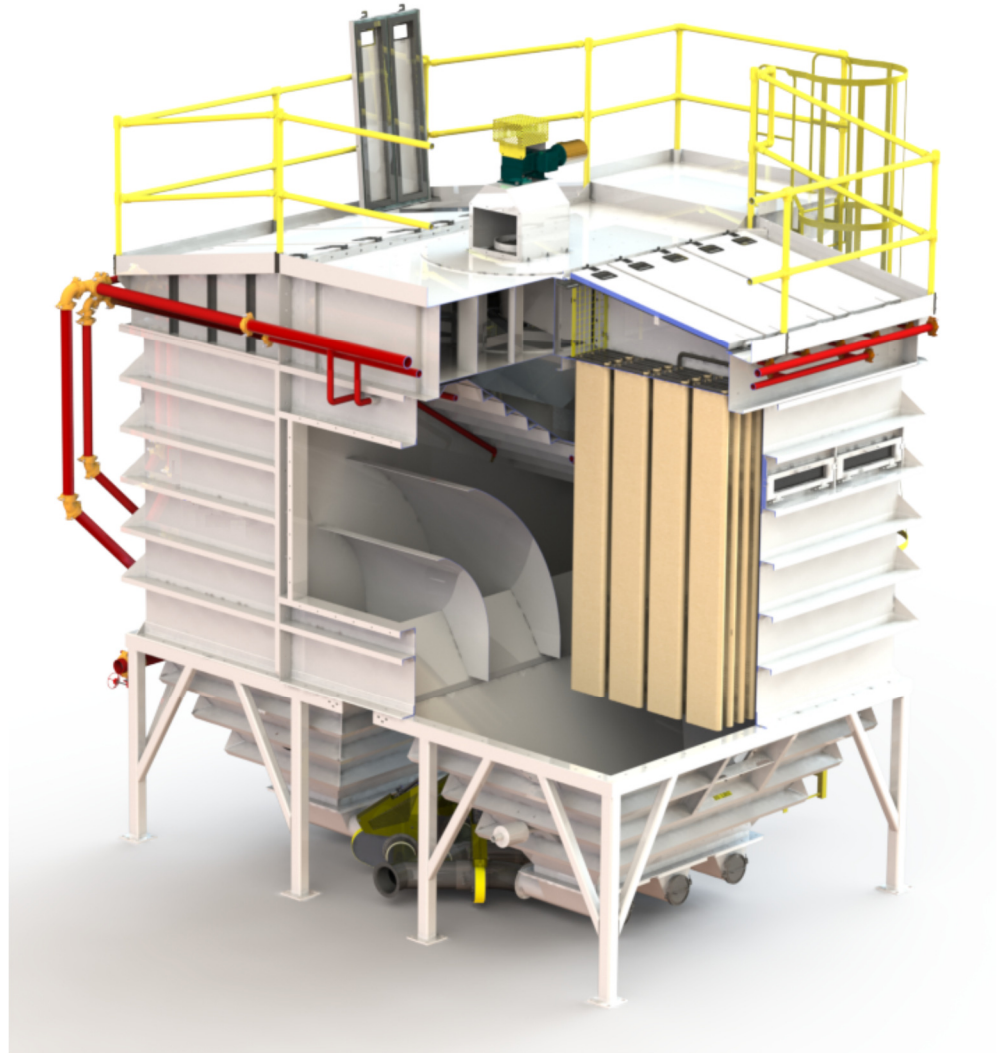
Expert installation support and system application engineering available

[Steimelmetalfab.com](http://Steimelmetalfab.com)

## Available Services

- System Integration
- Industrial Ventilation
- Material Handling
- Power & Controls
- Manufacturing

# REVERSE AIR CLEANED FILTER (RACF)



The Reverse Air Cleaned Filter (RACF) is the key offline component in a dust control system that is designed to remove dust from tissue, towel, diaper, feminine hygiene, or other fibrous manufacturing processes.

**SME**  
**STEIMEL METAL FAB, LLC.**

Hamilton, OH (513) 616-8647

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# REVERSE AIR CLEANED FILTER (RACF)

## *Key Operational Description & Benefits*

**Media Cleaning** - The RACF uses a small fan to reverse air clean the media rather than using compressed air during a cleaning cycle. Cleaning air is delivered to a rotor placed in the clean air plenum which isolates one (1) partitioned bag zone, while allowing the remaining air to be exhausted by the main dust control fan. The rotor rotates 360 degrees with cleaning based on time or on demand.

**Fines Removal** - The RACF releases fines from the media via media cleaning fan. As fines are drawn down into the hoppers they are removed by pneumatically actuated on/off gates, ductwork, and fines removal fan. The lower gates are in sequence with the media clean rotor to maximize effectiveness for fines removal.

**Explosion Suppression** - The RACF uses an active sodium bicarbonate explosion suppression system, a passive flameless explosion quenching system; which does not require outside wall/roof penetration for explosive venting.

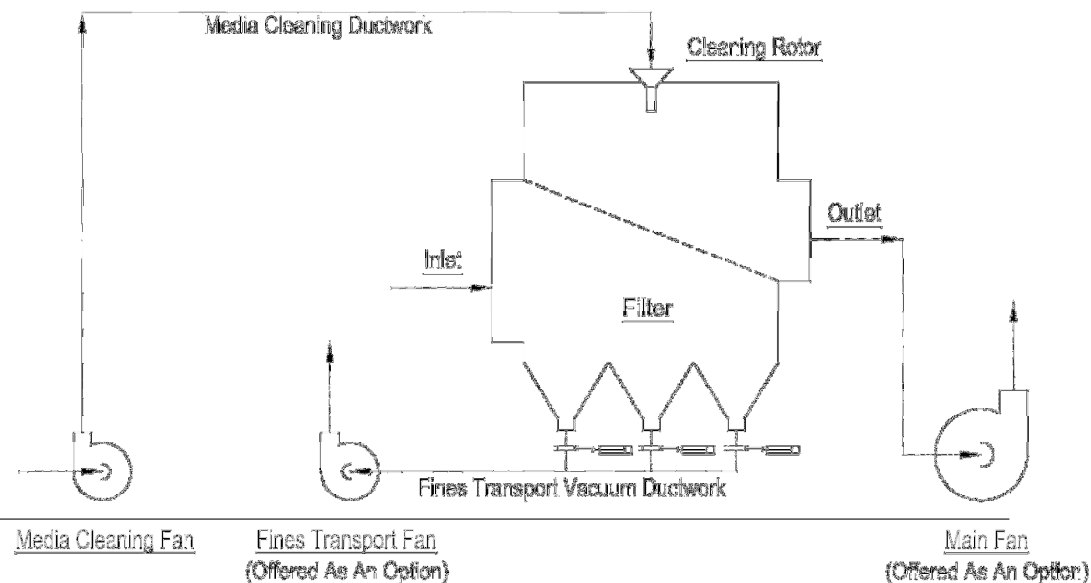
**Electrical Controls Package** - The RACF electrical controls package includes the hardware, controls, and programming for the overall system unlike conventional filter manufacturers

### **Process Safety Elements**

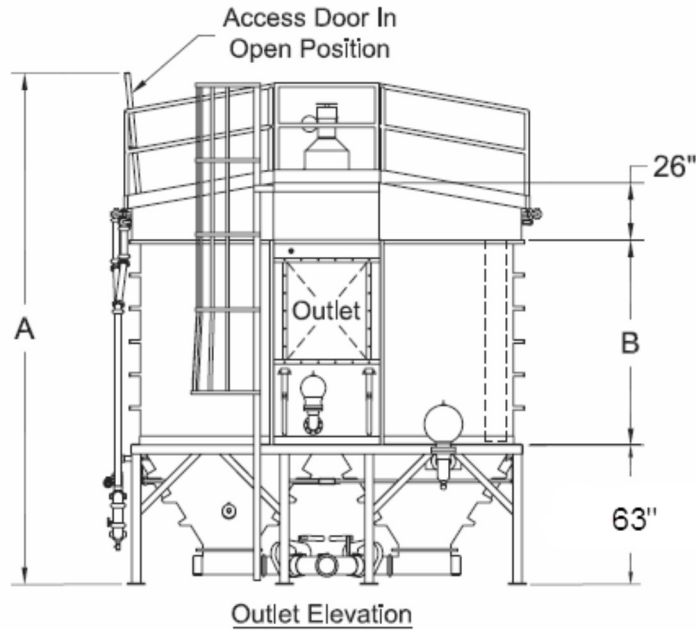
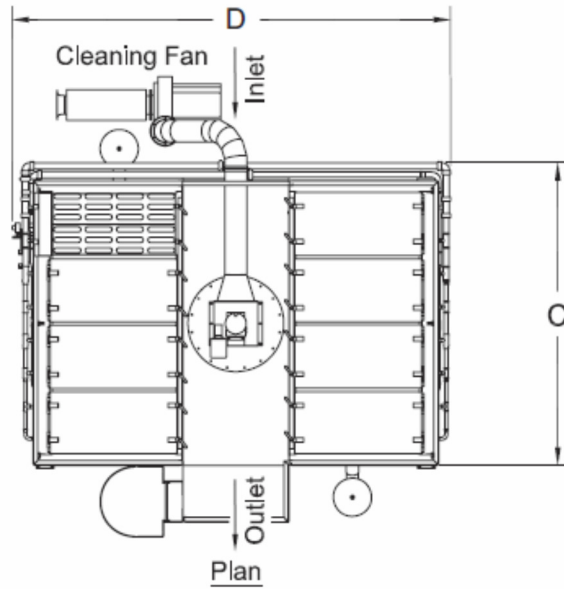
Fire protection sprinklers & alarm  
Explosion suppression system  
Grounding

### **Electrical & Controls Package**

Fire protection alarming  
Explosion suppression system  
Electrical & pneumatic panels  
Fines transport fan (20 hp)  
Main system fan (150 hp)  
Media cleaning fan (20 hp)



## General Arrangement & Dimensions



MODEL	MAX AIR SYSTEM VOLUME	MEDIA AREA	BAG QTY	BAG LENGTH	A	B	C	D
	(cfm)	(ft <sup>2</sup> )		(inches)				
RACF-2375-192-2-60	22,014	2,043	192	60	200	58	147	200
RACF-3800-192-2-96	35,225	3,269	192	96	234	93	147	212
RACF-4750-192-2-120	44,136	4,086	192	120	258	117	147	212
RACF-5100-240-2-120	55,794	5,107	240	120	258	117	160	212

(ALL DIMENSIONS LISTED IN INCHES)



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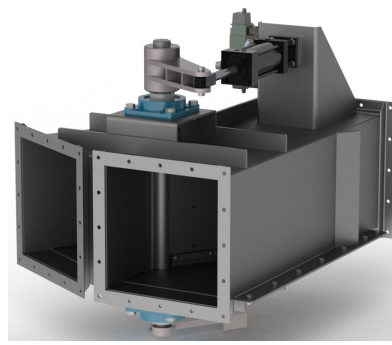
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HIGH PRESSURE  
BLAST GATES



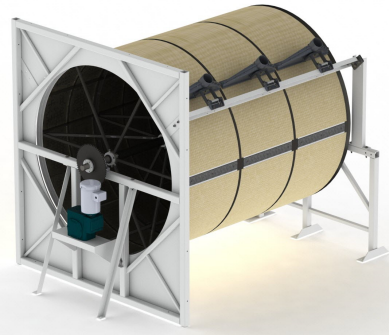
HIGH PRESSURE  
ALTERNATING GATES



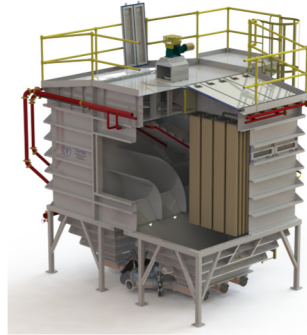
DIVERTER  
VALVES



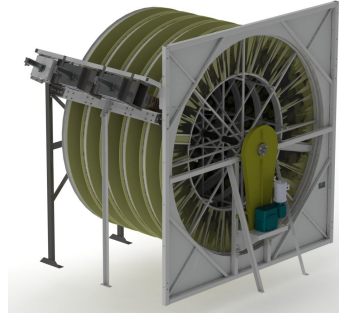
BALANCING  
SLIDE GATES



VACU-DRUM  
FILTERS



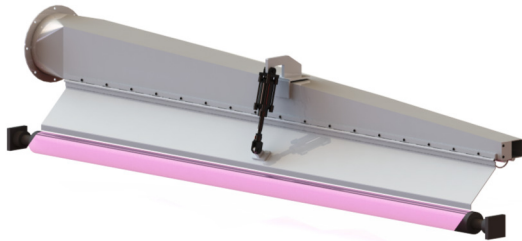
REVERSE AIR  
CLEANING FILTERS



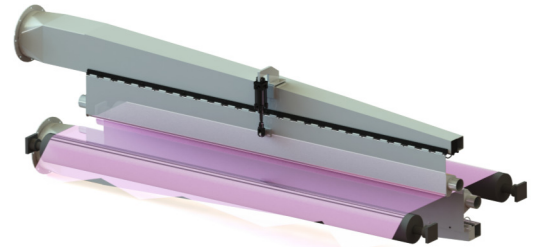
CIRCLE-VEE  
FILTERS



BAG  
FILTERS



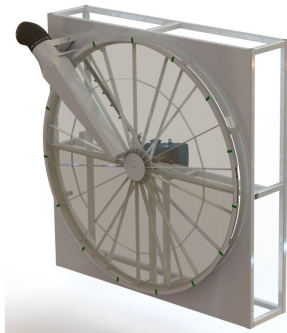
DUST COLLECTION  
HOODS



WEB CLEANING  
COLLECTION SYSTEMS



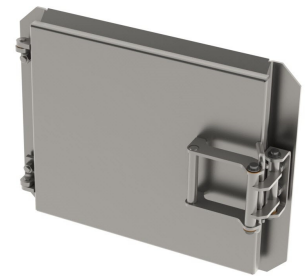
CIRCULAR  
PULSE JET FILTERS



PRE-SEPARATOR  
FILTERS



OVERHEAD OSCILLATING  
AIR CIRCULATION FANS



QUICK OPENING  
ACCESS DOORS

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