Donaldson.

RF Baghouse Collectors

Models 48RF8-484RF12

Simple design and energy-efficient filtration for high-volume dust collection applications.

- Handles extremely heavy dust loads of up to 70–100 grains per cubic foot in a variety of applications including woodworking, cement, grain, chemicals, and food.
- High filtration efficiencies of 99.9%+ by weight with minimal pressure drop.
- Even-Air[™] Flow Straightener eliminates bag sway and extends bag life by straightening airflow.
- Bag service from the clean-air side of collector makes filter changeout safer, easier, and faster.
- Single hopper uses only one rotary valve resulting in lower system and installation costs.
- Conical hopper prevents product build-up.

The RF Cleaning System reduces operations costs.

- Each bag is cleaned within four minutes, yet never cleans adjacent bags thus reducing re-entrainment issues.
- Cleans by using its own air supply, eliminating the need for costly compressed air.



RF Baghouse Collector

• Small horsepower cleaning motor saves energy costs.

The Donaldson Torit RF cleaning system requires a significantly smaller motor when compared to competitive units. The chart below illustrates the average energy savings for a variety of annual operating scenarios.

| 5 Days/Week Hours/Day | Annual Operating Hours | Annual 5 HP Operating Costs | Annual 25 HP Operating Costs | Annual Savings |
|--------------------------|---------------------------|--------------------------------|---------------------------------|----------------|
| 8 | 2080 | \$618 | \$2986 | \$2,368 |
| 16 | 4160 | \$1,235 | \$5971 | \$4,736 |
| 24 | 6240 | \$1,853 | \$8957 | \$7,104 |

Assumes U.S. Energy Average Cost of 6.68 cents per kilowatt hour with the motor operating at full-load amps. Savings will vary based on costs per kilowatt hour.

All-Welded Construction

Solid, durable one-piece body makes it easier and less costly to install the dust collector. Heavy duty 1/4" tubesheet and up to 3/16" body wall thickness resists warping.

Standard Round Outlet on Walk-In Units

(Rectangular optional)

Rotating Cleaning Air Manifold

Needs only one solenoid and diaphragm valve because the manifold rotates into position over the bag openings. Makes troubleshooting and maintenance much easier.

RF Cleaning System

Involute Scroll Inlet

Directs dirty air into a cyclonic pattern, causing heavy dust particles to fall into the hopper before the air passes to the filter bag section. This eliminates the need for a cyclone precleaner used on other baghouses.

Optional Explosion Vents

Positive-Seal Boltsafe[™] Cages

Provide electrical grounding, easy bag changeout, reduced bag sway, and an airtight seal to the tubesheet. Cages will not rise out of position once they are installed.

Oval Bags

Provide more radial bag movement during the cleaning cycle, resulting in longer bag life and lower pressure drop.

Even-Air Flow Straightener

Optional Legs and Caged Ladders

Compact Design

Round unit has one hopper in base; there is usually no need for screw conveyors or multiple discharge devices.

Medium-Pressure Air Pump

(not shown) Eliminates need for plant compressed air, which can be susceptible to condensation, oil and freezing problems. The medium-pressure air pulse cleans efficiently to extend bag life.

Easy to install-built to last.

Dimensions & Specifications



Model RFT



Model RFW

| Model I | No. of Bags | Bag Length (ft) | Cloth Area (ft²) | Air-to-Media ratio (cfm) | | Air Pump | Approximate Dimensions (inches) | | | | | | Shipping Weight | |
|---------|----------------|-----------------------|------------------------|-----------------------------|--------|-------------|------------------------------------|-------|-------|-------|-------|-------|--------------------|--------|
| | 3- | | | 5:1 | 10:1 | 15:1 | (hp) | Α | В | С | D | Е | F | (lbs) |
| 48RF8 | 48 | 8 | 499 | 2,495 | 4,990 | 7,485 | 2 | 68.0 | 54.8 | 186.3 | 231.9 | 236.6 | 293.5 | 7,388 |
| 48RF10 | 48 | 10 | 624 | 3,120 | 6,240 | 9,360 | 2 | 68.0 | 54.8 | 210.3 | 255.9 | 260.6 | 341.5 | 8,105 |
| 72RF8 | 72 | 8 | 749 | 3,745 | 7,490 | 11,235 | 2 | 68.0 | 54.8 | 186.3 | 231.9 | 236.6 | 293.5 | 7,554 |
| 72RF10 | 72 | 10 | 937 | 4,685 | 9,370 | 14,055 | 2 | 68.0 | 54.8 | 210.3 | 255.9 | 260.6 | 341.5 | 8,306 |
| 124RF8 | 124 | 8 | 1290 | 6,450 | 12,900 | 19,350 | 2 | 96.0 | 84.0 | 220.5 | 266.4 | 271.0 | 316.0 | 10,048 |
| 124RF10 | 124 | 10 | 1613 | 8,065 | 16,130 | 24,195 | 3 | 96.0 | 84.0 | 244.5 | 290.4 | 295.0 | 364.0 | 10,910 |
| 156RF8 | 156 | 8 | 1622 | 8,110 | 16,220 | 24,330 | 3 | 96.0 | 84.0 | 220.5 | 266.4 | 271.0 | 316.0 | 10,298 |
| 156RF10 | 156 | 10 | 2030 | 10,150 | 20,300 | 30,450 | 3 | 96.0 | 84.0 | 244.5 | 290.4 | 295.0 | 364.0 | 11,217 |
| 232RF8 | 232 | 8 | 2413 | 12,065 | 24,130 | 36,195 | 3 | 123.0 | 113.4 | 261.9 | 314.9 | 306.4 | 357.1 | 15,304 |
| 232RF10 | 232 | 10 | 3018 | 15,090 | 30,180 | 45,270 | 5 | 123.0 | 113.4 | 285.9 | 338.9 | 330.4 | 405.1 | 16,591 |
| 232RF12 | 232 | 12* | 3622 | 18,110 | 36,220 | 54,330 | 5 | 123.0 | 113.4 | 309.9 | 362.9 | 354.4 | 453.1 | 17,825 |
| 276RF8 | 276 | 8 | 2870 | 14,350 | 28,700 | 43,050 | 3 | 123.0 | 113.4 | 261.9 | 314.9 | 306.4 | 357.1 | 15,614 |
| 276RF10 | 276 | 10 | 3591 | 17,955 | 35,910 | 53,865 | 5 | 123.0 | 113.4 | 285.9 | 338.9 | 330.4 | 405.1 | 16,975 |
| 276RF12 | 276 | 12* | 4308 | 21,540 | 43,080 | 64,620 | 5 | 123.0 | 113.4 | 309.9 | 362.9 | 354.4 | 453.1 | 18,290 |
| 376RF8 | 376 | 8 | 3910 | 19,550 | 39,100 | 58,650 | 7.5 | 139.6 | 130.8 | 285.3 | 339.9 | 326.8 | 381.1 | 19,617 |
| 376RF10 | 376 | 10 | 4892 | 24,460 | 48,920 | 73,380 | 7.5 | 139.6 | 130.8 | 309.3 | 363.9 | 350.8 | 429.1 | 21,248 |
| 376RF12 | 376 | 12* | 5869 | 29,345 | 58,690 | 88,035 | 7.5 | 139.6 | 130.8 | 333.3 | 387.9 | 374.8 | 477.1 | 22,868 |
| 484RF8 | 484 | 8 | 5034 | 25,170 | 50,340 | 75,510 | 7.5 | 157.6 | 149.8 | 309.9 | 383.9 | 348.4 | 405.1 | 25,458 |
| 484RF10 | 484 | 10 | 6297 | 31,485 | 62,970 | 94,455 | 7.5 | 157.6 | 149.8 | 333.9 | 425.8 | 372.4 | 453.1 | 27,796 |
| 484RF12 | 484 | 12* | 7555 | 37,775 | 75,550 | 113,325 | 7.5 | 157.6 | 149.8 | 357.9 | 431.8 | 396.4 | 501.1 | 30,115 |

* Boltsafe only

Standard Features

- All-welded or knock-down construction:
 - 48-376 models 10 gauge, minimum
 - 484 models 3/16" dirty air plenum and 10 gauge clean air plenum
 - Heavy-duty 1/4" plate steel tubesheet
- Air pump (TEFC motor drive)
- 1/3 hp TEFC motor for manifold drive
- NEMA 9 pulse valve solenoid
- Involute scroll inlet with airflow straightener
- 60° hopper
- Grounded bag and cage system
- ±20 "wg housing rating

- Hopper manhole
- NEMA 4 pulse timer
- Magnehelic®* gauge
- 16 oz. polyester felt bags
- Galvanized bag cages
- Top handrail (RFT)
- Positive seal Boltsafe[™] hardware
- Prime coated interior
- Blue exterior finish coating passes 250-hour salt spray corrosion performance test
- Round outlet (RFW)
- Rectangular outlet (RFT)

Equipment Options

- Explosion vents
- Tubular square steel support legs
- Caged ladder and platform per OSHA specifications
- Variety of special filter medias, including Tetratex[®]**
- Stainless steel construction
- Sprinkler taps
- Internal service light
- Photohelic[®]* gauge
- Finish coating for hostile environments
- Rectangular outlet (RFW)
- Round outlet (RFT)
- Snap-in bags (8' and 10' only)

- Custom paint colors
- Electrical control panels
- Hopper level indicator
- Hopper service port
- 3" hopper water overflow check valve
- Hopper outlet transitions
 - 2'-0" to 1'-8" dia. x 4¹/₈" high
 - 2'-0" dia. to 1'-4" dia. x $7^{5}\!/\!{}_8$ " high
 - 2'-0" dia. to 1' 0" dia. x 11" high
 - 2'-0" dia. to 10" dia. x 12³/₄" high
 - 2'-0" dia. to 8" dia. x 14¹/₂" high
 - 2'-0" dia. to 1'-6" x 2'-0" rectangle x 515/16" high
- * Magnehelic and Photohelic are registered trademarks of Dwyer Instruments, Inc.
- ** Tetratex is a registered trademark of Tetratec Corporation, a Donaldson Company.





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