

# BRF

BAGHOUSE DUST COLLECTOR

MEDIUM  
PRESSURE  
AND  
REVERSE  
AIR





## OUR MISSION

**“TO IMPROVE THE HEALTH, SAFETY,  
AND QUALITY OF PEOPLE’S LIVES  
BY BUILDING THE BEST DUST AND  
FUME COLLECTORS ON EARTH”**

IMPERIAL SYSTEMS, INC.

B R E A T H E   B E T T E R ,   W O R K   S A F E R

# BIG

# ROUND

# FILTER



## **POWDER COAT**

First Round Baghouse  
to be Powder Coated

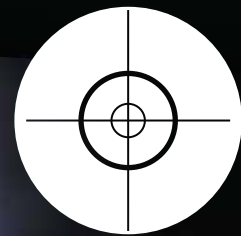
Scratch & Corrosion  
Resistant



## **HEAVY DUTY**

7 & 10 Gauge  
Construction

Military Grade  
Door Latches



## **EXACT PULSE**

Auto Calibration  
of Filter Bag Alignment

Direct Pulse  
in Every Filter Bag

**COMPARISON CHECKLIST**

**BRF//MP**  
 BAGHOUSE DUST COLLECTOR  
 MEDIUM PRESSURE

**BRF//RA**  
 BAGHOUSE DUST COLLECTOR  
 REVERSE AIR

Leading Round Baghouse  
 Dust Collector

Leading Square Baghouse  
 Dust Collector

|  |                                     |                                     |                                     |                                     |
|--|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Sloped Roof                                | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Powder Coated                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                                     |                                     |
| Self Cleaning                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Exact Pulse™                               | <input checked="" type="checkbox"/> |                                     |                                     |                                     |
| Auto-Calibrate                             | <input checked="" type="checkbox"/> |                                     |                                     |                                     |
| Heavy Duty Construction<br>10 & 3/16 Gauge | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                                     |
| No Plant Compressed<br>Air Required        | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                                     |                                     |
| Direct Drive Shaft                         | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                                     |                                     |
| High Entry Option                          | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Inlet Baffles                              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                                     |                                     |
| Tangential Entry Option                    | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                                     |
| Perforated Cone                            | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                                     |                                     |
| Minimal Maintenance                        | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                                     |                                     |
| Custom System Design                       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                                     |                                     |
| Tool Free Filter Change-out                | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                                     |                                     |
| Most Energy Efficient                      | <input checked="" type="checkbox"/> |                                     |                                     |                                     |
| ServiceMAXX Support                        | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |                                     |                                     |

# BRF BAGHOUSE APPLICATIONS

The BRF excels in this application, with options to handle all sizes and types of grain dust. BRF baghouses are found everywhere from small processing facilities to national grain handling terminals.

## GRAIN INDUSTRY



## SEED

The BRF baghouse efficiently handles dust from seed processing. BRF baghouses are designed to handle coarse, abrasive, or fine dust. The system can be customized for individual needs to target specific dust problems.

The BRF baghouse is popular for woodworking applications because of its durability and efficiency. With applications ranging from lumber mills to cabinet and flooring manufacturing, The BRF can handle your woodworking challenges.

## WOODWORKING



## RECYCLING

Whatever product you're recycling, the BRF baghouse has a solution for your dust collection. BRF baghouses are being used for recycling applications ranging from rubber to carpet, with options available for any recycling challenge.

Dust is probably being generated at lots of places in your feed manufacturing facility. A BRF Baghouse is the perfect piece of equipment for your facility. Feed is also a concern when it comes to combustible dust.

## FEED



## AGGREGATE

The BRF baghouse can be customized to handle tough, heavy, or sharp material. When collecting dust from aggregate processing, you need a baghouse that has been proven to handle these challenges.

With an abrasive dust like silica, the BRF baghouse stands out for efficiency and endurance. With available options to provide abrasion resistance and a history of success in the silica handling industry, the BRF is the right dust collector for this application.

## SILICA



# ABORTGATE

A great option for fire and contaminated air diversion. The Abort Gate goes on the clean air return ductwork and protects workers and facility.

# EIV

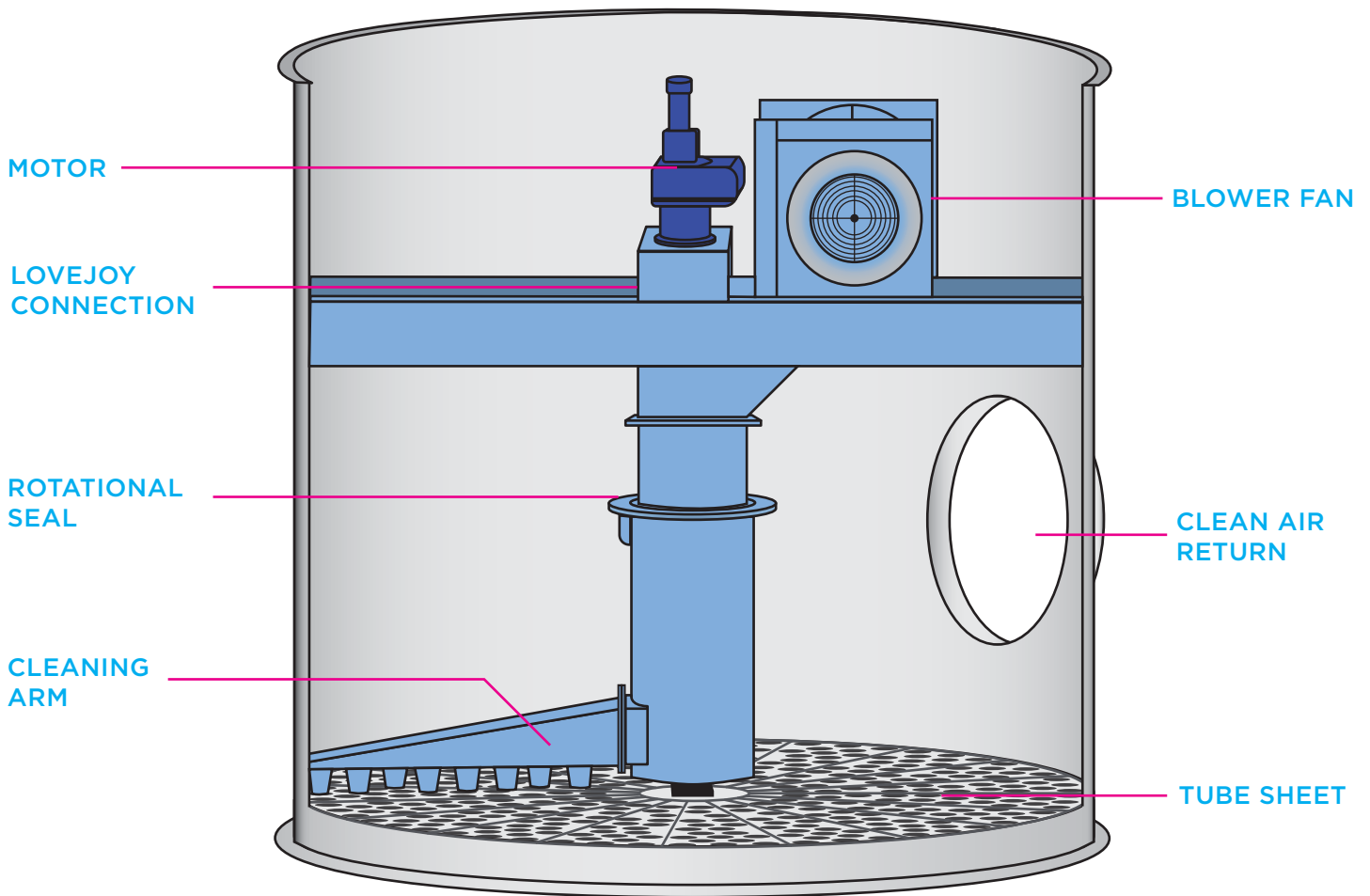
EXPLOSION ISOLATION VALVE

This is a must if you have combustible dust. The EIV will protect you from a back draft in case of a deflagration. This option gets installed on the dirty air ductwork.



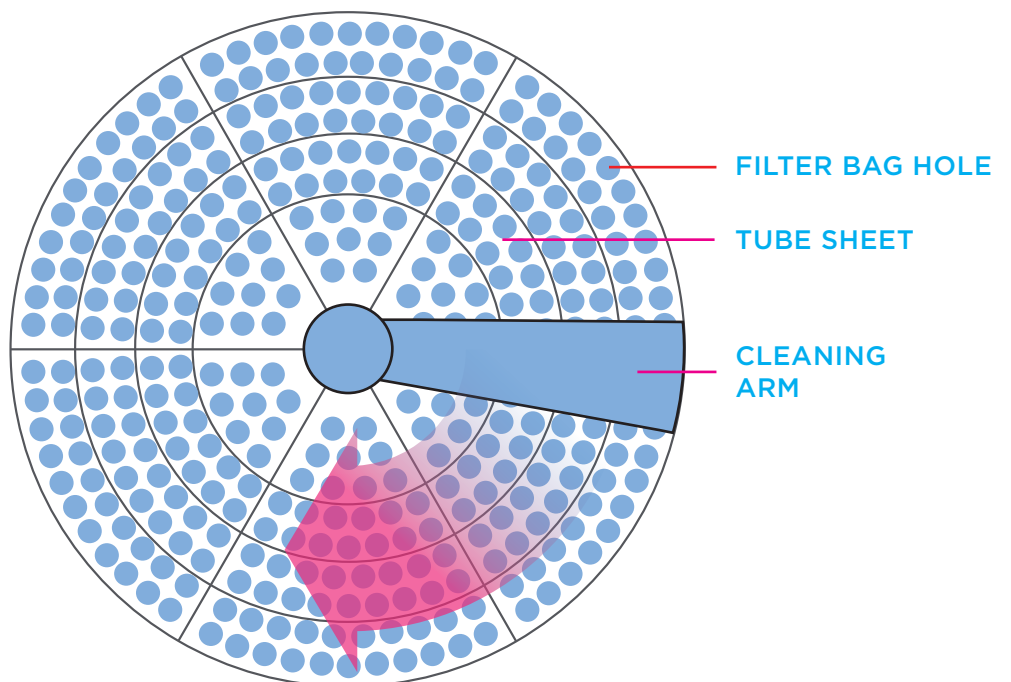


# BRF//RA REVERSE AIR CLEANING SYSTEM



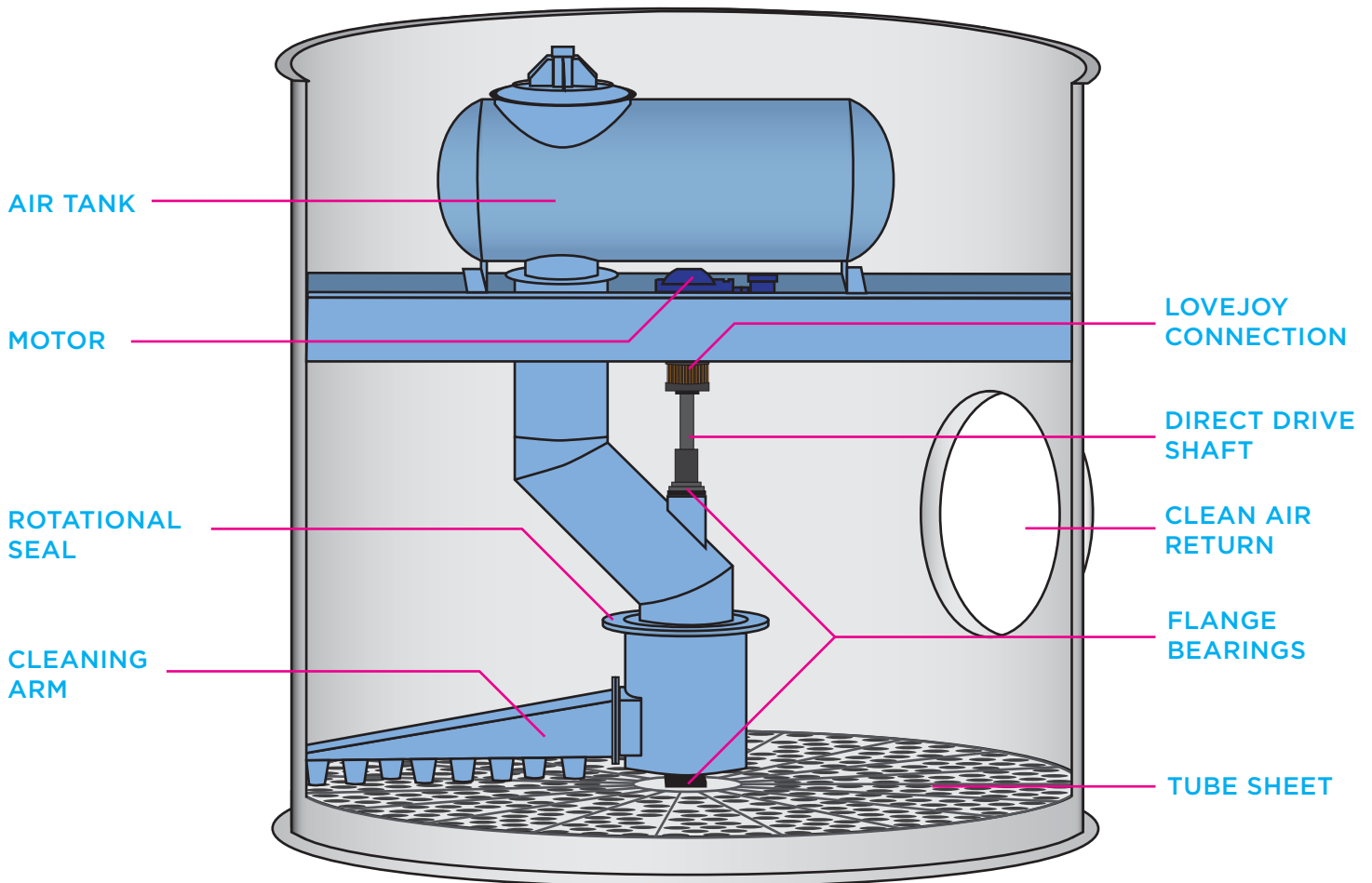
## REVERSE AIR BAGHOUSE

The Reverse Pressure BRF is an all-purpose baghouse suitable for most materials. The filter bags are cleaned by a fan that rotates over them. One major advantage to our reverse pressure baghouse design is that unlike some other baghouses, the entire BRF can stay online while the filters are being cleaned. All the filters in the Reverse Air BRF are constantly in operation. Because our reverse air baghouse uses a fan for cleaning, it does not require any compressed air.



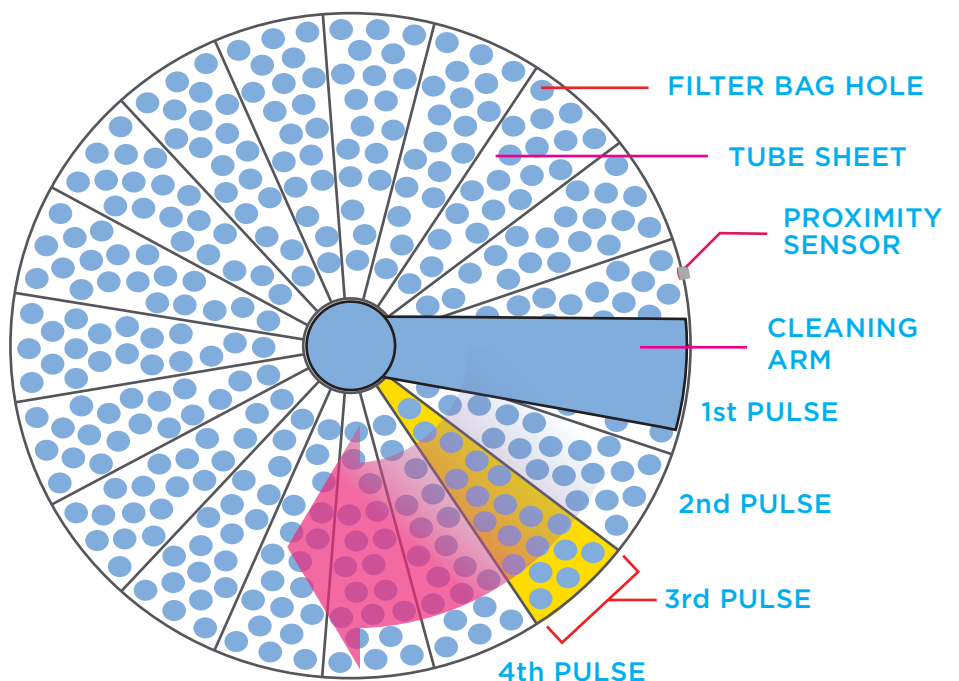


# BRF//MP MEDIUM PRESSURE CLEANING SYSTEM



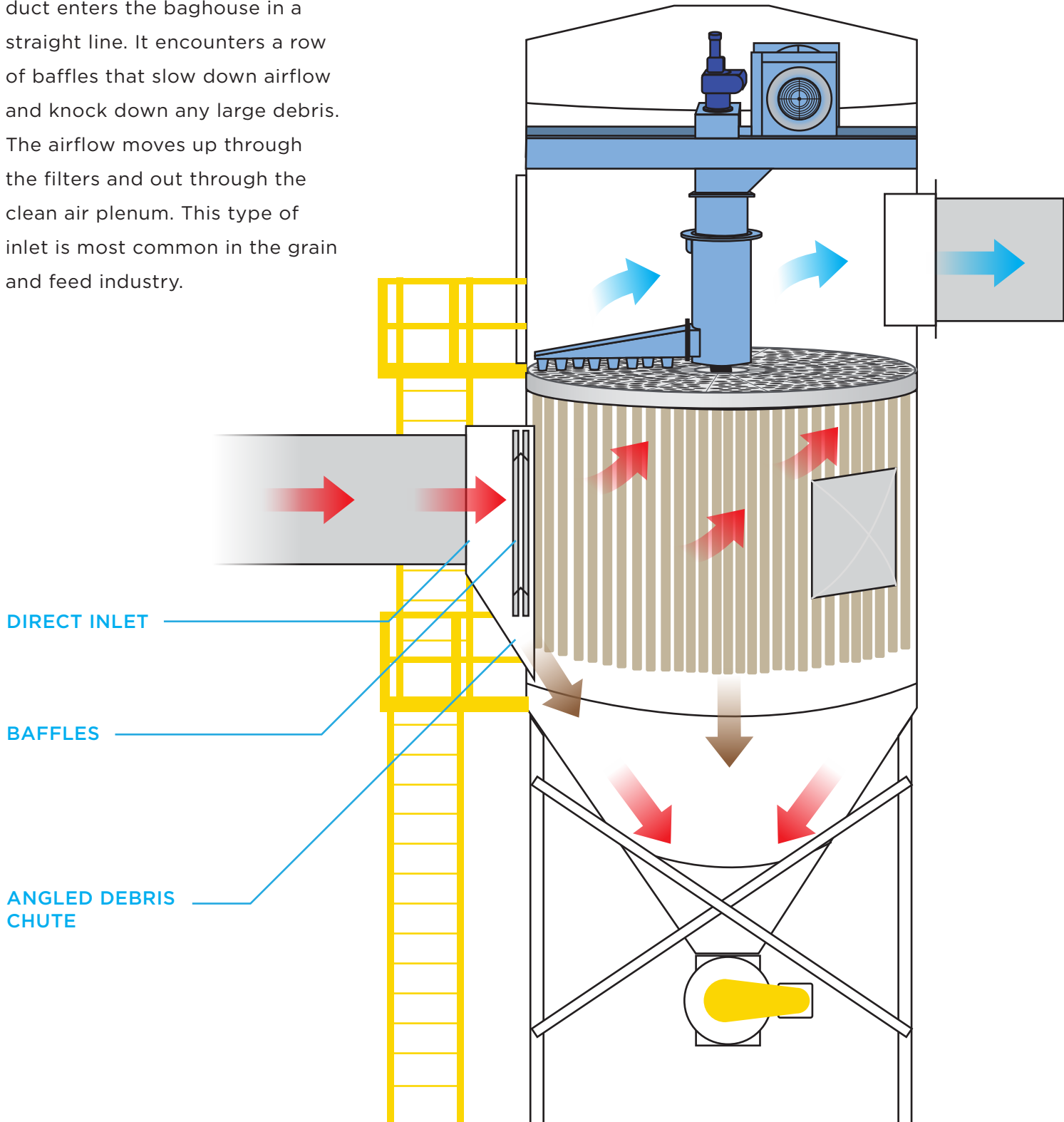
## MEDIUM PRESSURE BAGHOUSE

The Medium Pressure BRF uses its own compressor (positive displacement pump) to produce compressed air that pulses through the filter bags. A rotating arm is designed to make sure that every bag gets cleaned consistently. A proximity sensor ensures that the cleaning arm is in perfect alignment. Because the bags are cleaned with a pulse of compressed air, more dust is broken loose from the bag surface. One section of the tube sheet is pulsed per rotation. During the rotation the proximity sensor keeps the arm aligned for the next section to be Exact Pulsed.



## HIGH ENTRY INLET

With the high entry inlet, the duct enters the baghouse in a straight line. It encounters a row of baffles that slow down airflow and knock down any large debris. The airflow moves up through the filters and out through the clean air plenum. This type of inlet is most common in the grain and feed industry.



# TANGENTIAL INLET

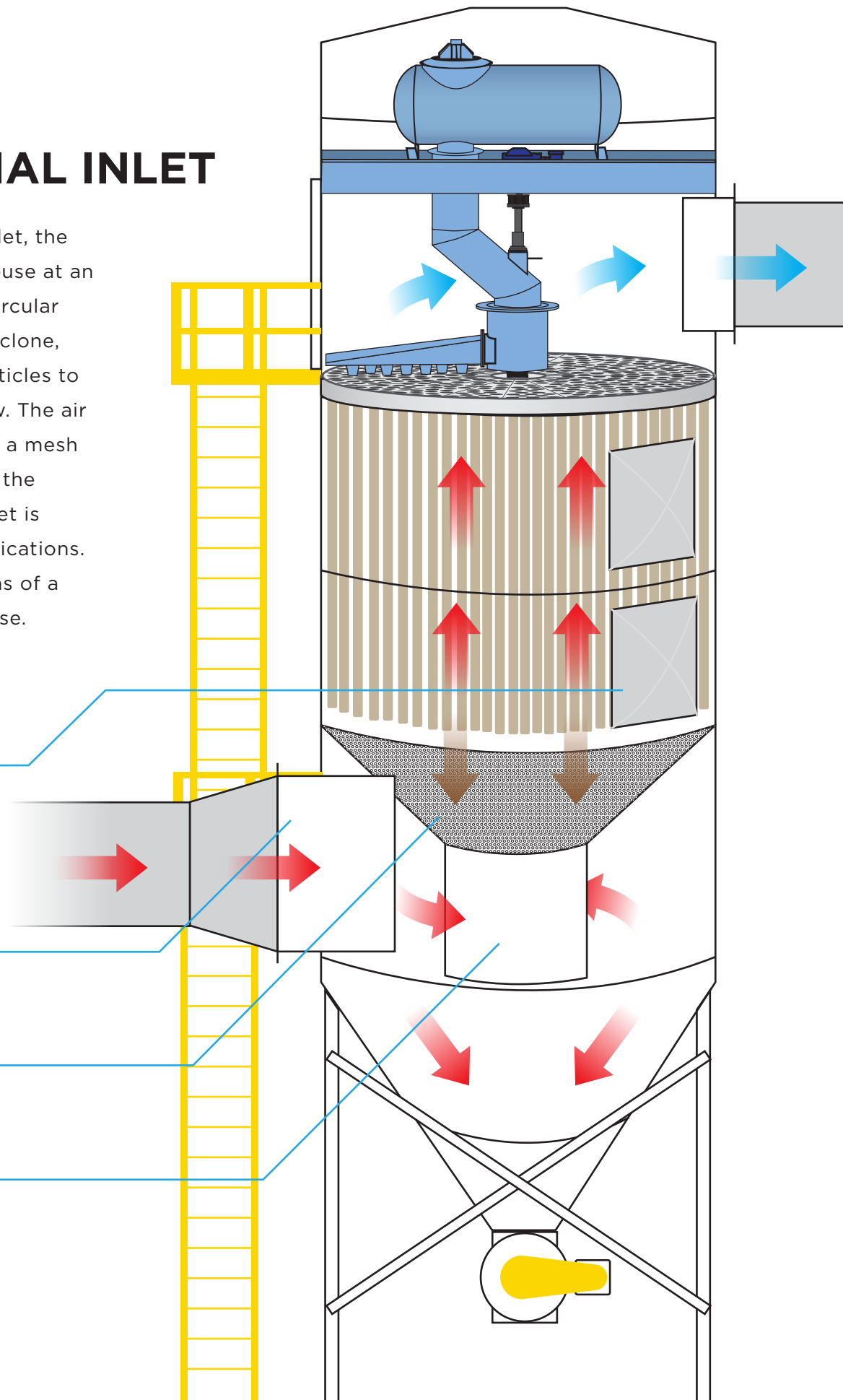
With the tangential inlet, the duct enters the baghouse at an angle. This causes a circular motion of air, like a cyclone, that causes larger particles to drop out of the airflow. The air is then pulled through a mesh cone before it gets to the filters. This type of inlet is common in many applications. It combines the actions of a cyclone and a baghouse.

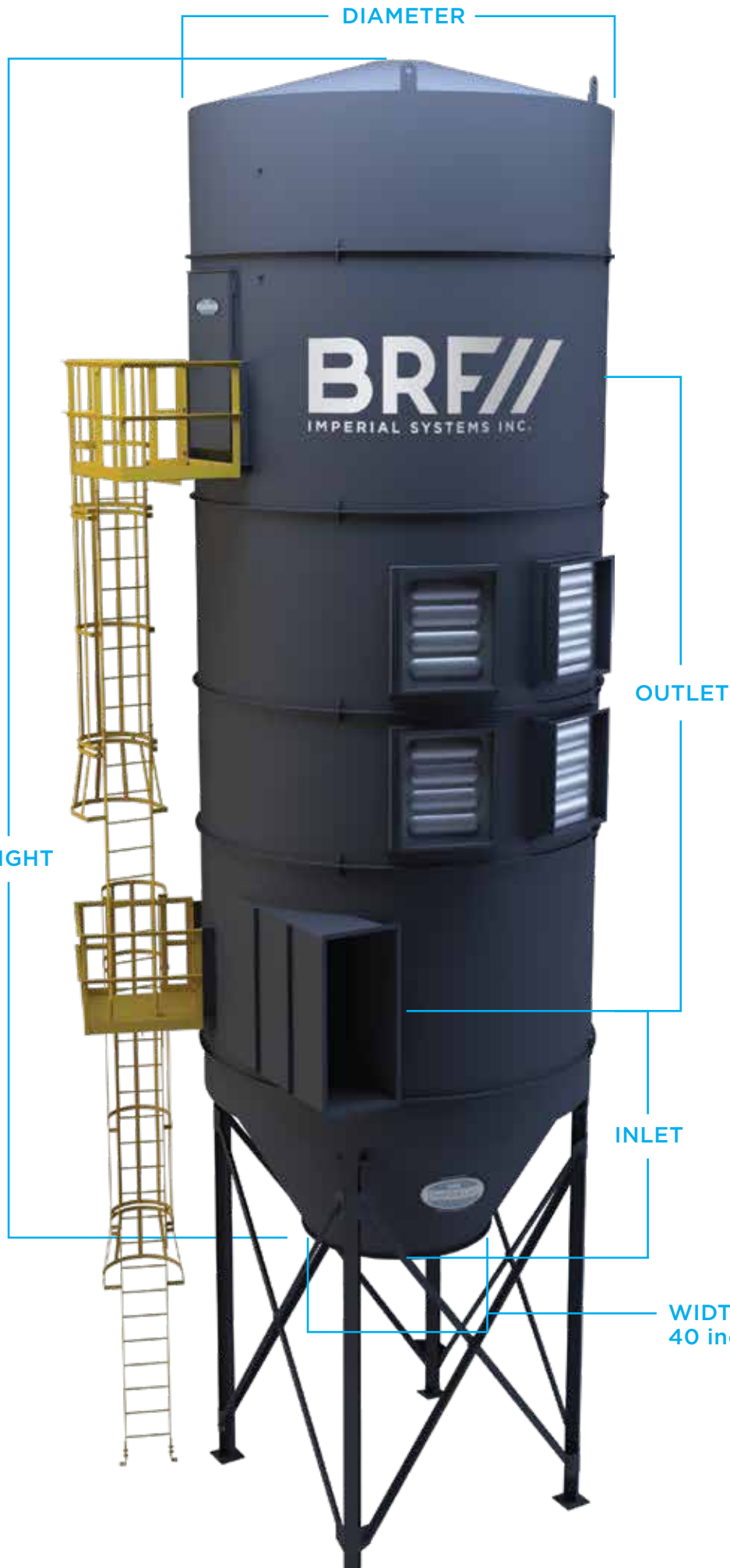
EXPLOSION VENT

ANGLED INLET

PERFORATED CONE

CYCLONE SECTION



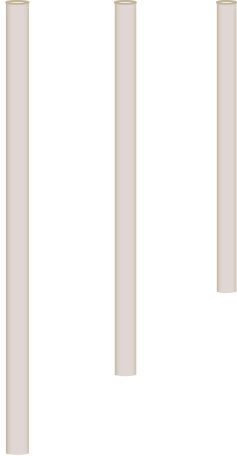


DIAMETER

**BRF//**  
IMPERIAL SYSTEMS INC.

BAG LENGTH OPTIONS

12' 10' 8'



HEIGHT

OUTLET

INLET

WIDTH  
40 inches

# BRF//RA

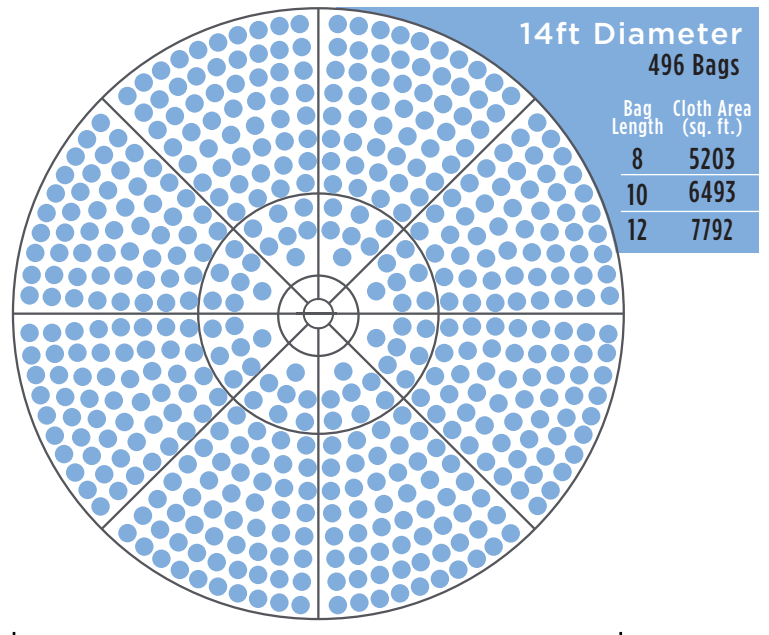
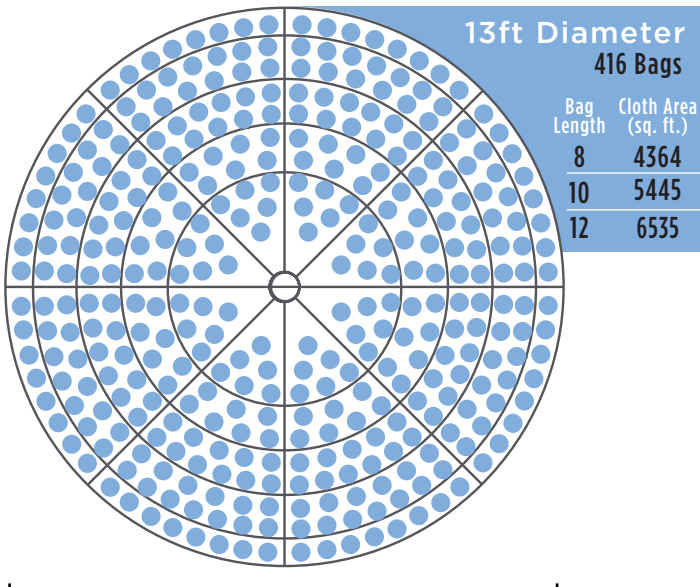
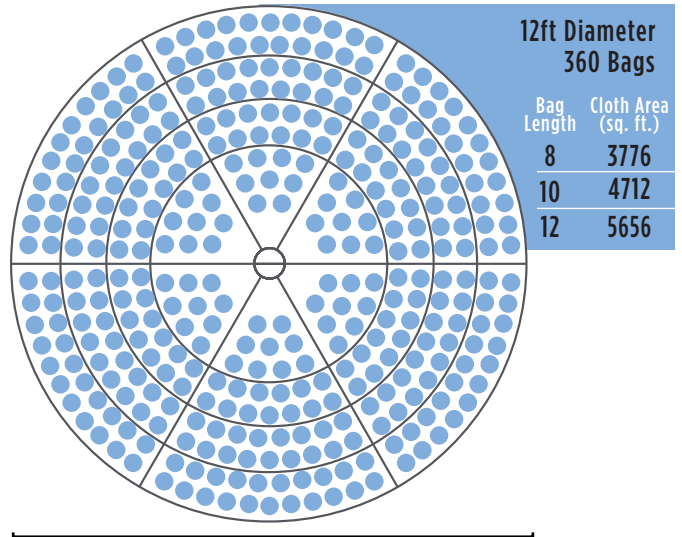
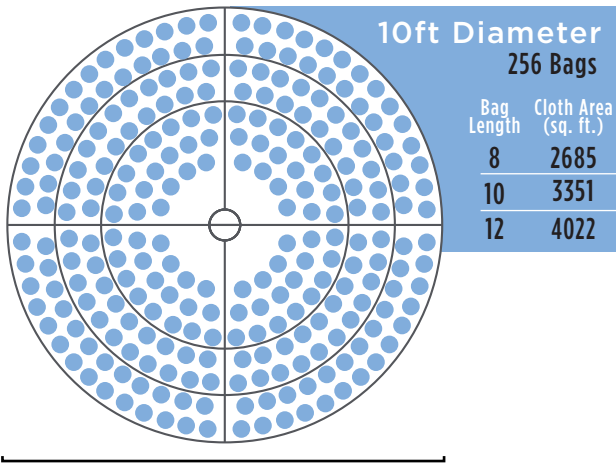
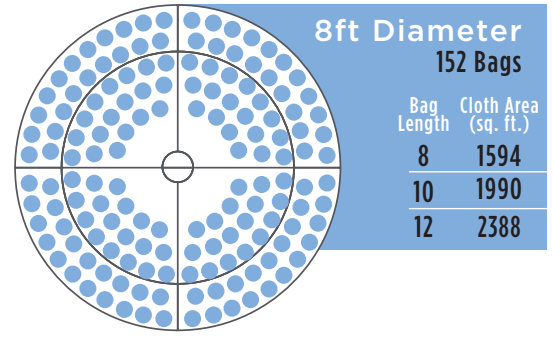
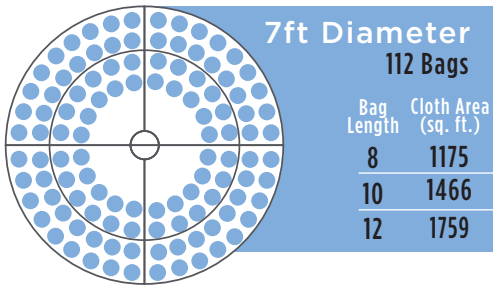
BAGHOUSE DUST COLLECTOR

# BRF//MP

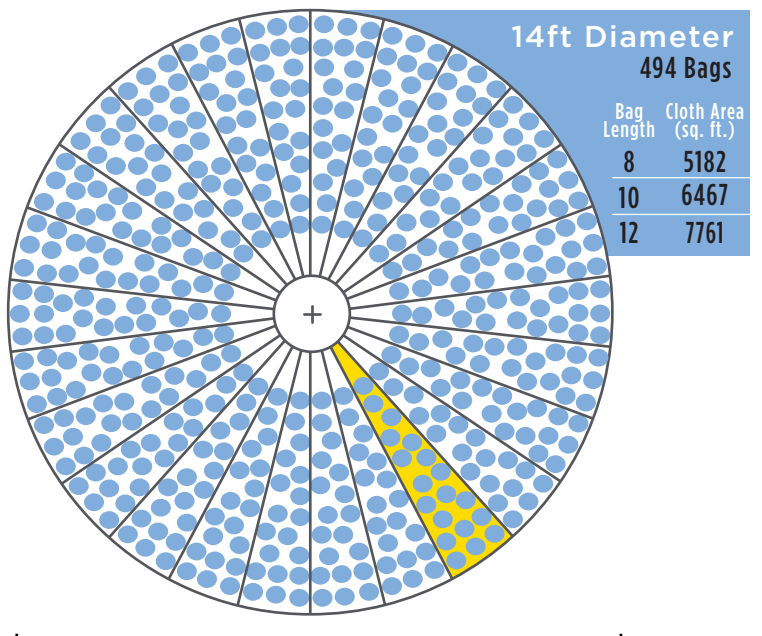
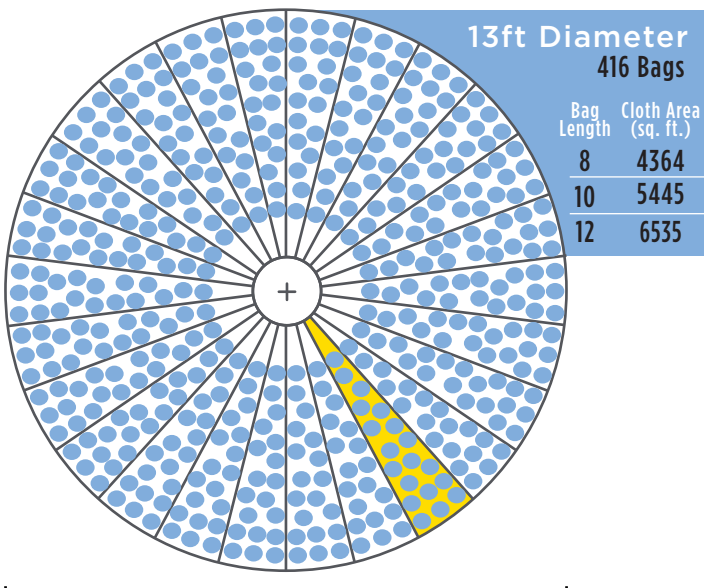
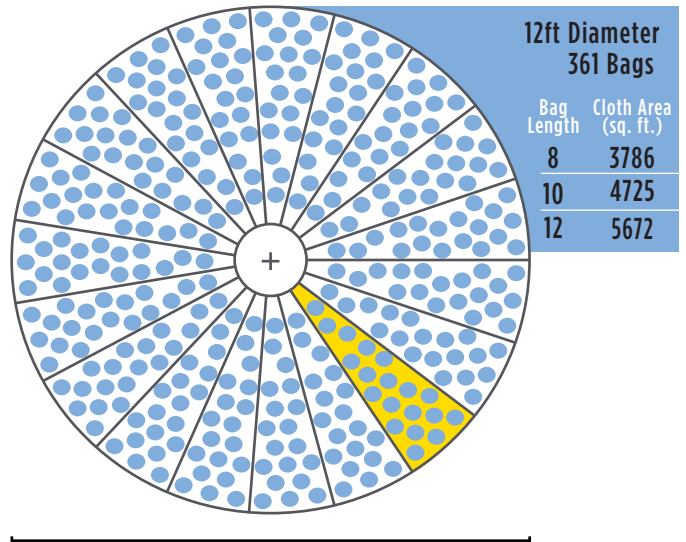
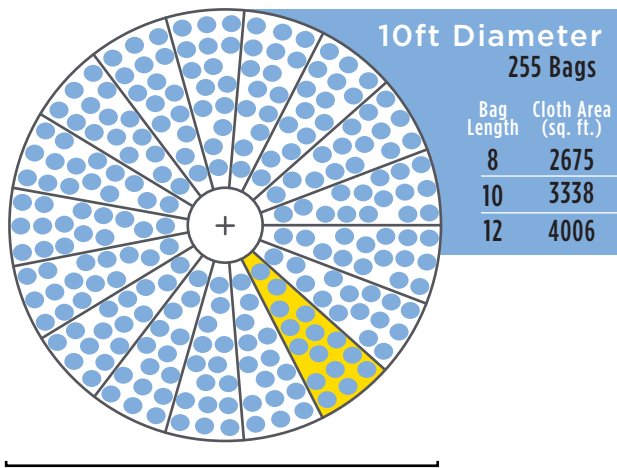
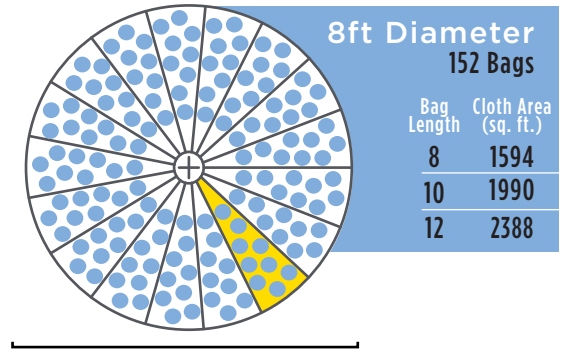
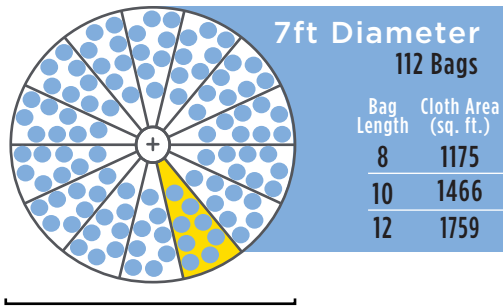
BAGHOUSE DUST COLLECTOR

| DIAMETER | Bag Length Options |             |         | Bag Length Options |             |         |       |
|----------|--------------------|-------------|---------|--------------------|-------------|---------|-------|
|          | 12ft Bag           | 10ft Bag    | 8ft Bag | 12ft Bag           | 10ft Bag    | 8ft Bag |       |
| 7ft      | WEIGHT (lbs)       | 8600        | 8000    | 7400               | 8800        | 8200    | 7600  |
|          | HEIGHT (in)        | 331         | 303     | 288                | 414         | 366     | 330   |
|          | OUTLET (in)        | 78          | 76      | 75                 | 249         | 225     | 201   |
|          | INLET (in)         | 150         | 148     | 145                | 60          |         |       |
|          | HP Req.            | 10hp blower |         |                    | 3hp PD pump |         |       |
| 8ft      | WEIGHT (lbs)       | 9800        | 9200    | 8500               | 10000       | 9400    | 8700  |
|          | HEIGHT (in)        | 348         | 293     | 278                | 434         | 386     | 341   |
|          | OUTLET (in)        | 80          | 78      | 76                 | 252         | 228     | 204   |
|          | INLET (in)         | 162         | 160     | 158                | 75          |         |       |
|          | HP Req.            | 10hp blower |         |                    | 3hp PD pump |         |       |
| 10ft     | WEIGHT (lbs)       | 13000       | 12100   | 11300              | 13200       | 12300   | 11500 |
|          | HEIGHT (in)        | 385         | 357     | 342                | 469         | 421     | 385   |
|          | OUTLET (in)        | 85          | 83      | 81                 | 256         | 232     | 208   |
|          | INLET (in)         | 188         | 186     | 184                | 99          |         |       |
|          | HP Req.            | 20hp blower |         |                    | 5hp PD pump |         |       |
| 12ft     | WEIGHT (lbs)       | 16400       | 15010   | 14200              | 16600       | 15210   | 14400 |
|          | HEIGHT (in)        | 421         | 392     | 376                | 501         | 453     | 417   |
|          | OUTLET (in)        | 89          | 87      | 84                 | 258         | 234     | 210   |
|          | INLET (in)         | 213         | 210     | 208                | 122         |         |       |
|          | HP Req.            | 25hp blower |         |                    | 5hp PD pump |         |       |
| 13ft     | WEIGHT (lbs)       | 19299       | 17750   | 16700              | 19400       | 17950   | 16900 |
|          | HEIGHT (in)        | 438         | 409     | 392                | 520         | 472     | 436   |
|          | OUTLET (in)        | 91          | 88      | 85                 | 261         | 237     | 213   |
|          | INLET (in)         | 225         | 223     | 220                | 135         |         |       |
|          | HP Req.            | 25hp blower |         |                    | 5hp         |         |       |
| 14ft     | WEIGHT (lbs)       | 20600       | 19100   | 18000              | 20800       | 19300   | 18200 |
|          | HEIGHT (in)        | 457         | 428     | 361                | 539         | 491     | 455   |
|          | OUTLET (in)        | 94          | 91      | 88                 | 264         | 240     | 216   |
|          | INLET (in)         | 238         | 236     | 233                | 148         |         |       |
|          | HP Req.            | 30hp blower |         |                    | 5hp PD pump |         |       |

# REVERSE AIR BAGHOUSE Tubesheet



# MEDIUM PRESSURE BAGHOUSE Tubesheet





**IMPERIAL SYSTEMS INC.**

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