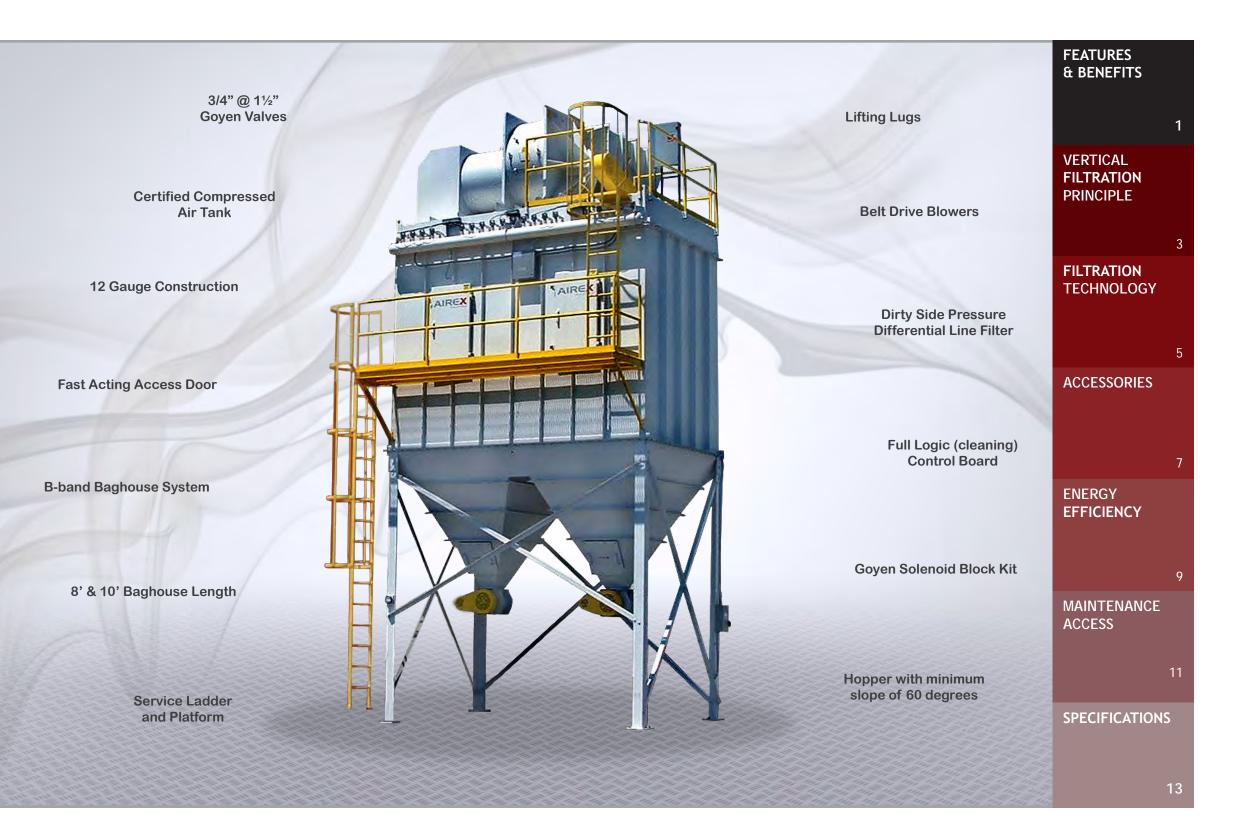
# BAGSONIX<sup>M</sup> SERIES



## **BAGHOUSE DUST COLLECTOR**





## DISCOVER THE POWER OF THE BAGHOUSE DUST COLLECTORS IN THE BAGSONIX SERIES

Baghouse dust collectors stand out due to their ability to handle high volumes of dust laden air using a compressed-air selfcleaning system enabling effective reverse blasting through deformation of the filter bags.

The unit filters sub-micron sized particles in continuous operating mode and with a steady loss of differential pressure.

Our line of baghouse dust collectors includes sealed mechanisms as well as doors that provide easy access with very few tools required for maintenance.

## MAIN ADVANTAGES AT A GLANCE

## **High filtration capacity**

Models from 16 to 720 filter bags and up to 125 000 CFM capacity.

### **Custom engineering**

The systems in the Bagsonix series can be customized based on specific requirements.

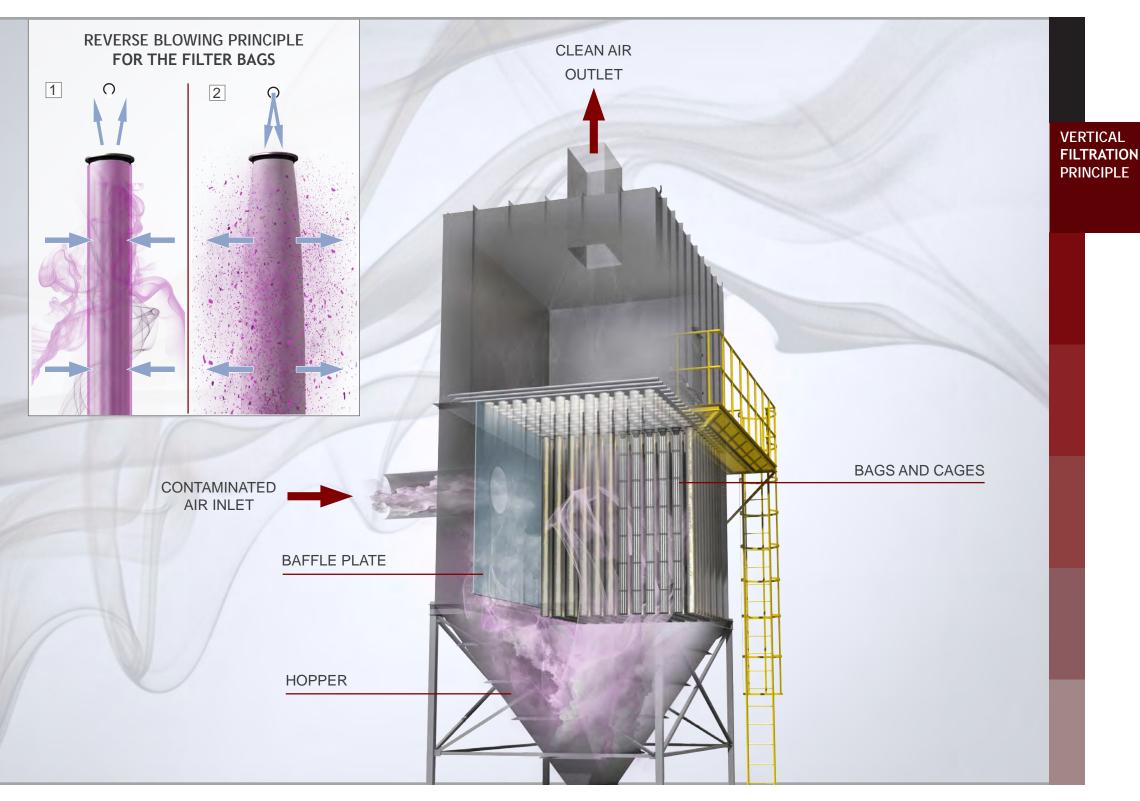
## **Project integration**

Avoids particle accumulation within plants, in order to better comply with NFPA regulations.

### Standard filter bags

Not limited to obtaining replacement cages and bags from a sole source provider.





- 1 The dust-laden air is filtered and forms a dust cake on the outside surface of the bag.
- 2 The pulsed air blast causes the bag to expand, which ejects the accumulated dust cake into the hopper.

## HOW THE BAGSONIX SERIES DUST COLLECTOR WORKS

Dust-laden air enters and is directed to the bottom of the dust collector by means of a deflector plate prior to going through the filter bags.

The dust accumulates creating a cake on the outside surface of the bags. At regular intervals, a burst of compressed air is injected into the bags through a parabolic nozzle that creates a shock wave causing the particles to fall to the bottom of the hopper.

The filtered air exits through the venturis into the clean section and is then either expelled outside or recirculated, depending on the application.

## ADVANTAGES

## Fast, simple and safe bag replacement

**Inside-access models:** It is possible to replace the bags with just a screwdriver.

**Top-access model:** The "B"-shaped belt technology requires no tools to replace the bags.

### Continuous operation

Unlike the shaker models, it is not necessary to shut down this type of dust collector to clean the filters.

## Economical

The baghouse dust collector is an economical choice because it requires minimal maintenance: only periodic bag replacement is necessary.





|   |                                      |                       |                 | Felt                      |                          |                             |                                     | Woven           | FILTRATION |  |
|---|--------------------------------------|-----------------------|-----------------|---------------------------|--------------------------|-----------------------------|-------------------------------------|-----------------|------------|--|
| Generic name                                  | Polyester                            | Polypropylene         | Meta-aramid     | Polyphenylene<br>Sulphide | Co-polyimide,<br>Polymer | Acrylic<br>(Co-polymer)     | PTFE<br>(fluorocarbone)             | Fiberglass      | TECHNOLOGY |  |
| Trade name                                    | Terylene, Dacron,<br>Trevira, Fortel | Meraklon,<br>Courlene | Nomex,<br>Conex | Ryton                     | P-84                     | Acrilan, Orlon,<br>Dralon T | Teflon, Goretex,<br>Tefaire, Rastex | Huyglass        |            |  |
| Colour  | White                                | White                 | Cream           | Light Brown               | Gold                     | Cream                       | Dark Brown                          | Variable        |            |  |
| Tenacity (CN/TEX)                             | 60                                   | 50                    | 33              | 35                        | 25                       | 20                          | 18                                  | 70-120          |            |  |
| Specific Density<br>(g/cm³) / (lbs/ft³)       | 1.38 / 86.15                         | 0.91 / 56.81          | 1.38 / 86.15    | 1.37 / 85.53              | 1.41 / 88.02             | 1.15 / 71.79                | 2.3 / 43.58                         | 2.5 / 156.07    |            |  |
| (continuous) Operating<br>temperature C° / F° | 135 / 275                            | 100 / 200             | 204 / 400       | 190 / 375                 | 260 / 500                | 120 / 260                   | 260 / 500                           | 260 / 500       |            |  |
| Permeability<br>(ft³/min_/ft²) / (m³/h_/m²)   | 25-35 / 453-635                      | 25-35 / 453-635       | 25-35 / 453-635 | 25-35 / 453-635           | 25-35 / 453-635          | 25-35 / 453-635             | 7-20 / 127-363                      | 15-30 / 272-544 |            |  |
| Cost<br>(\$/m²) / (\$/ft²)                    | 10.75 /1.00                          | 15.05 / 1.40          | 30.15 / 2.80    | 35.50 / 3.30              | 73.20 / 6.80             | 14.85 / 1.38                | 147.50 / 13.70                      | 53.80 / 5.00    |            |  |
|   |                                      |                       |                 | General                   | Strength                 |                             |                                     |                 |            |  |
| Pressure during<br>reverse blasting           | ****                                 | ***                   | **              | ****                      | ****                     | **                          | *                                   | ***             |            |  |
| Moisture                                      | **                                   | *                     | ***             | ****                      | ****                     | ****                        | ****                                | ****            |            |  |
| Combustion                                    | yes                                  | yes                   | no              | no                        | no                       | yes                         | no                                  | no              |            |  |
| Acid  | ***                                  | ****                  | **              | ***                       | ***                      | *                           | ****                                | ***             |            |  |
| Alkalis                                       | *                                    | ****                  | **              | **                        | **                       | *                           | ****                                | *               |            |  |
| Abrasion                                      | ****                                 | ****                  | ***             | **                        | *                        | ***                         | **                                  | *               |            |  |
| Solvent                                       | ***                                  | ****                  | **              | ***                       | ****                     | **                          | ****                                | ****            |            |  |
| Oxidising agents                              | ****                                 | ***                   | **              | *                         | **                       | *                           | ****                                | ****            |            |  |
| Hydrolysis                                    | *                                    | ****                  | **              | ***                       | **                       | ***                         | ****                                | ****            |            |  |
|   |                                      |                       |                 |                           |                          |                             |                                     |                 |            |  |

## WE HAVE THE FILTERING MEDIUM THAT MATCHES YOUR NEEDS

Maximum separation performance is made possible by using high quality materials for the filtering fabrics. Our line of natural and synthetic felts enables us to customize the collector to the needs of each facility.

To ensure complete sealing for any type of dust, the filter bags are generally designed to be installed and held firmly in place by either a B-shaped belt, flat belt, cord, double cord or ring. A broad range of treatments and coatings can be applied to either side of the bags to facilitate reverse blasting, increase effectiveness, and extend service life.

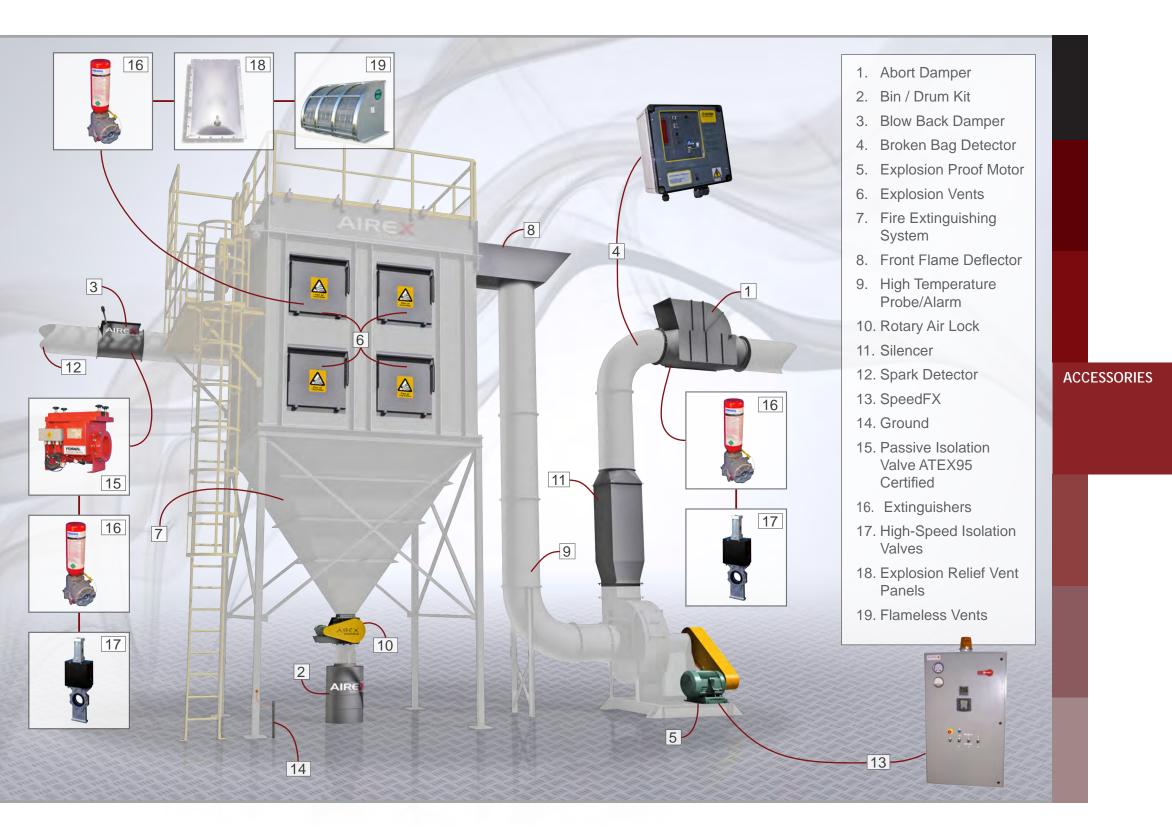
## THINGS TO CONSIDER WHEN CHOOSING THE FILTERING MEDIUM

- substance
- shape

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- particle size
- humidity level in the air
- load
- temperature





## ENHANCE YOUR SECURITY AND PERFORMANCE

Some options like the SpeedFX<sup>™</sup> can vary motor speed and energy consumption thus improving efficiency.

A number of Airex accessories aim to meet NFPA regulations, preventing against fire and explosions while better protecting workers and facilities.

## FIRE PROTECTION ACCESSORIES

## **Abort Damper**

Connected with a proper spark or fire detection system, the abort damper redirects exhaust air into the atmosphere as soon as a spark is detected.

## **Blow Back Damper**

Damper ensure there is a seal, if a fire or explosion occurs in the dust collector, preventing the return of smoke and fire to the shop via the intake ductwork.

## **Explosion Vents**

The explosion vents redirects a propagating flame or explosion to atmosphere. Pressure rated washers are used to seal and release vent.

## **Rotary Air Lock**

Designed to control the flow of discharge material from a dust collector or other type of process while maintaining an air seal.

Spark Detection & Fire Extinguishing Kit

System counters the spread of fire with a temperature probe and sprinkler, spraying the collector and stopping the blower (eliminating oxygen intake once a set point is reached).



|               |                                       |          |                   |                                       |            | 1                   |                                       |            |      |        |
|---------------|---------------------------------------|----------|-------------------|---------------------------------------|------------|---------------------|---------------------------------------|------------|------|--------|
| S             | HAKER UNIT                            |          | CYCLONIC          | C EFFECT UNIT                         |            | RECTAN              | GULAR UNIT                            |            |      |        |
|               | COSTS                                 |          |                   | COSTS                                 |            |                     | COSTS                                 |            |      |        |
|               | Acquisition                           | \$       |                   | Acquisition                           | \$\$\$     |                     | Acquisition                           | \$\$       |      |        |
|               | Maintenance                           | \$\$     | 1                 | Maintenance                           | \$         |                     | Maintenance                           | \$         |      |        |
|               | Energy<br>Consumption                 | \$\$\$   |                   | Energy<br>Consumption                 | \$\$\$     |                     | Energy<br>Consumption                 | \$         |      |        |
|               | Filters Replacement<br>Frequency      | \$\$\$   |                   | Filters Replacement<br>Frequency      | \$\$       |                     | Filters Replacement<br>Frequency      | \$         |      |        |
|               | Static Pressure                       | \$\$\$   |                   | Static Pressure                       | \$\$\$     |                     | Static Pressure                       | \$         | ENE  | RGY    |
|               | OTHER CHARACTERIST                    |          |                   | OTHER CHARACTERIS                     |            |                     | OTHER CHARACTERIST                    |            | EFFI | CIENCY |
|               | Variable Volume                       | ••       | AIRS              | Variable Volume                       | •          |                     | Variable Volume                       | •••        |      |        |
|               | Filtration Capacity<br>Continuous Use |          |                   | Filtration Capacity<br>Continuous Use | •••        |                     | Filtration Capacity<br>Continuous Use | •••        |      |        |
|               | Compressed Air                        | no<br>no |                   | Compressed Air                        | yes<br>yes |                     | Compressed Air                        | yes<br>yes |      |        |
|               | Compressed All                        | 110      |                   | Compressed Air                        | yes        |                     | Compressed Air                        | yes        |      |        |
| DISTINCTIVE F | EATURES:                              |          | DISTINCTIVE FEATU | JRES:                                 |            | DISTINCTIVE FEATURI | ES:                                   |            |      |        |

- Off line cleaning
- Preferable to operate the dust collector at a low filtration ratio.
- Ideal for occasional or intermittent use.

- On / off line cleaning
- This design requires more overhead space.
- Heavy energy consumption due to the high static pressure of the cyclonic effect.

- On / off line cleaning
- Choice of efficient and low energy consuming blower, due to low pressure loss.
- This design requires less overhead space.

## THE PERFECT BALANCE BETWEEN **EFFECTIVENESS AND COST**

More than one kind of dust collector uses filter bags. This does not mean that they are all just as effective for the same application. There are no bad dust collectors, just bad decisions during analysis and selection.

The Bagsonix series is a rectangular unit. Best used for high volume continuous filtration. Adding a variable frequency drive helps reduce size, selection and operating costs.

## THE DIFFERENT BAGHOUSE DUST COLLECTORS

## **Shaker Unit**

This unit is far from being the preferred option if you are looking for continuous and efficient operation for industrial use.

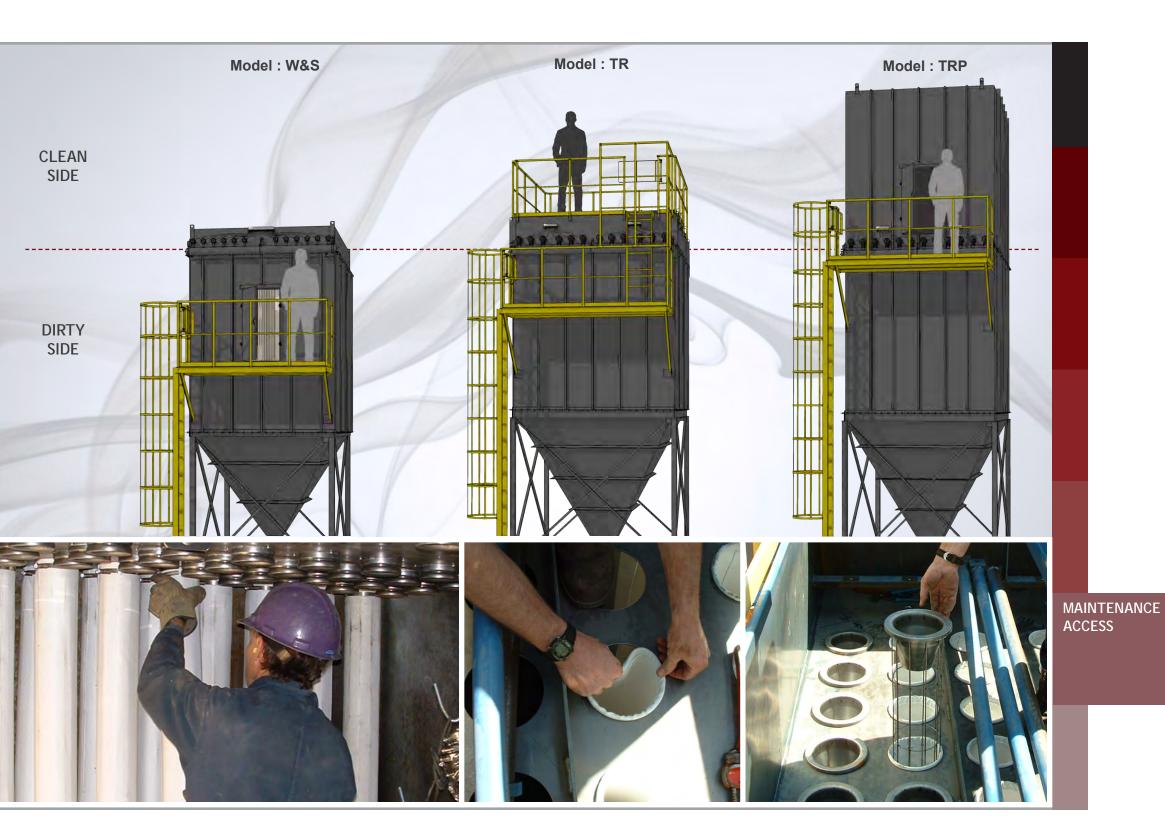
## Cyclonic Effect Unit

This type of dust collector uses the cyclonic effect to separate out the larger particles and then trap the fine particles using filter bags.

### **Rectangular Unit**

This model provides a multitude of potential customizations to suit the client's requirements. It ranks among the most effective due to its balance between filtration capacity and the energy needed for proper operation.





10 Airex Industries Inc.

## DIFFERENT MAINTENANCE ACCESS OPTIONS

The main selection criterion that determines which dust collector to choose is available overhead space.

The Bagsonix series offers three models that are differentiated by the location of the maintenance access.

## FEATURES OF THE MODELS

## W&S model: dirty side access

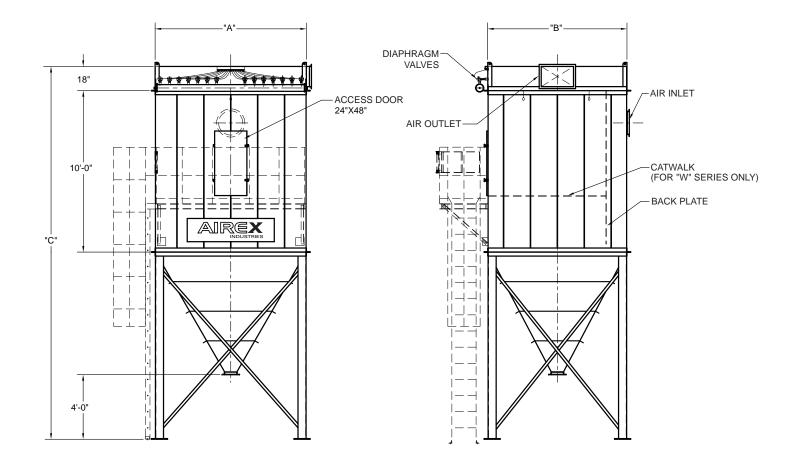
This model is the most compact, which is ideal for locations where overhead space is limited. Its great disadvantage, as the name implies, comes from the fact that maintenance must be done inside the dirty section of the dust collector.

**TR model: clean side access with no plenum** Replacing the bags is very easy because it does not require any tools, thereby increasing maintenance speed.

Clean side access requires additional overhead clearance of roughly 2m - 2,5m (6' - 8').

**TRP model: clean side access with plenum** Identical to the above model (TR) except that it has a plenum enabling the operator to go inside the clean section. This protects the operator from bad weather during maintenance.

# **SPECIFICATIONS**

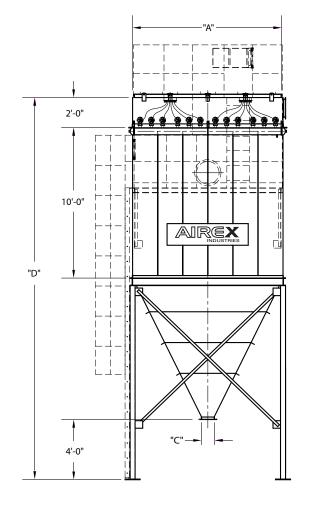


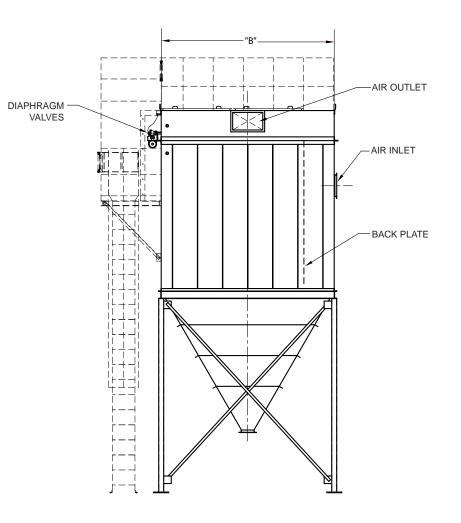


|       | CLOTH AREA (ft <sup>2</sup> ) |             |      |      |            | C           | WEIGHT | NUMBER               |
|-------|-------------------------------|-------------|------|------|------------|-------------|--------|----------------------|
| MODEL | BAGS 8'-0"                    | BAGS 10'-0" | А    | В    | BAGS 8'-0" | BAGS 10'-0" | (LBS)  | AND SIZE<br>OF VALVE |
| 16S   | 160                           | 200         | 28"  | 34"  | 162"       | 186"        | 1,050  | 4@3/4"               |
| 24S   | 0.40                          | 200         | 28"  | 48"  | 185"       | 199"        | 1,350  | 4 @ 2/4"             |
| 24W   | 240                           | 300         | 42"  | 52"  | 178"       | 202"        | 1,600  | 4@3/4"               |
| 36S   | 360                           | 450         | 42"  | 52"  | 178"       | 202"        | 1,750  | 6 @ 2/4"             |
| 36W   | 300                           | 430         | 56"  | 52   | 182"       | 202"        | 2,100  | 6 @ 3/4"             |
| 48S   | 480                           | 600         | 42"  | 66"  | 190"       | 214"        | 2,150  | 6 @ 3/4"             |
| 48W   | 400                           | 000         | 56"  | 00   | 190        | 214         | 2,700  | 0 @ 3/4              |
| 64S   | 640                           | 800         | 56"  | 68"  | 192"       | 216"        | 2,500  | 8 @ 3/4"             |
| 64W   | 040                           | 000         | 70"  | 00   | 194"       | 218"        | 3,600  | 0 @ 0/4              |
| 80S   | 800                           | 1,000       | 56"  | 82"  | 204"       | 228"        | 3,350  | 8 @ 3/4"             |
| 80W   | 000                           | 1,000       | 70"  | 02   | 204        | 220         | 4,200  | 0 @ 0/4              |
| 100S  | 1,000                         | 1,250       | 70"  | 82"  | 204"       | 228"        | 3,650  | 10 @ 3/4"            |
| 100W  | 1,000                         | 1,200       | 84"  | 02   | 206"       | 230"        | 4,500  | 10 @ 0/4             |
| 120S  | 1,200                         | 1,500       | 70"  | 96"  | 216"       | 240"        | 4,500  | 10 @ 1"              |
| 120W  | ,,200                         | 1,000       | 84"  |      |            |             | 4,750  |                      |
| 144S  | 1,440                         | 1,800       | 84"  | 96"  | 216"       | 240"        | 5,700  | 12 @ 1"              |
| 144W  | .,                            | .,          | 98"  |      | 218"       | 242"        | 6,600  | 0 .                  |
| 168S  | 1,680                         | 2,100       | 98"  | 96"  | 218"       | 242"        | 6,900  | 14 @ 1"              |
| 168W  |                               | ·           | 112" |      | 230"       | 254"        | 7,800  |                      |
| 192W  | 1,920                         | 2,400       | 126" | 96"  | 242"       | 266"        | 8,900  | 16 @ 1"              |
| 216W  | 2,160                         | 2,700       | 154" | 102" | 215"       | 239"        | 9,000  | 18 @ 1"              |
| 240W  | 2,400                         | 3,000       | 168" | 102" | 215"       | 239"        | 9,500  | 20 @ 1"              |
| 264W  | 2,640                         | 3,300       | 182" | 102" | 215"       | 239"        | 10,100 | 22 @ 1"              |
| 288W  | 2,880                         | 3,600       | 196" | 102" | 215"       | 239"        | 12,000 | 24 @ 1"              |
| 312W  | 3,120                         | 3,900       | 210" | 102" | 218"       | 242"        | 14,000 | 26 @ 1"              |
| 336W  | 3,360                         | 4,200       | 224" | 102" | 224"       | 248"        | 15,000 | 28 @ 1"              |
| 360W  | 3,600                         | 4,500       | 238" | 102" | 230"       | 254"        | 17,000 | 30 @ 1"              |
| 384W  | 3,840                         | 4,800       | 252" | 102" | 236"       | 260"        | 18,700 | 32 @ 1"              |
| 408W  | 4,080                         | 5,100       | 266" | 102" | 242"       | 266"        | 19,950 | 34 @ 1"              |
| 432W  | 3,420                         | 5,400       | 280" | 102" | 248"       | 272"        | 21,000 | 36 @ 1"              |

# - INSIDE ACCESS -

# **SPECIFICATIONS**





| MODEL      | CLOTH AREA (ft²) | A    | В    | С    | D    | WEIGHT<br>(LBS) | NUMBER<br>AND SIZE OF<br>VALVE |
|------------|------------------|------|------|------|------|-----------------|--------------------------------|
| 54-10TR-6  | 848              | 60"  | 101" | 10"  | 249" | 4,931           | 6 @ 1 1/2"                     |
| 72-10TR-6  | 1,131            | 60"  | 131" | 10"  | 274" | 6,180           | 6 @ 1 1/2"                     |
| 81-10TR-6  | 1,273            | 90"  | 101" | 10"  | 249" | 6,300           | 9@11/2"                        |
| 108-10TR-6 | 1,697            | 90"  | 138" | 10"  | 286" | 7,621           | 9 @ 1 1/2"                     |
| 144-10TR-6 | 2,262            | 120" | 138" | 10"  | 281" | 9,072           | 12 @ 1 1/2"                    |
| 180-10TR-6 | 2,828            | 150" | 138" | 22"  | 281" | 10,355          | 15 @ 1 1/2"                    |
| 216-10TR-6 | 3,393            | 180" | 138" | 52"  | 281" | 11,647          | 18 @ 1 1/2"                    |
| 252-10TR-6 | 3,959            | 210" | 138" | 82"  | 281" | 12,939          | 21 @ 1 1/2"                    |
| 288-10TR-6 | 4,524            | 240" | 138" | 112" | 281" | 14,244          | 24 @ 1 1/2"                    |
| 324-10TR-6 | 5,090            | 270" | 138" | 142" | 281" | 15,927          | 27 @ 1 1/2"                    |
| 360-10TR-6 | 5,656            | 300" | 138" | 172" | 281" | 17,207          | 30 @ 1 1/2"                    |
| 396-10TR-6 | 6,221            | 330" | 138" | 202" | 281" | 18,511          | 33 @ 1 1/2"                    |
| 432-10TR-6 | 6,787            | 360" | 138" | 230" | 281" | 19,802          | 36 @ 1 1/2"                    |
| 468-10TR-6 | 7,352            | 390" | 138" | 262" | 281" | 21,096          | 39 @ 1 1/2"                    |
| 504-10TR-6 | 7,918            | 420" | 138" | 292" | 281" | 22,413          | 42 @ 1 1/2"                    |
| 540-10TR-6 | 8,483            | 450" | 138" | 322" | 281" | 23,706          | 45 @ 1 1/2"                    |
| 576-10TR-6 | 9,049            | 480" | 138" | 352" | 281" | 24,998          | 48 @ 1 1/2"                    |
| 612-10TR-6 | 9,615            | 510" | 138" | 382" | 281" | 26,693          | 51 @ 1 1/2"                    |
| 648-10TR-6 | 10,180           | 540" | 138" | 412" | 281" | 27,960          | 54 @ 1 1/2"                    |
| 684-10TR-6 | 10,746           | 570" | 138" | 442" | 281" | 29,265          | 57 @ 1 1/2"                    |
| 720-10TR-6 | 11,311           | 600" | 138" | 472" | 281" | 30,570          | 60 @ 1 1/2"                    |



# - TOP ACCESS -



## **SPECIFICATIONS**

# - TOP ACCESS WITH PLENUM -

|       |   | 'B"► | 1                                     |
|-------|---|------|---------------------------------------|
|       | ACCESS DOOR<br>24"X48"<br>DIAPHRAGM<br>VALVES |      | AIR OUTLET<br>AIR INLET<br>BACK PLATE |
| 4'-0" |   |      |                                       |

| MODEL       | CLOTH AREA (ft²) | A    | В    | С    | D    | WEIGHT<br>(LBS) | NUMBER<br>AND SIZE OF<br>VALVE |
|-------------|------------------|------|------|------|------|-----------------|--------------------------------|
| 54-10TRP-6  | 848              | 57"  | 101" | 10"  | 345" | 6,499           | 6 @ 1 1/2"                     |
| 72-10TRP-6  | 1,131            | 57"  | 128" | 10"  | 368" | 8,045           | 6 @ 1 1/2"                     |
| 81-10TRP-6  | 1,273            | 90"  | 101" | 10"  | 345" | 8,892           | 9 @ 1 1/2"                     |
| 108-10TRP-6 | 1,697            | 84"  | 135" | 10"  | 386" | 9,906           | 9 @ 1 1/2"                     |
| 144-10TRP-6 | 2,262            | 111" | 135" | 10"  | 374" | 11,554          | 12 @ 1 1/2"                    |
| 180-10TRP-6 | 2,828            | 138" | 135" | 13"  | 374" | 13,116          | 15 @ 1 1/2"                    |
| 216-10TRP-6 | 3,393            | 165" | 135" | 40"  | 374" | 14,687          | 18 @ 1 1/2"                    |
| 252-10TRP-6 | 3,959            | 192" | 135" | 67"  | 374" | 16,258          | 21 @ 1 1/2"                    |
| 288-10TRP-6 | 4,524            | 219" | 135" | 94"  | 374" | 17,842          | 24 @ 1 1/2"                    |
| 324-10TRP-6 | 5,090            | 246" | 135" | 120" | 374" | 19,804          | 27 @ 1 1/2"                    |
| 360-10TRP-6 | 5,656            | 273" | 135" | 148" | 374" | 21,363          | 30 @ 1 1/2"                    |
| 396-10TRP-6 | 6,221            | 300" | 135" | 186" | 374" | 22,946          | 33 @ 1 1/2"                    |
| 432-10TRP-6 | 6,787            | 327" | 135" | 202" | 374" | 24,516          | 36 @ 1 1/2"                    |
| 468-10TRP-6 | 7,352            | 354" | 135" | 229" | 374" | 26,088          | 39 @ 1 1/2"                    |
| 504-10TRP-6 | 7,918            | 381" | 135" | 256" | 374" | 27,685          | 42 @ 1 1/2"                    |
| 540-10TRP-6 | 8,483            | 408" | 135" | 283" | 374" | 29,256          | 45 @ 1 1/2"                    |
| 576-10TRP-6 | 9,049            | 435" | 135" | 310" | 374" | 30,827          | 48 @ 1 1/2"                    |
| 612-10TRP-6 | 9,615            | 462" | 135" | 336" | 374" | 32,807          | 51 @ 1 1/2"                    |
| 648-10TRP-6 | 10,180           | 489" | 135" | 364" | 374" | 34,347          | 54 @ 1 1/2"                    |
| 684-10TRP-6 | 10,746           | 516" | 135" | 390" | 374" | 35,931          | 57 @ 1 1/2"                    |
| 720-10TRP-6 | 11,311           | 543" | 135" | 418" | 374" | 37,515          | 60 @ 1 1/2"                    |







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