

DIVERSIFIED AIR SYSTEMS, INC.

MAXFLO™-VERTICAL

Cartridge Dust Collectors

- ***Vertical downflow design***
- ***Space economy***
- ***Rock solid industrial construction***



- ***Easy to maintain & operate***
- ***Powerful cleaning system***
- ***Standard sizes from 2 to 128 cartridge filters***
- ***Made in U.S.A.***

Superior technology generating substantial operating savings

CARTRIDGE AIR CLEANING

Contaminated air is drawn through high-efficiency cartridge filters, where the particulate is collected on the outside of the media. Filtered air is pulled through the system and exhausted. The reverse jet pulse cleaning system extends filter life and decreases maintenance costs.

HIGH-PERFORMANCE CARTRIDGES

With a 99.7% efficiency rating for submicron (0.5) particulate, extra-large circular filters are horizontally oriented for uniform dust loading and efficient cleaning.

EFFICIENCY

The Vertical Series utilizes a patented downflow/vertical design to ensure consistent filtration and efficient dust handling. Many competitors' products operate with a high level of re-entrainment, which means that energy and filter life are wasted by repeated collecting of the same dust.

SIZE AVAILABILITY

The Vertical Series is designed with a full range of capacities for a vast array of applications. From the V-2S with 2 cartridges to the V-128 with 128 cartridges, every Vertical Dust Collector has the media capacity and optimal filtering velocity for every type of contaminant and process.

POWERFUL CLEANING

The patented Venturi assisted design optimizes reverse jet pulse cleaning and increases filter life. With three available methods to initiate the filter cleaning cycle, every Vertical Dust Collector is equipped with the control system that best fits the application.

IMPROVED FAN OPERATION

Venturi and innovative cylindrical fan housing increases performance, attenuates noise, simplifies maintenance and eliminates the need for a discharge damper.

EASE OF MAINTENANCE

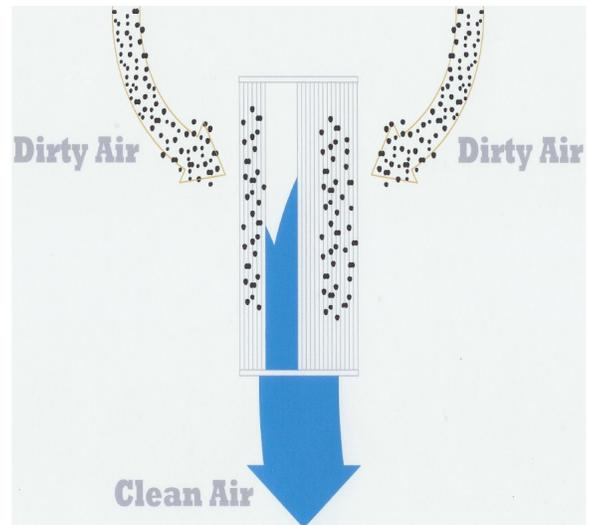
Outstanding design features combine to promote longer filter life. Easy access allows each filter to be changed within several minutes.

SPACE ECONOMY

The downflow/vertical design has a smaller footprint than comparable units with horizontal filters.

ROCK-SOLID INDUSTRIAL CONSTRUCTION

Vertical Dust Collectors are built for durability and reliability with 11 gauge steel fabrication and welded seams and joints.



FROM A LEADER IN CLEAN AIR TECHNOLOGY

Diversified Air Systems, Inc. is an Industry Leader in manufacturing highly efficient, low maintenance, cost effective solutions for dust and fume control. Diversified Air Systems, Inc. has designed state of the art Dust Collectors which utilize a patented down flow design, and is proud to have placed units with Manufacturing Leaders, such as:

John Deere
Emerson
TVA

Siemens
Toyota
Rockwell

Airgas
Electrolux
Martinrea



Note: Specifications listed above may be modified to suit application. contact D.A.S. or representative for information.

Diversified Air Systems, Inc.

10801 Electron Drive, Louisville, Kentucky 40299

Toll free: **(800) 264-8958**

Tel.: **(502) 267-0333** • Fax: **(502) 267-4241**

Website: www.diversair.com • email: info@diversair.com

HOW OUR VERTICAL DUST COLLECTORS OPERATE

Contaminated air enters the collector above the filter cartridges. Specially designed components in the cabinet uniformly distribute the contaminated air across the top of the filters. The contaminated air flows downward at a steady velocity. Dust is conveyed to the settling area below the filters by both air flow and gravity. Extremely small particulate is collected on the filter media, allowing clean air to return to the workplace or outside environment. Once particulate collection on the filters is sufficient to reduce air flow, the patented reverse jet pulse cleaning system propels the collected dust off of the filters and into the settling area,

DOWNFLOW

The Vertical Series downflow/vertical design produces zero velocity at the base of each filter stack, allowing the dust to settle uninhibited below cartridges, thereby eliminating re-entrainment.

CARTRIDGE FILTERS

The standard 80% cellulose 20% polyester cartridge media is high in resin content to provide mechanical resilience, and has pleat-lock construction. Standard cartridges are rated for temperature up to 160 degrees Fahrenheit. High temperature cartridges are also available.

DUST SETTLING

The Vertical Series design allows larger dust contaminants to have a clear path to the dust settling area and finer particles to be collected by the filters.

VENTURI

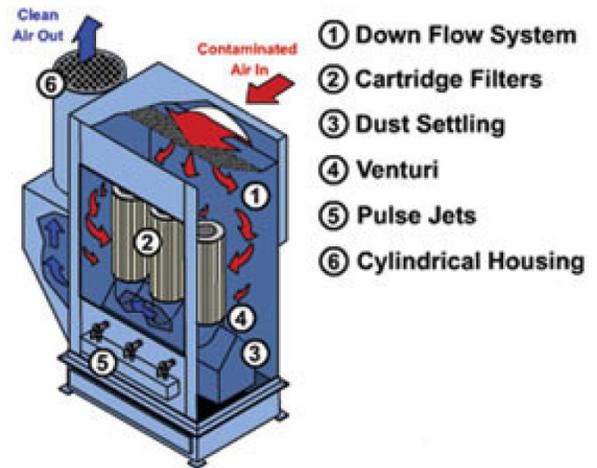
Venturi reverse pulse cleaning is the quick release of pressure through a blowtube into a venture enductor tube into a cartridge filter. A higher volume of air is induced via this principle. The resulting burst of compressed air is more equally dispersed across the filter resulting in greater cleaning effectiveness compared to typical reverse pulse cleaning.

PULSE JETS

Pulse jet performance and economy are maximized by optimizing the orifice size and position. There are four methods of initiating jet pulse cleaning to best fit each application.

CYLINDRICAL FAN HOUSING

The motor, fan and inlet cone are packaged into a tubular centrifugal fan arrangement for greater performance, quieter operation and simplified maintenance.



DUST COLLECTION EFFICIENCY

The major obstacle to dust collection efficiency is re-entrainment, the re-filtering of dust that has been stirred up prior to settling. The goal is to dislodge the dust from the filter and allow it to settle in the hopper below.

The Vertical Series utilizes patented downflow/verticle technology to minimize re-entrainment and extend filter life. Carefully managed inlet air velocity ensures that the air only flows downward, never upward or sideways. This prevents air movement below the filters where the dust has settled and results in effective cleaning while the dust collector is operating and shut down.



Note: Specifications listed above may be modified to suit application. contact D.A.S. or representative for information.

Diversified Air Systems, Inc.

10801 Electron Drive, Louisville, Kentucky 40299

Toll free: **(800) 264-8958**

Tel.: **(502) 267-0333** • Fax: **(502) 267-4241**

Website: www.diversair.com • email: info@diversair.com

MAXFLO-Vertical Dust Collector Specifications

| <u>Model</u> | <u>Filters</u> | <u>Sq. Ft. Media</u> | <u>Hoppers</u> | <u>Standard Height (in.)</u> | <u>Standard Width (in.)</u> | <u>Standard Depth (in.)</u> | <u>Unit Weight (lb)</u> |
|---------------------|-----------------------|-----------------------------|-----------------------|-------------------------------------|------------------------------------|------------------------------------|--------------------------------|
| V - 2S | 2 | 508 | 1 | 144.63 | 42.25 | 55.31 | 1,100 |
| V - 4S | 4 | 1,016 | 1 | 152.19 | 42.25 | 55.31 | 1,650 |
| V - 4 | 4 | 1,016 | 1 | 152.19 | 42.25 | 55.31 | 1,200 |
| V - 6 | 6 | 1,524 | 1 | 166.19 | 84.88 | 40.81 | 1,900 |
| V - 8 | 8 | 2,032 | 1 | 159.38 | 76.06 | 49.25 | 2,000 |
| V - 12 | 12 | 3,048 | 1 | 166.16 | 86.13 | 62.13 | 2,600 |
| V - 18 | 18 | 4,572 | 1 | 177.06 | 96.19 | 69.25 | 3,550 |
| V - 24 | 24 | 6,096 | 1 | 188.88 | 113.56 | 70.25 | 4,200 |
| V - 32 | 32 | 8,128 | 1 | 202.19 | 115.21 | 90.25 | 5,200 |
| V - 40 | 40 | 10,160 | 2 | 188.88 | 115.75 | 110.25 | 5,025 |
| V - 48 | 48 | 12,192 | 2 | 189.75 | 130.25 | 96.31 | 5,690 |
| V - 56 | 56 | 14,224 | 2 | 194.19 | 150.25 | 96.31 | 6,400 |
| V - 64 | 64 | 16,256 | 2 | 203.38 | 170.25 | 96.31 | 7,000 |
| V - 72 | 72 | 18,288 | 2 | 189.75 | 190.25 | 96.31 | 7,800 |
| V - 80 | 80 | 20,320 | 3 | 191.75 | 210.25 | 96.31 | 8,600 |
| V - 96 | 96 | 24,384 | 4 | 189.75 | 260.50 | 96.31 | 11,000 |
| V - 112 | 112 | 28,448 | 4 | 194.75 | 300.50 | 96.31 | 12,800 |
| V - 128 | 128 | 32,512 | 4 | 203.38 | 340.50 | 96.31 | 14,900 |

Notes:

1. Models V-2S thru V-40 dimensions & weights include standard top mount blowers & inlets
2. Models V-48 thru V-128 dimensions & weights do not include ground mount/remote blowers
3. All dimensions & weights include hopper/leg sets for a 55-gallon drum base

Note: Specifications listed above may be modified to suit application. contact D.A.S. or representative for information.

Diversified Air Systems, Inc.

10801 Electron Drive, Louisville, Kentucky 40299

Toll free: **(800) 264-8958**Tel.: **(502) 267-0333** • Fax: **(502) 267-4241**Website: www.diversair.com • email: info@diversair.com

MAXFLO Vertical Dust Collector

The MAXFLO Vertical Dust Collector is a patented Down Flow system with Vertically positioned filters which eliminates particulate re-entrainment and improves filter life. Our Patented Venturi Assist Design optimizes reverse jet pulse cleaning, improves contaminant release and filter life. The vertical design with self contained blowers have a much smaller footprint than horizontal units.

Specifications & Options

| | |
|--|--|
| | V-2S thru V-128 |
| Construction | 7 ga./11 ga. Carbon Steel Welded Construction |
| Paint | Powder Coated Signal Blue |
| Base Unit Includes | Collector, Legs, Hopper & Turbo Pulse Control |
| Self Contained Unit Mount Motors/Blowers | 3HP thru 50HP DD 208/230/460v/3ph/60hz |
| Ground Mount Motors/Blowers | BI-AF Class III & IV Balanced & Tested |
| Motor Starters & VFD's | Combo NEMA 12 & NEMA 1 VFD or Magnetic |
| Drums & Drum Lid Kit | 20 or 55 Gallon Dust Drum & 14" Drum Lid Kits |
| Cleaning System Compressed Air | Reverse Jet Pulse, Dual 1.5" Valves & Manifolds |
| Digital Turbo Cleaning | PC Turbo Digital Pulse Control & Cycle Down |
| Filter Media | 80/20 Blend, Spun Bond Poly & Fire Retardant |
| Media Efficiency | 99.5% @ 0.5 Micron |
| Side & Abrasive Inlets | Designed for Fine or Abrasive Particulate |
| Silencers | ILC Silencers for Sound Attenuation |
| Explosion Vents | Explosion Vents with Membranes or Latches |
| Fire Suppression | Sprinkler Head(s) with Coupling (212F) 1/2" NPT |
| Catwalks & Ladders | Handrails, Safety Gate & Bar Grate for Security |
| Structural Ratings | 100 MPH Wind Load & Seismic Zone 4 |
| Additional Options | Rotary Air Lock, Compressed Air Coalescing Filter, Dust Trays, Afterfilters & Custom Paint |

Note: Specifications listed above may be modified to suit application. contact D.A.S. or representative for information.

Diversified Air Systems, Inc.

10801 Electron Drive, Louisville, Kentucky 40299

Toll free: **(800) 264-8958**

Tel.: **(502) 267-0333** • Fax: **(502) 267-4241**

Website: www.diversair.com • email: info@diversair.com