

# Downflo® WorkStation Dust Collectors



# Downflo® WorkStation

## Outperforms All Other Collectors

Downflo® WorkStations fit anywhere on the plant floor and apply NO restrictions to worker movements or visibility. The full line of WorkStations is designed specifically for those in-plant areas where dirty and/or noisy operations are out in the open—grinding, sanding, chipping, batch mixing or welding.

The Downflo WorkStation's advantages are found in the collector's exclusive design and patented components. Featuring a ledgeless design in combination with patented Ultra-Web® filter media and ExtraLife™ cleaning technology, the DWS delivers exceptional performance in metalworking applications, wood applications, and process applications where high filtration efficiency and ledgeless construction is often a requirement.

### DWS Offers:

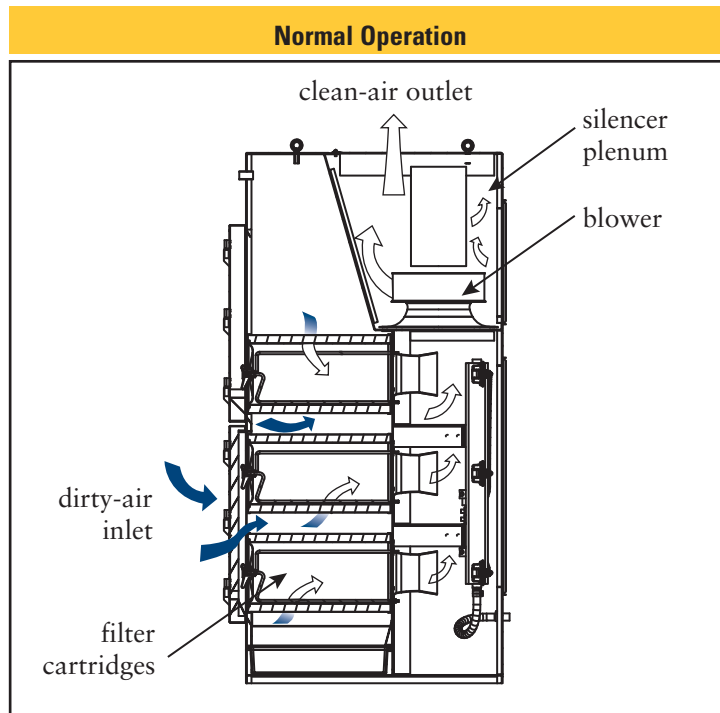
- **Flexible, modular, self-contained workstations**
- **Patented Ultra-Web cartridge filters provide cleaner air longer**
- **Easy filter access requires no tools**
- **No hoods or ductwork required**
- **Energy savings - recirculate clean air and reduce the need for costly make-up air**
- **Ledgeless construction minimizes dust build up inside the collector**
- **Reversible louver inlets**
- **10-year warranty**



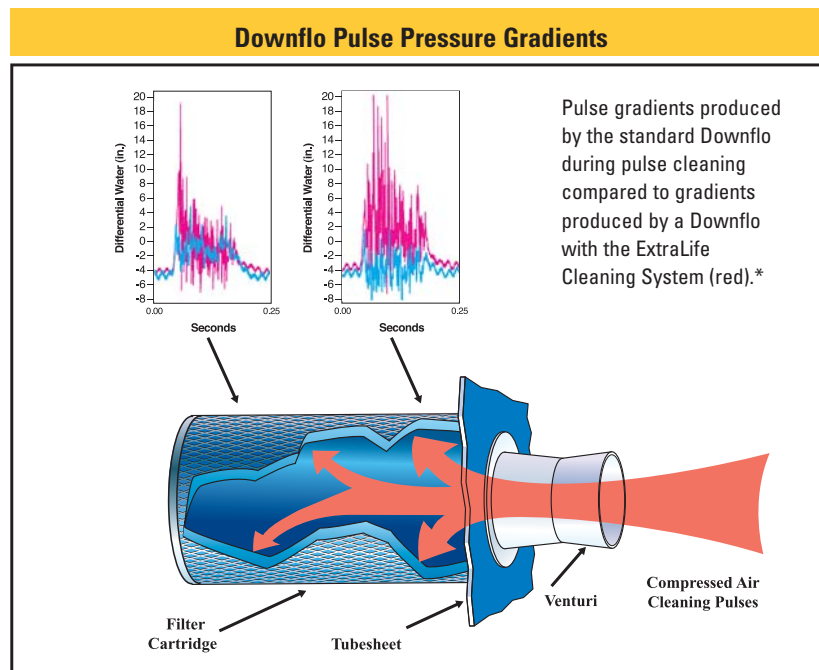
DWS 6-1

# Downflo<sup>®</sup> WorkStation

## Sizes & Operations



**Pulse Cleaning Technology** ExtraLife™ Filter Cleaning System uses proprietary, computer-modeled pulse cleaning technology to easily “pulse off” dust from the surface of the filter, improving filtration efficiency and prolonging filter life.

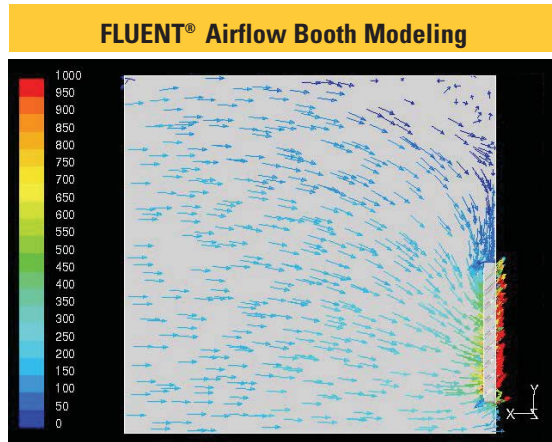


\* The red lines in the illustration show the increased pressure at the front of the Downflo filter generated by the ExtraLife system. The blue line shows the pulse signature of a standard cartridge collector.

# Downflo<sup>®</sup> WorkStation

## Engineered for Reliable Performance

**Downflo WorkStation Booth Packs** are a reflection of Donaldson Torit's commitment to technical research and development. Sophisticated FLUENT<sup>®</sup>\*\* airflow modeling software revealed that DWS booth packs are designed for adequate and consistent capture velocities at the booth opening and throughout the booth.



- No system imbalance
- No air turbulence
- No hot spots
- No uncomfortable draft inside the booth that can upset working conditions

**DWS Booths Are Designed** to remove fine airborne contaminants from the workers' breathing zone and provide a cleaner working environment in metalworking, woodworking, and process applications.



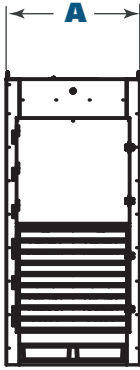
Models**	Canopy with Side Shields	Soft-Wall Weld Curtains	Soft-Wall Acoustical Curtains	Hard-Wall Galvanized Panels	Hard-Wall Acoustical Panels
Purpose	Most basic booth/hooding arrangement	Lightweight structure for use under most light conditions	Lightweight structure for moderate sound control	Heavy-duty structure/smooth walls for easy washdown	Heavy-duty structure for higher sound control
DWS 4-1	45 x 36 x 90	—	—	—	—
DWS 4-2	90 x 36 x 90	90 x 90 x 90	90 x 90 x 90	90 x 90 x 90	90 x 90 x 90
DWS 4-3	—	135 x 90 x 90	135 x 90 x 90	135 x 90 x 90	135 x 90 x 90
DWS 4-4	—	180 x 90 x 90	180 x 90 x 90	180 x 90 x 90	180 x 90 x 90
DWS 4-5+	—	Custom	Custom	Custom	Custom
DWS 6-1	45 x 36 x 90	67.5 x 90 x 90	67.5 x 90 x 90	—	—
DWS 6-2	90 x 36 x 90	135 x 90 x 90	135 x 90 x 90	90 x 90 x 90	90 x 90 x 90
DWS 6-3	—	180 x 90 x 90	180 x 90 x 90	135 x 90 x 90	135 x 90 x 90
DWS 6-4	—	Custom	Custom	180 x 90 x 90	180 x 90 x 90
DWS 6-4+	—	Custom	Custom	Custom	Custom

\* FLUENT is a registered trademark of Fluent, Inc.

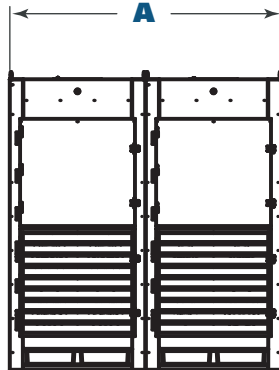
\*\* Dimensions are width x depth x height in inches.

# Downflo<sup>®</sup> WorkStation

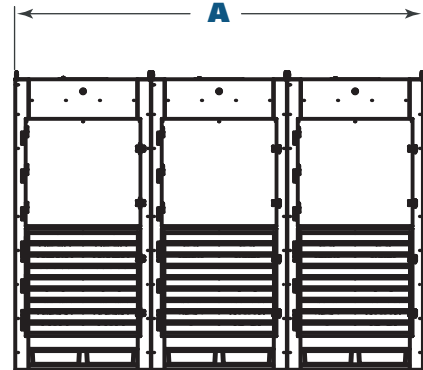
## Dimensions & Specifications



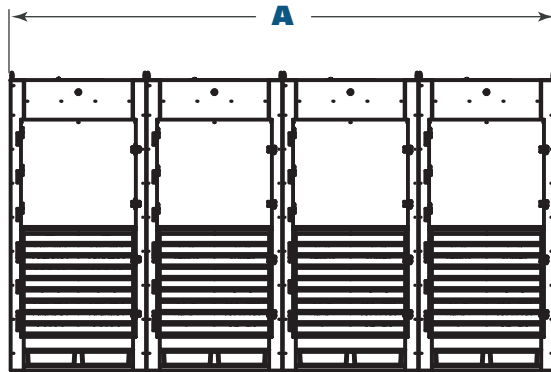
Front View  
DWS 4-1, DWS 6-1 - Models



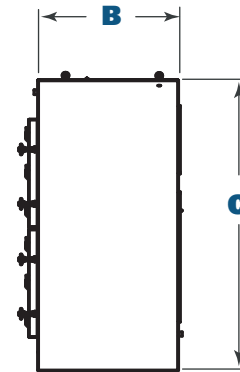
Front View  
DWS 4-2, DWS 6-2 - Models



Front View  
DWS 4-3, DWS 6-3 - Models



Front View  
DWS 4-4, DWS 6-4 - Models



Side View  
All Models

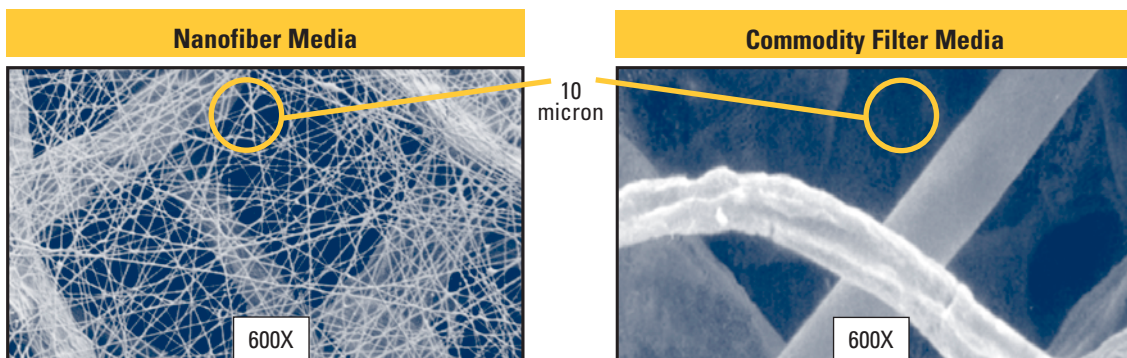
Base Model*	Modular Assemblies	Nominal Airflow** (cfm)	No. of Filters	Ultra-Web Filter Area (ft <sup>2</sup> )	No. of Modules	No. of Valves	No. of Dust Drawers	Shipping Weight (lbs)	Dimensions (inches)		
									A	B	C
DWS 4-1		4,500	4	760	1	4	2	1,300	45.0	47.8	96.0
	DWS 4-2	9,000	8	1,520	2	8	4	2,600	90.0	47.8	96.0
	DWS 4-3	13,500	12	2,280	3	12	6	3,900	135.0	47.8	96.0
	DWS 4-4	18,000	16	3,040	4	16	8	5,200	180.0	47.8	96.0
DWS 6-1		5,500	6	1,140	1	6	2	1,350	45.0	47.8	96.0
	DWS 6-2	11,000	12	2,280	2	12	4	2,700	90.0	47.8	96.0
	DWS 6-3	16,500	18	3,420	3	18	6	4,050	135.0	47.8	96.0
	DWS 6-4	22,000	24	4,560	4	24	8	5,400	180.0	47.8	96.0

\* The first number indicates number of filters in the power module, and the second number indicates number of power modules.  
 \*\* Based on clean filters.

# Downflo<sup>®</sup> WorkStation

## Cartridge Filter Technology

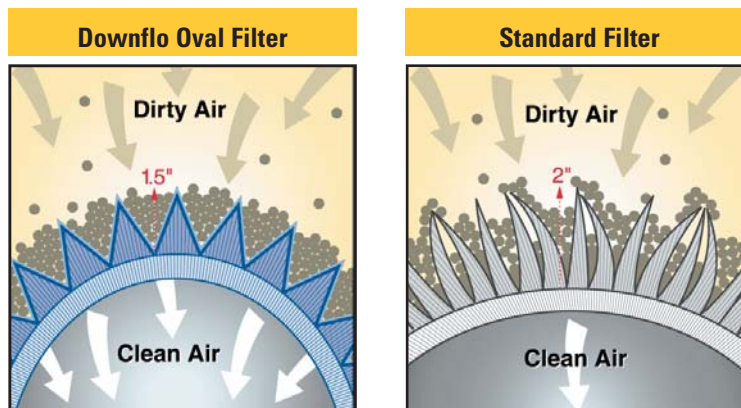
**High Performance Filters** The Downflo Oval filter design is another indication of Donaldson Torit's commitment to technical research and development. The distinguishing factor in our filters is Ultra-Web<sup>®</sup> filtration technology. *Ultra-Web nanofiber media* uses a layer of fibers 0.2 to 0.3 microns in diameter to capture contaminants on the surface of the media less than one micron in size. The resulting dust cake is easily cleaned off during the automated collector cleaning cycles providing cleaner air longer, with a minimum MERV\* 13 efficiency rating based on ASHRAE 52.2 - 1999 test standards.



Nanofiber surface loading technology is available in all Ultra-Web and Fibra-Web filter cartridges.

Conventional media has spaces of up to 60 microns between fibers, allowing dust to become deeply embedded.

**DFO Filter Media Pleats** Shorter and stiffer filter pleats help minimize dust entrapment and simplify filter cleaning. A shorter pleat wall is less likely to collapse or bend, which provides a stronger pleat structure with improved cleaning and dust release capabilities during pulse cleaning.



**Cartridge Filters for Many Applications** The Downflo WorkStations in conjunction with Donaldson Torit's unique oval-shaped filter cartridges are an unbeatable system. Choose from our superior line of filters to complete the most powerful filtration solution available for your application.

# Downflo® WorkStation

## Standard Features & Equipment Options

	Standard	Optional		Standard	Optional
<b>Collector Design</b>					
Ledgeless Construction 14 Gauge	X				
Tube-sheet, Base Plate 10 Gauge	X				
High Performance Acoustical Airfoil Fans	X				
Aluminum Fan Wheels	X				
TEFC Motors – 5, 7.5 HP, 60 Hz	X				
TEFC Motors – 4, 5.5 kW, 50 Hz		X			
Fan Compartment Fully Lined w/Silencer Foam	X				
ExtraLife™ Filter Cleaning System	X				
Compressed Air Required – 50 PSIG	X				
Fully Lined and Silenced Clean Air Plenum	X				
Reversible Open Louver Inlet		X			
Quick and Easy Filter Access	X				
Acoustical Panel		X			
Two Plastic Dust Drawers per Power Mod	X				
Galvanized Steel Dust Drawers		X			
Integral Silencer	X				
Chamber Silencer		X			
Caster Packs		X			
Downdraft Bench Pack		X			
Bag-Out Bag (Filter & Dust Drawer)		X			
Sprinkler Pipe Coupling	X				
Sprinkler Pack Assembly		X			
<b>Cartridge Filters</b>					
Ultra-Web® (MERV* 13)	X				
Ultra-Tek® (MERV 12)					
Thermo-Tek® (MERV 12)					
Fibra-Web® (MERV 14)					X
Ultra-Web SB (MERV 15)					
Torit-TEX™ (MERV 16)					
HEPA/ASHRAE Afterfilters		X			
<b>Paint System</b>					
Primed inside and out. Exterior surfaces finished blue.			X		
Custom Color				X	
<b>Electrical Controls, Gauges and Enclosures</b>					
Solid State Timer in NEMA 4 Enclosure		X			
Delta P or Delta P Plus Control Panels				X	
IEC Control Panel				X	
Magnehelic® Gauge				X	
Photohelic® Gauge				X	
<b>Booth Options</b>					
Canopy w/Side Shields - Painted steel construction side panels swing out 90°.					X
Soft-Wall Weld Curtains - Galvanized steel frames with clear PVC roof panels and blue translucent PVC side panels approved for welding.					X
Soft-Wall Acoustical Curtains - Galvanized steel frames with clear PVC roof and gray acoustical side panels.					X
Hard-Wall Galvanized Panels					X
Hard-Wall Acoustical Panels					X
<b>Booth Lighting Packs</b>					
Industrial Light Fixtures					X
Dust Tight Lens Fixtures					X
Flush Light Fixtures					X
<b>Sound Level**</b>					
5 HP & 4 kW Power Packs – 63 dB(A)					
7.5 HP & 5.5 kW Power Packs – 68 dB(A)					
LAEq Pulse Average – 84-86 dB(A)					
<b>Warranty</b>					
10-Year Warranty			X		

® Magnehelic and Photohelic are registered trademarks of Dwyer Instruments, Inc.

\* The Minimum Efficiency Reporting Value (MERV) of this filter cartridge has been determined through independent laboratory testing using ASHRAE 52.2 (1999) test standards. The MERV rating was determined at a face velocity of 118 feet per minute and loading up to four inches water gauge. Actual efficiency of any filter cartridge will vary according to the specific application parameters. Dust concentration, airflow, particle characteristics, and pulse cleaning methods all affect filtration efficiency.

\*\* Sound measurements were taken in a hemianechoic chamber and under free-field conditions and do not reflect the influences of actual operating environments. Standard sound pressure levels were taken at an operator position of 1.5m high and 1m from each of the four sides of the cabinet.

U.S. Patents 6,488,746; 6,090,173; 5,562,746

Information contained in this document is subject to change without notice.

# Cleaner Air Worldwide

## Better Technology



- 550 engineers worldwide
- More than 500 patents
- Broad range of innovative collectors and filters
- 100's of media formulations

## Experience & Service



- Technical expertise and support
- Ready-to-ship filters and parts within 24 hours
- 1,000,000+ dust, fume, & mist collectors installed

## Global Support



- Facilities in 35 countries
- 37 manufacturing plants and 11 distribution centers
- Sales offices worldwide



# Donaldson®

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to get Cleaner Air today  
800-365-1331**

