# **M**onoxAII

### Self-Contained Shaker Type Dust Collector

Leading the Way in Dry Dust Collection Technology







### **Monoxivent Source Capture Systems**

The manufacturing capabilities of Monoxivent include a complete line of vehicle exhaust extraction systems, hose reels, overhead and underground exhaust systems, rail systems, source capture flex arms, portable filter units, wall mount filter systems, cartridge collectors with air pulse cleaning, cyclone dust collectors, free hanging filter units, fiberglass reinforced plastic UnderDuct/ Corrosion Composites, and custom design build services for special requirements from our customers.

Monoxivent prides itself in developing and offering products that meet the demand for "user friendly systems." The design has been based upon direct communication with end users, listening to their needs and improving upon various ideas and concepts. This method of design caters to the users of our systems, thus making the purchase of Monoxivent products a wise investment.



## The MonoxAll Advantage

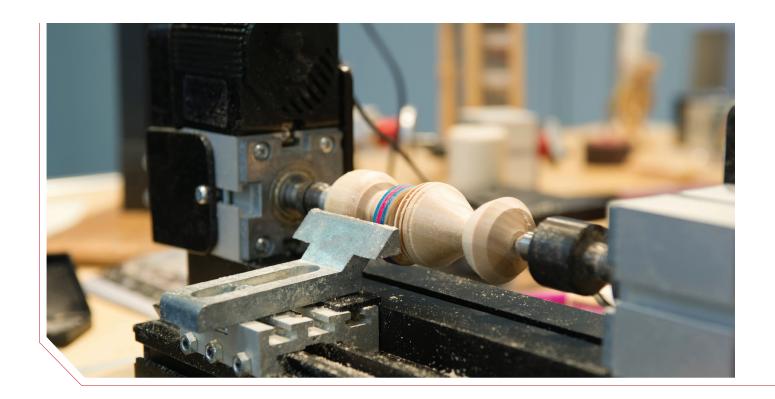
The MonoxAll dust collector is a compact and efficient solution to small and medium volume dry dust problems. Designed to control dust from a single source or system, the MonoxiAll saves energy by recirculating clean air.

AAF dust control experts designed the MonoxAll for many years of trouble-free, efficient service. Its design allows maximized airflow and efficiency.

#### **Benefits**

- Excellent filtration
- Self-contained operation to plug and play
- No compressed air required
- Compact design
- Mitigates combustible dust risk in ST1 dust applications
- Tool-less filter change
- Long filter life





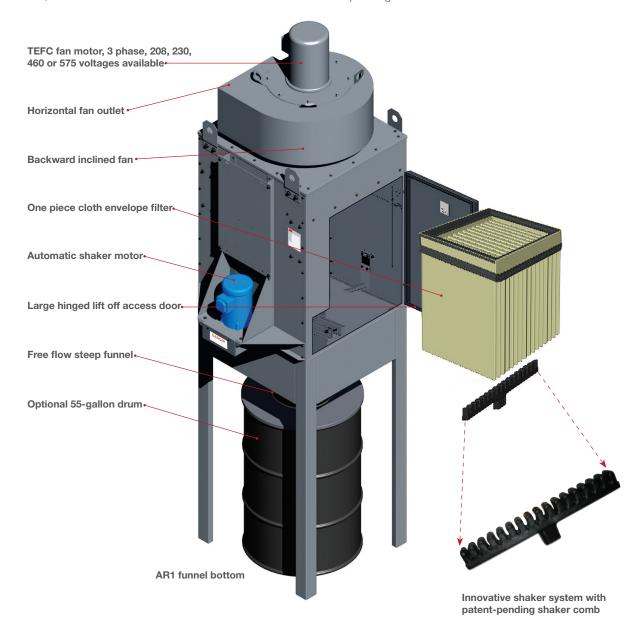
# Applications

- Woodworking
- Pharmaceuticals
- Rubber & plastic
- Sanding
- Sawing
- Trimming



### Monox All Sizes AR1-3 Through AR2-10

MonoxAll sizes AR1-3 through AR2-10 are compact, self-contained dust collectors. Available in bin vent, flat bottom or funnel bottom dust disposal arrangements, each unit consists of a housing with fan, motor, filter envelope and automatic shaker. The flat bottom unit offers the advantage of very low headroom, while the funnel bottom features the dust storage advantage of a single 55-gallon (189.27-liter) drum on AR1-3. Two drums are utilized with the AR2-5, AR2-7.5 and AR2-10. The bin vent model includes weatherproofing with rain hood.



### MonoxAll Sizes AR3-10 Through AR6-25

MonoxAll sizes AR3-10 and larger are compact, self-contained dust collectors available in bin vent or funnel bottom dust disposal arrangements. Each unit consists of a housing with fan, motor, filter envelopes and automatic shaker. The bin vent unit offers the advantage of very low headroom for indoor use and weatherproofing with rain hood for outdoor locations. The funnel bottom units feature the advantage of utilizing 55-gallon (189.27-liter) drums for collecting and storage of the dust.

#### **Efficient Operation**

Monoxivent dust control experts designed the MonoxAll for many years of trouble-free, efficient service. The MonoxAll performs effectively in a variety of applications such as woodworking, grinding, polishing, packaging and bin venting. Automatic off-line cleaning of filters is standard on all units.

#### **World-Class Quality**

Many of the technologies used to control air pollution were originally developed by **Monoxivent** Our facilities are specifically designed to manufacture and test complex air pollution control products. During the entire production process, our operations are governed by our certified quality system.

#### **Superior Shaker Action**

The MonoxAll shaker moves the filter envelope with the necessary acceleration and frequency to dislodge the dust cake, providing excellent filter fabric cleaning. Force is distributed throughout the fabric pocket by a shaker bar that holds each pocket and its internal separator framework.

Automatic shakers are standard in sizes AR1-3 through AR6-25. A micro-electronic controller is mounted and wired to the shaker motor. The controller is UL-508 and CSA approved.

#### **Quiet - Meets OSHA Limits**

MonoxAll collectors include silencing to comply with OSHA noise limits.

#### **Dust Disposal Choices**

Select the MonoxAll dust disposal arrangement that best fits your application. Model AR1 is available in flat bottom with drawer and funnel bottom. Model AR2 is available in flat bottom with drawer or carts or funnel bottom. AR4 and AR6 are available only with funnel bottom. The flat bottom units include generously sized collector bins or carts. Access doors feature large, quick opening latches. The funnel bottom units fit 55-gallon (189.27-liter) drums.

#### **High-Performance Fans**

The non-overloading fan delivers more air at higher static pressures and reduces capacity variation and suction loss as the dust cake builds on the filter fabric. With the fan on the clean air side, dust and other collected material are filtered out by the fabric filter before reaching the fan, resulting in long, reliable performance.

#### **Filter Pocket Spacing to Match Applications**

The MonoxAll filter is available with either standard or extra wide pocket spacing. The extra wide spacing is ideal for coarse or fibrous dust as found in grinding or woodworking applications. The standard pocket spacing is recommended for fine dust applications.

#### **Optimized Filter Design**

The MonoxAll filter has been designed to maximize airflow and efficiency. The pocket and separator geometry minimizes differential pressure. The one-piece construction adds strength and sealing integrity to achieve up to 99+% efficiency on general industrial dust by weight.

#### **Smooth Flow Design**

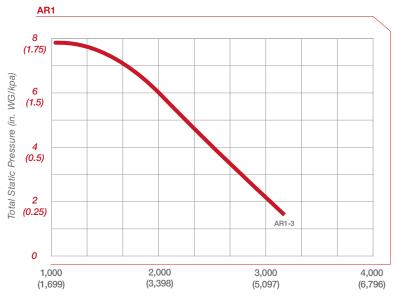
The MonoxAll filter design minimizes internal turbulence and differential pressure. Air flows vertically inside the filter pockets, guided by the corrugated spacers. This produces a laminar flow into the horizontal fan inlet cone.



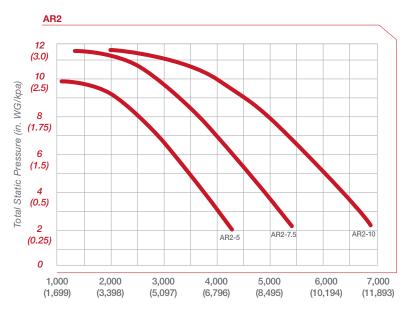


# MonoxAll

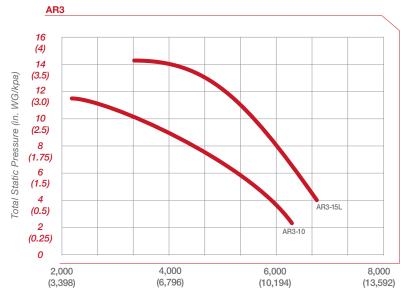
#### **Direct Drive Fan Performance**



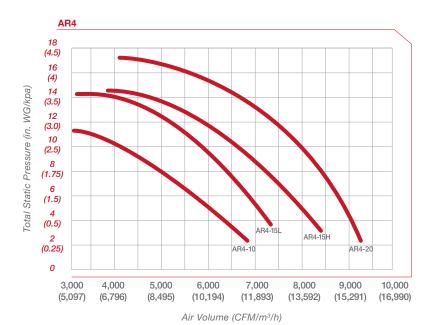
Air Volume (CFM/m³/h)



Air Volume (CFM/m³/h)



Air Volume (CFM/m³/h)



AR6 18 (4.5)16 (4) 14 Total Static Pressure (in. WG/kpa) (3.5) 12 (3.0)10 (2.5) 8 (1.75) (1.5)(0.5)AR6-20 AR6-25 2 (0.25) 0 4,000 5,000 6,000 7,000 8,000 9,000 10,000 11,000 12,000 (6,796) (8,495) (10,194) (11,893) (13,592) (15,291) (16,990) (18,689) (20,388)

Air Volume (CFM/m³/h)

## Available Options and Accessories

#### **Options**

- Sprinkler system
- Alternate bag media
- Hopper discharge devices
- Hopper transitions
- Top mounted fan
- Fan silencer
- Bin vent design
- Dust drawer design (on specific sizes)
- Dust cart design (on specific sizes)
- Explosion vents
- Control center with fan starter
- Integral HEPA/ASHRAE filters
- Fan-machine interlock

#### Accessories

- Explosion protection equipment
- Fan
- Fan silencer
- Airlocks
- Screw conveyors
- AAF control center
- Custom paint systems

MonoxAll with Silencer Sound Data							
Model	Sound Level (dBA @ 3 ft/914 mm)						
AR1-3	75						
AR2-5	79						
AR2-7.5	77						
AR2-10 AR3-10 AR4-10	77						
AR3-15L AR4-15L	77						
AR3-15H AR4-15H	82						
AR4-20 AR6-20	81						
AR6-25	81						

Models with Silencer Sound Data									
Sound Level (dBA @ 3 ft/914 mm)									
AR1-3	AR2-5	AR2-7.5	AR2-10 AR3-10 AR4-10	AR3-15L AR4-15L	AR3-15H AR4-15H	AR4-20 AR6-20	AR6-25		
75	79	77	77	77	82	81	81		



## Dimensions and Specifications

Model	Ctulo*	Number of	Filter	Area	Height		Width		Depth		Approximate Weight	
Model	Style*	Cartridges	Sq. Ft.	Sq. M.	Inches	mm	Inches	mm	Inches	mm	Lbs.	Kgs.
AR 1-3	FB	1	132	12.3	127	3,226	37-3/16	945	35	889	615	279
AR 1-3	BV	1	132	12.3	68	1,727	37-3/16	945	35	889	465	211
AR 1-3	DD	1	132	12.3	86	2,184	37-3/16	945	35	889	550	249
AR 1-3	DC	1	132	12.3	108	2,743	37-3/16	945	35	889	660	299
AR 2-5	FB	2	264	24.5	134-7/8	3,426	37-3/16	945	58-1/2	1,486	935	424
AR 2-5	BV	2	264	24.5	71-1/2	1,816	37-3/16	945	58-1/2	1,486	680	308
AR 2-5	DC	2	264	24.5	111-1/2	2,832	37-3/16	945	58-1/2	1,486	1,020	463
AR 2-7.5	FB	2	264	24.5	134-7/8	3,426	37-3/16	945	58-1/2	1,486	990	449
AR 2-7.5	BV	2	264	24.5	71-1/2	1,816	37-3/16	945	58-1/2	1,486	735	333
AR 2-7.5	DC	2	264	24.5	111-1/2	2,832	37-3/16	945	58-1/2	1,486	1,070	485
AR 2-10	FB	2	264	24.5	134-7/8	3,426	37-3/16	945	58-1/2	1,486	1,000	454
AR 2-10	BV	2	264	24.5	71-1/2	1,816	37-3/16	945	58-1/2	1,486	745	338
AR 2-10	DC	2	264	24.5	111-1/2	2,832	37-3/16	945	58-1/2	1,486	1,080	490
AR 3-10	FB	3	396	36.8	141-1/8	3,585	93-1/16	2,364	35	889	1,250	567
AR 3-10	BV	3	396	36.8	73-1/16	1,856	93-1/16	2,364	35	889	800	363
AR 3-10	DC	3	396	36.8	113	2,870	93-1/16	2,364	35	889	1,300	590
AR3-15	FB	3	396	36.8	141-1/8	3,585	93-1/16	2,364	35	889	1,430	8,986
AR3-15	BV	3	396	36.8	73-1/16	1,856	93-1/16	2,364	35	889	980	445
AR3-15	DC	3	396	36.8	113	2,870	93-1/16	2,364	35	889	1,480	671
AR 4-10	FB	4	528	49.1	134-3/16	3,408	65-1/8	1, 654	60	1,524	1,400	635
AR 4-10	BV	4	528	49.1	73-1/8	1,857	65-1/8	1,654	60	1,524	1,030	467
AR 4-15L	FB	4	528	49.1	134-3/16	3,408	65-1/8	1,654	60	1,524	1,500	680
AR 4-15L	BV	4	528	49.1	73-1/8	1,857	65-1/8	1,654	60	1,524	1,130	513
AR 4-15H	FB	4	528	49.1	135	3,429	65-1/8	1,654	60	1,524	1,500	680
AR 4-15H	BV	4	528	49.1	73-7/8	1,876	65-1/8	1,654	60	1,524	1,130	513
AR 4-20	FB	4	528	49.1	136-3/8	3,464	65-1/8	1,654	60	1,524	1,530	694
AR 4-20	BV	4	528	49.1	75-1/4	1,911	65-1/8	1,654	60	1,524	1,150	522
AR 6-20	FB	6	792	73.6	143-3/8	3,642	92-7/8	2,359	60	1,524	1,960	889
AR 6-20	BV	6	792	73.6	75-1/4	1,911	92-7/8	2,359	60	1,524	1,443	655
AR 6-25	FB	6	792	73.6	151-7/16	3,847	92-7/8	2,359	60	1,524	2,070	939
AR 6-25	BV	6	792	73.6	83-5/16	2,116	92-7/8	2,359	60	1,524	1,550	703

#### NOTES

- I. Weight does not include any accessories such as explosion vents or controls.
- $\begin{tabular}{ll} \bf 2. & {\bf See} \ sales \ drawings \ for \ complete \ dimensions. \end{tabular}$
- 3. Filter Area is based on the standard wide filters.
- $\textbf{4.} \ \ \text{Depth does not include fan silencer or transition}.$
- \* FB= Funnel Bottom, BV= Bin Vent, DD-= Dust Drawer, DC= Dust Cart

Sales Office:

### **MONOXIVENT**

I 306 Mill Street Rock Island, IL 61201 877-608-4383 info@monoxivent.com www.monoxivent.com

Model Style*	Style*	No. of Cartridges	Filter Area		Height		Width		Depth		Approx. Weight	
	Cartifuges	sq ft	sq m	in	mm	in	mm	in	mm	lb	kg	
AR 1-3	FB	1	132	12.3	127	3226	37 3/16	945	35	889	615	279
AR 1-3	BV	1	132	12.3	68	1727	37 3/16	945	35	889	465	211
AR 1-3	DD	1	132	12.3	86	2184	37 3/16	945	35	889	550	249
AR 1-3	DC	1	132	12.3	108	2743	37 3/16	945	35	889	660	299
AR 2-5	FB	2	264	24.5	134 7/8	3426	37 3/16	945	58 1/2	1486	935	424
AR 2-5	BV	2	264	24.5	71 1/2	1816	37 3/16	945	58 1/2	1486	680	308
AR 2-5	DC	2	264	24.5	111 1/2	2832	37 3/16	945	58 1/2	1486	1020	463
AR 2-7.5	FB	2	264	24.5	134 7/8	3426	37 3/16	945	58 1/2	1486	990	449
AR 2-7.5	BV	2	264	24.5	71 1/2	1816	37 3/16	945	58 1/2	1486	735	333
AR 2-7.5	DC	2	264	24.5	111 1/2	2832	37 3/16	945	58 1/2	1486	1070	485
AR 2-10	FB	2	264	24.5	134 7/8	3426	37 3/16	945	58 1/2	1486	1000	454
AR 2-10	BV	2	264	24.5	71 1/2	1816	37 3/16	945	58 1/2	1486	745	338
AR 2-10	DC	2	264	24.5	111 1/2	2832	37 3/16	945	58 1/2	1486	1080	490
AR 3-10	FB	3	396	36.8	141 1/8	3585	93 1/16	2364	35	889	1250	567
AR 3-10	BV	3	396	36.8	73 1/16	1856	93 1/16	2364	35	889	800	363
AR 3-10	DC	3	396	36.8	113	2870	93 1/16	2364	35	889	1300	590
AR3-15	FB	3	396	36.8	141 1/8	3585	93 1/16	2364	35	889	1430	8986
AR3-15	BV	3	396	36.8	73 1/16	1856	93 1/16	2364	35	889	980	445
AR3-15	DC	3	396	36.8	113	2870	93 1/16	2364	35	889	1480	671
AR 4-10	FB	4	528	49.1	134 3/16	3408	65 1/8	1654	60	1524	1400	635
AR 4-10	BV	4	528	49.1	73 1/8	1857	65 1/8	1654	60	1524	1030	467
AR 4-15L	FB	4	528	49.1	134 3/16	3408	65 1/8	1654	60	1524	1500	680
AR 4-15L	BV	4	528	49.1	73 1/8	1857	65 1/8	1654	60	1524	1130	513
AR 4-15H	FB	4	528	49.1	135	3429	65 1/8	1654	60	1524	1500	680
AR 4-15H	BV	4	528	49.1	73 7/8	1876	65 1/8	1654	60	1524	1130	513
AR 4-20	FB	4	528	49.1	136 3/8	3464	65 1/8	1654	60	1524	1530	694
AR 4-20	BV	4	528	49.1	75 1/4	1911	65 1/8	1654	60	1524	1150	522
AR 6-20	FB	6	792	73.6	143 3/8	3642	92 7/8	2359	60	1524	1960	889
AR 6-20	BV	6	792	73.6	75 1/4	1911	92 7/8	2359	60	1524	1443	655
AR 6-25	FB	6	792	73.6	151 7/16	3847	92 7/8	2359	60	1524	2070	939
AR 6-25	BV	6	792	73.6	83 5/16	2116	92 7/8	2359	60	1524	1550	703

#### Notes:

Weight does not include any accessories such as explosion vents or controls.

See sales drawings for complete dimensions.

Filter Area is based on the standard wide filters

Depth does not include fan silencer or transition

<sup>\*</sup> FB= Funnel Bottom, BV= Bin Vent, DD-= Dust Drawer, DC= Dust Cart