





ELIMINATE TOXIC FUMES IN YOUR WORKPLACE

Protecting your workplace environment from noxious fumes and particulates is a major concern. Monoxivent has been providing smart and innovative air cleaning solutions for customers since 1953. Monoxivent has the experience you need.

MONOXIVENT COMPANY OVERVIEW:

Monoxivent is guided today by Monoxivent's original values: a commitment to product quality, customer service, innovation, business integrity, and a high regard for individual contributions. Monoxivent, founded in 1953, has grown from a small shop to a thriving corporation that looks to carry its momentum into the years ahead. The company, which specializes in source capture systems and products, competes with the nation's elite in regard to vehicle and fume exhaust solutions.

Monoxivent has grown and moved into a state of the art office, production, and fabrication facility in 2013. The corporate offices are located in a building adjacent to the manufacturing facility. This move has allowed the Monoxivent team to serve its customers with more efficiency, while maintaining the quality that the company has built its foundation upon. The offices and production space for Monoxivent, and parent Crawford Co., are a combined 67,000-sq. feet, located in Rock Island, IL. Monoxivent also acquired additional capabilities and support in 2000. Monoxivent has "in-house" access to a laser-cutting center, a CNC punch, a plasma cutting system, and a team of specialty-weld designers.

The manufacturing capabilities of Monoxivent include a complete line of vehicle exhaust extraction systems, hose reels, overhead and underground exhaust systems, NORFI exhausting 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 communication with end users, listening to their needs and improving upon various ideas and concepts. This method of design caters to users of our systems.



Monoxivent is a division of Crawford Co. Crawford specializes in heating, ventilation, air conditioning, plumbing, laser cutting, and specialty welded fabrication.

Learn more at:
crawford-company.com

Monoxivent Product Overview

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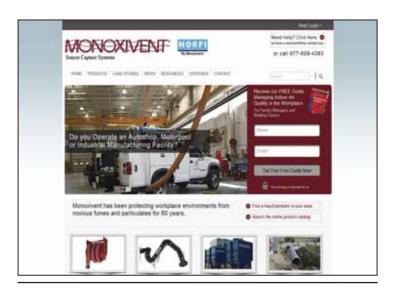
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Visit <u>monoxivent.com</u> for complete technical data, product overviews, application spotlights, and for the latest news from Monoxivent!



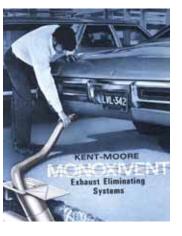
In the interest of continuing product improvement, we reserve the right to change models, specifications, and/or features without prejudice.

MONOXIVENT HISTORY:

Monoxivent, founded in 1953, has grown from a small shop to a thriving corporation. The "Monoxivent brand" originated under the KENT-MORE corporate umbrella in Detroit, MI. In the early days, the company promoted "getting rid of exhaust fumes, without wasting heat!" A selling point that holds true in the 21st Century. Health, safety, and efficiency were also big selling points in the 1950's, as they are today.

The Monoxivent Jr. was an early top seller and was targeted towards gasoline service stations. The system offered an inexpensive, yet practical method of eliminating





fumes. A version of this is offered today with high-temperature hose and door ports.

Underfloor systems were also very popular from the outset. Neoprene, stainless steel, and galvanized tubing were all popular options, especially in the 1960's and 1970's.

The company moved to Moline, IL/Rock Island, IL (Quad Cities), in the 1980's. John Sandberg and Drake DeVore grew the business throughout the nation in the 1980's and through the 1990's. DeVore added "DSP" to the corporate name in the 1990's. Today the company is referred to as Monoxivent once again.

Crawford Co. then purchased Monoxivent in 2000 and brought the company into its' corporate mix. In recent years, under the direction of president Bob Frink, Monoxivent has continued to diversify its' standard product and has increased production of custom items. Sales have continued to grow and the Monoxivent "standard product offering" now totals over 700 items!



Hose Reels, 9000 Series • Vehicle Exhaust Removal





OVERVIEW:

Monoxivent's Hose Reels are the premier solution for vehicle exhaust fume extraction. Hose Reels offer a convenient and efficient method for extracting harmful emissions from all types of service areas. A variety of tailpipe adapters attach to all types of vehicles. Hose Reels are either Motor Operated or Manual Spring Retractable. The Reels are offered in standard 4-, 5-, 6-, and 8-inch hose diameters. The Reels are supplied completely assembled and ready for installation. The Reels may be connected with ductwork to a central exhaust system or each reel may be supplied with a direct mount fan.

FEATURES:

- Spring- or Motor-Operated Hose Reels
- 4", 5", 6", 8" high-temperature silicone nomex or medium-temperature polyester hose standard
- A variety of other hose options are available for special applications

BENEFITS:

 Easy storage and retraction of hose, while competitively priced - motor reel controlled with standard wall-mount switch or optional hanging pendant switch; Wireless radio remote control also available

APPLICATIONS:

 Auto Dealerships, Motorcycle Shops, Light Equipment Repair, Garage Settings, High Ceiling/Bay Applications, Any indoor location where internal combustion engines are run





Hose Reels, 9000 Series • Vehicle Exhaust Removal

Spring Hose Reels



9000, 9000-W SERIES 4-, 5-, 6-, 8-inch Diameter Hose

- Designed for manual extension and spring return of the flexible exhaust hose
- Manually uncoil hose to desired length and lock, when finished unlatch and hose recoils automatically

Reel Breakdown: 9000, 9000-W Mounting Frame Pluct Collar Inlet/Hose Connection

Model	<u>Hose</u> <u>Dia.</u>	<u>Hose</u> <u>Capacity</u>	<u>Drum</u> <u>Dia.</u>	<u>Drum</u> Width
9000	4", 5", 6"	25'	18"	20"
9000-W	4"	40'	25"	33"
9000-W	5", 6"	35'	25"	33"
9000-W	8"	24'	25"	39"

Note, Models above are standard. Models are shown with either 4000 or 5000 Series Hose and may be Spring Retractable or Motor Operated. Other hose options are available.

Motor Hose Reels





9000-MTR, 9000-W-MTR SERIES 4-, 5-, 6-, 8-inch Diameter Hose

- Direct Drive Planetary Gear Motor or Chain Driven Tube Type Motor
- Direct Drive: 120-volt, 1-phase or 220-volt, 1-phase
- Tube Type: 120-volt, 1-phase
- Motor operated by spring rocker switch or by optional 2- or 4button hanging pendant or radio remote control
- Reel equipped with manual override on motor



Hose Reels, 9000 Series • Vehicle Exhaust Removal

Hose Reel Options: 9000, 9000-W

Many options are available with the Monoxivent Hose Reel, including:

DMS-HR Direct Mount Switch to Reel for Fan

On/Off

P2

RC Remote Control for Operation of Motor HR

2-Button Pendulum Switch for Up/Down

Control of Motor HR

P4 4-Button Pendulum Switch for Up/Down

Control of Motor HR and On/Off Fan Control

DMHR Direct Mount to Hose Reel D-Series Blower



Monoxivent Hose Reels may be mounted in three positions: from an overhead support structure, from a side support structure, or on the floor. Ceiling mounts are most common, however wall mounts and floor mounts are options when overhead space is not available.

Tailpipe Adapters: 9000, 9000-W

The 23827 and TCA are the most common Tailpipe Adapters for hose reel systems. However, a wide variety of other styles, configurations, and options are available.

The 23827 has an oval body constructed of 600-degree F heavy wall neoprene rubber. The 23827 is available for 3" and 4" diameter hose.

The TCA (Tapered Cone Adapter) is constructed of stainless steel and fits hose sizes of 4", 5", 6", and 8" (larger sizes available).

A variety of other adapter options are available.

DMHR-Fan: 9000, 9000-W

The D-Series Blower is used for direct mounting to reels and is direct drive, utilizing a radial type wheel. The housing and wheel are spark-proof and constructed of cast aluminum. The fan is available in either 0.5 HP or 1.0 HP. The standard motor is TEFC and is available in a variety of voltage/phase configurations and larger horse power motors. D Series Blowers can be configured to mount independently of hose reels.

Exhausting Hose Options: 9000, 9000-W

4000 Series

The Series 4000 Hose serves as Monoxivent's most common hose for vehicle exhaust source capture. The hose easily withstands temperatures at 600-degrees F and is ideal for use with hose reels or overhead exhaust systems. The 4000 Series Hose has exceeded 600-degrees F during certified testing and has met an intermittent temperature rating of 1250-degrees F. The 4000 hose also meets Military Spec. 62028 for temperature rating (1000-degrees F for 72 hours).

5000 Series

The Series 5000 Hose is a versatile option and may be used for Hose Reels, overhead exhaust systems, underground systems, welding, industrial use, light-duty material handling, and agricultural use. The 5000 hose withstands temperatures up to 500-degrees F.













Hose Reels, XL & L Series • Vehicle Exhaust Removal







L Series Hose Reel - Dual Spring Cassette



OVERVIEW:

Monoxivent offers a wide variety of Oversized Hose Reels within the XL SERIES. These reels are offered with 24"- and 36"-diameter drums. The reels accommodate between 8" and 18" diameter hose. The reels are designed for specialized applications, but not limited to: aircraft ventilation, fume source capture, large diesel source capture, marine applications, and a broad-range of industrial applications. As an option, reels are available with explosion-proof motors and controls. Finishes include powder coated and stainless steel.

Monoxivent's L SERIES is offered as spring- or motor-operated. The L SERIES provides versatility within the product mix and bridges the gap between the standard 9000 and XL reels. The spring reel features single or dual cassettes, while the motor version is powered by a tube-type motor. The L has a 48" wide drum and holds up to 44' of 8" diameter exhaust hose.

FEATURES:

- Oversized Hose Reels
- L Series up to 48" wide drum and holds up to 44' of 8" diameter hose (spring/motor operated)
- XL Series up to 84" wide drum and holds up to 65' of 18" diameter hose (motor operated)

BENEFITS:

 Allows for easy storage of large diameters and lengths of exhaust hose

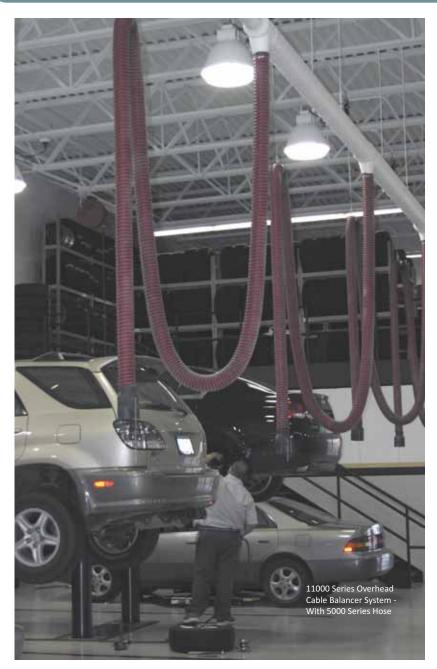
APPLICATIONS:

 Military Vehicles, Diesel Trucks, Heavy Equipment, Aircraft Ventilation, Marine Applications, Industrial Applications, Bus Transit





Overhead Systems • Vehicle Exhaust Removal



11000 SERIES Cable Balancer System

- Designed for direct attachment to ductwork and is retractable with use of spring balancer and lifting elbow
- Available with wall bracket and D-Series fan
- Balancer includes locking mechanism, external tension adjustment, 15-foot steel lifting cable, snap hook, safety chain, and more
- 4000- and 5000-Series Hose used with 11000 Series;
 Stainless Steel TCA (Tapered Cone Adapter) or 23827 Neoprene Rubber Adapter used to connect to tailpipe
- Other hoses/adapters available for variety of applications

Monoxivent's conventional overhead systems are the userfriendly and cost-effective solution that meets a wide-variety of demands.

These systems incorporate many hose types and lifting configurations. The hose types range from high-temperature silicone to medium-temperature polyester. The lifting configurations include ropes and pulleys and cable balancers. The retractable telescoping system and the swivel booms offer other alternatives for overhead exhaust extraction.

Complete the package by adding a direct-mount fan, which allows a complete-stand alone system. Or connect to ductwork and a central fan.

FEATURES:

OVERVIEW:

 Many hose types and lifting configurations available: boom mount, duct mount, pivoting crane mount

BENEFITS:

User-friendly, cost effective, configurable for any need

APPLICATIONS:

 Auto Dealerships, Motorcycle Shops, Light/Heavy Equipment Repair, Garage Settings, Railroad, Bus Transit, Manufacturing Facilities

L1000 Series Overhead PAC (Pivotin

d Crane) System - With 4000 Series Hose





Monoxiven

NORFI

Balancer

Balancer

Overhead Systems • Vehicle Exhaust Removal







Easy to Use

 Flex Hose attaches to main ductwork and retracts through use of lifting elbow, rope, and pulleys or winch operated with cable and pulleys







Underfloor Systems • Vehicle Exhaust Removal



OVERVIEW:

Underground Exhaust Systems are offered in either a self-storing or plug-in configuration with ductwork underground.

The self-storing systems have the "flex drops" stored under the floor in the ductwork. In the plug-in configuration the flex hose simply plugs into the floor outlet; and the flex drops are stored, above ground, on hangers.

FEATURES:

- Single or Dual Outlets offered
- Self-Storing (most common) or Plug-in Style
- No-Crush Series 3000 hose (most common), 10' length
- 3", 4", 5", 6" diameters

BENEFITS:

- Self-contained hose assembly
- Lay-flat door, flush with shop floor in open position
- Eliminates need for hose drops from the shop ceiling
- 3000 Series Hose features heavy convolutions and is no-crush neoprene type hose

APPLICATIONS:

Auto Dealerships, Motorcycle Shops, Light/Heavy
 Equipment Repair, Garage Settings, Anywhere an Overhead System is not practical

Nozzles and Adapters

OVERVIEW:

Monoxivent tailpipe nozzles and adapters are available for almost any type of vehicle source capture. The nozzles and adapters are easy to use, versatile, durable, safe, and competitively priced.

FEATURES:

- Wide range of products for various tailpipes and diameters of hose
- · Accessories include safety chains, spring clamps, vise grips, dampers, handles, lifting sleeves, lifting poles, and magnets

BENEFITS:

• User-friendly, cost effective, configurable for any need

APPLICATIONS:

• Standard nozzles and adapters for: Automobiles, Light Trucks, Heavy-Duty Trucks, Vertical Stacks, Motorcycles, ATV's, Buses, Construction/Military **Equipment, all Diesel Applications**





TCA SERIES

Applications: Hose Reels, Conventional Overhead

Systems, Plug-in for Underfloor Locking Hand Damper, Sleeves, Options: Screens, Handles, Vise Grips,

Spring Clamps

Used With: Automobiles, Light Trucks,

Motorcycles, ATV's

Sizing: 4", 5", 6", 8" - larger sizes available Features:

Stainless Steel, Tapered Cone

Model # <u>Size</u> <u>Description</u>

Tapered Cone, SS TCA-4 5" TCA-5 Tapered Cone, SS

TCA-6 Tapered Cone, SS

TCA-8 Tapered Cone, SS



Applications: Conventional Overhead Systems, Hose Reels

Options: Locking Hand Damper, Lifting

Sleeve, Magnets, Handles, 10'

Lifting Pole

Used With: Vertical Stacks, Heavy-Duty Trucks,

Diesel Applications

Sizing: 4", 5", 6", 8" Rubber Coated, Internal Stop Bar Features:

Model# Size/Description

TPA-RB-4 8" Opening to fit 4" Hose, Rubber Coated 8" Opening to fit 5" Hose, Rubber Coated TPA-RB-5 8" Opening to fit 6" Hose, Rubber Coated TPA-RB-6 TPA-RB-8 8" Opening to fit 8" Hose, Rubber Coated





Nozzles and Adapters



Applications: Options: Used With: Sizing: Features:		Hose Reels, Conventional Overhead Systems, Underground Exhaust (23827 Only) Spring Clamps, Sleeves, Spring Hinged Dampers Automobiles, Light Trucks, Motorcycles, ATV's 3", 4", 5", 6" Neoprene Fabrication, Oval or Round Mouth
Model #	<u>Size</u>	Description
23827	3-4"	Neoprene, Oval Mouth
23827-SC	3-4"	Neoprene, Oval Mouth, Spring Clamp
23828	3-4"	Neoprene, Large Oval Mouth
23828-SC	3-4"	Neoprene, Large Oval Mouth, Spring Clamp
23827-SL	3-4"	Neoprene, Oval Mouth, Sleeve
23827-SC-SL	3-4"	Neoprene, Oval Mouth, Sleeve, Spring Clamp
23828-SL	3-4"	Neoprene, Large Oval Mouth, Sleeve
23828-SC-SL	3-4"	Neoprene, Large Oval Mouth, Sleeve, Spring Clamp

23800 SERIES

23897

Hose 23897-SI

23897-SC

23897-SC-SL

4-5"

4-5"

4-5-6"

4-5-6"



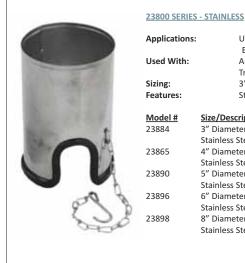


Neoprene, 6" Dia. Mouth, No Crush Hose

Neoprene, 6" Dia. Mouth, Fabric Hose

Neoprene, 6" Dia. Mouth, Spring Clamp, No Crush





Exhaust Systems Automobiles, Light Trucks 3", 4", 5", 6", 8" Stainless Steel Size/Description 3" Diameter, Underground Stainless Steel Adapter 4" Diameter, Underground Stainless Steel Adapter 5" Diameter, Underground Stainless Steel Adapter 6" Diameter, Underground Stainless Steel Adapter 8" Diameter, Underground Stainless Steel Adapter

Underground

Portable Fume Eliminator • Vehicle Exhaust Removal



OVERVIEW:

The Portable Fume Eliminator is your answer for indoor exhaust capture, when hazardous fumes are present. The Eliminator was developed for use in shops where a conventional overhead or underfloor system is not practical.

The Eliminator is ideal for truck, bus, agricultural, and construction equipment applications. The Eliminator is easy to use and maneuver. In just seconds, the Eliminator can be moved into position, connected to a 120-volt power source (three phase option available), and turned on.

Due to its' small size, storing the Eliminator is not a problem. The compact base has a footprint of 20" x 28" (standard Eliminator) or 32" x 72" (hose reel Eliminator). Depending on the model, the vertical mast has a stored height of 90" or 120".

The adjustable mast is a key feature. It can be easily raised or lowered to fit all topand mid-body exhaust pipes. For under chassis, simply uncouple the hose on the vertical mast and couple it to an under chassis clamping nozzle.

For truck applications, the main vertical stack features a 45-degree end with an 8" opening. The configuration allows for use with straight, taper cut, turn out, and rain cap vertical stacks. For bus applications, or for vehicles with a high horizontal exit exhaust pipe, the Eliminator features a straight end with an 8" mouth.

The Eliminator is available with or without a fan. The fan is a 1.5-HP, 120-volt, single-phase unit, which produces approximately 700-800 CFM of exhaust. The discharge hose is available with two storage options: on a single hose storage mast, or on a Monoxivent hose reel.

FEATURES:

 Offered in three different models: Hose Reel Model Standard Model Basic/Base Plate (no fan) Model

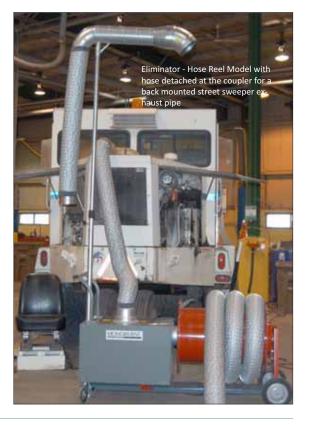
BENEFITS:

- Portable and Compact
- Self-contained Exhaust System

APPLICATIONS:

• Truck, Bus/Transit, Agricultural Equipment, Construction Equipment







Portable Fume Eliminator • Vehicle Exhaust Removal





System highlights follow:

- Portable unit
- Compact size
- Easy maneuverability
- Telescoping mast
- Adjustable height
- No contact with vehicle
- Fits all top-, midbody, and under chassis exhaust pipes
- Versatile hose storage options: hose reel option, hose storage mast







* All models ideal for truck, bus, auto, agricultural equipment, and construction equipment applications!

Models:

ELIMINATOR - HOSE REEL

• Extended base, reel used for discharge hose storage (up to 30' x 6" diameter hose), telescoping mast, radial blade fan, discharge hose, vertical stack nozzle with straight end or 45-degree end, 45' electrical spring retractable reel, optional self-storing under-chassis tailpipe adapter

ELIMINATOR - STANDARD

• Standard base, small mast used for hose storage, telescoping mast, radial blade fan, discharge hose, vertical stack nozzle with straight end or 45-degree end, 45' electrical spring retractable reel, optional self-storing under-chassis tailpipe adapter

ELIMINATOR - BASIC/BASE PLATE

• Base plate, telescoping mast, vertical stack nozzle with straight end or 45-degree end



NORFI Rail Systems



TECHNORAIL

Product Overview: Aluminum extruded extraction rail with sealing lips and mounting profiles to carry movable extraction trolleys. The extraction rail can be used with fully flexible hose systems. The Technorail modular concept caters for a wide range of applications and workplace environments. Straight-forward assembly, robust design with low pressure losses. Specification includes all necessary seals and clips.

Length: As Required

Channel cross-section: 27 in²

Material: Aluminum Weight: 20lb./ft.

Operating Temperature: 302°F (150°C)



ALU150

Product Overview: Aluminum extruded extraction rail with sealing lips and mounting profiles to carry movable extraction trolleys. The extraction rail can be used with arms, hose reels and fully flexible hose systems. The ALU modular concept caters for a wide range of applications and workplace environments. Straight-forward assembly, robust design with low pressure losses. Specification includes all necessary seals, clips and brackets.

Length: As Required

Channel cross-section: 47 in² / equivalent pipe dia. 7in.

Material: Extruded Aluminum

Weight: 26lb./ft.

Operating Temperature: 302°F (150°C)



ALU250

Product Overview: Aluminum extruded extraction rail with sealing lips and mounting profiles to carry movable extraction trolleys. The 250's larger cross section allows for higher air volume. The extraction rail can be used with arms, hose reels and fully flexible hose systems. The ALU modular concept caters for a wide range of applications and workplace environments. Straight-forward assembly, robust design with low pressure losses. Specification includes all necessary seals, clips and brackets.

Length: As Required

Channel cross-section: 70 in² / equivalent pipe dia. 9in.

Material: Extruded Aluminum

Weight: 44lb./ft.

Operating Temperature: 302°F (150°C)



Hose Reels

Simple Drops

Arms



MONOXIRAIL Systems with Hose Reels

MONOXIRAIL Systems, with Hose Reels, are a premier solution for vehicle exhaust fume extraction. The rail combined with the hose reel creates a free and open work environment within numerous applications.

The Systems are provided in two models: the ALU Rail and Technorail. The Technorail models easily handle smaller air volumes and lighter weight equipment and accessories, while the ALU models are geared toward higher air volumes and larger equipment.



MONOXIRAIL Systems with Simple Drops

MONOXIRAIL Systems, with Simple Drops, are one of the most versatile indoor source capture solutions on the market today.

The Systems are provided in two models: the ALU Rail and Technorail. The Technorail models easily handle smaller air volumes and lighter weight equipment and accessories, while the ALU models are geared toward higher air volumes and larger equipment.



MONOXIRAIL Systems with Arms

MONOXIRAIL Systems, with Welding Source Capture Arms, provide versatile air cleaning solutions for industrial applications including removal of welding smoke, dust, and hazardous airborne particulate.

The Systems are provided in two models: the ALU Rail and Technorail. The Technorail models easily handle smaller air volumes and lighter weight equipment and accessories, while the ALU models are geared toward higher air volumes and larger equipment.





NORFI Tailpipe Adapters

NORFI









NORFI Tailpipe Adapters

NORFI Tailpipe Adapters offer a premier option for source capture. A proper connection to the tailpipe is crucial for the function and handling of exhaust extraction systems. Our standard nozzles include aluminum and rubber configurations. The nozzles have manual or automatic clamping mechanisms.

- Round Exhaust Funnel Floor Stand
- Mechanical Round Rubber Body Adapter, Quick Release, Truck Exhaust
- Mechanical Oval Rubber Body Adapter, Quick Release, Vehicle Exhaust
- Custom Mechanical Oval Rubber Body Adapter, Rapid Action Clamp, High Performance Vehicle Exhaust



Welding and Source Capture Arms/Booms

OVERVIEW:

Monoxivent's swivel and articulating boom arms allow for longer reach, offering an extended range of motion. The arms provide safe and versatile solutions. The systems eliminate welding smoke, dust, and other hazardous airborne particulate.

FEATURES:

- · Easily articulated
- Adjustable friction joints
- 7', 10', 14' arms available
- Optional PAC or Boom available; mini arms available for lab applications

BENEFITS:

- Long reach, versatility, and extended range of motion
- Capture welding smoke, dust, and other airborne particulate before entering the breathing zone

APPLICATIONS:

 Welding/Maintenance Shops, Trade Schools, Training/Union Halls, other Industrial Shop Environments, Lab Environments





15000-TT Series Tube-Type Arm

- External support flex arm: 7', 10', 13' length
- 4", 5", 6", or 8" Diameter
- Consists of: cast aluminum swivel mounting joint, two aluminum support tubes, three segments of weld-proof hose (interconnected with rigid pipe), which terminates in an adjustable suction nozzle.
 The arm is positioned and balanced with a gas spring
- Complete set includes: suction hood, wall bracket, and rotational arm. A flange fastened fan is available as an option. The wall bracket serves for a wall or column attachment



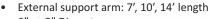
Welding and Source Capture Arms/Booms

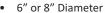


- Boom length: 7', 10', 13'
- One piece pivoting extension
- Many options attach to swivel boom, including 15000 arm, 24" welding hood, and more
- Boom supplied with a pivoting wall/column bracket constructed of one-piece die, stamped 5/16" industrial steel plate









Package includes: blower (optional), wall/column mounting bracket, arm, external support structure, and stainless steel (or polycarbonate) hood with handle







- Mini Arms may be used in a vast array of applications ranging from soldering to graphic arts. Mini Arms may be wall mounted, mounted directly to duct, or mounted to tables
- Ideal for removal of toxic fumes and odors in laboratory or shop environments
- Various nozzle and hood options are available, including: clear dome hoods, metal hoods, angle cut suction nozzles, and flat flange hoods



Portable Units • Welding Source Capture



PHS • PCFS TECHNICAL DATA

Motor:

1.5 HP, 1 PH, 3450 RPM

Fan:

750 CFM Actual

Weight PCFS:

Cabinet less arm - 360 lbs.

Weight PHS:

Cabinet less arm - 300 lbs.

Cabinet:

18-gauge steel with Epoxy powder

coating

Wheels:

4 Casters, 5" diameter, with locking

feature

115/120/1 Pre-wired power cord

AMP Draw:

Start-up requires 13 AMPS - Minimum

20 AMP Service

Filter Monitor Lights:

Standard on all units

OVERVIEW:

Portable Filtration Units are offered in both cartridge and HEPA filter configurations. A variety of media options are available for both. Our fume arms may be added to these units for source capture applications.

Typical applications, for these units, are welding/maintenance shops, school shop environments, and other locations where a permanently installed system is not practi-

FEATURES:

- Offered in both cartridge and HEPA filter configurations
- 7' and 10' arm lengths available
- Optional filters available
- Plugs into standard 120-volt outlet, supplied with 25', 12-gauge, 3-wire cord with ground plug
- Available less arm for duct connection
- Heavy Gauge Steel Cabinet
- · Baked enamel finish
- Internal air distribution baffle spreads dirty air evenly across filter
- Dirty air chamber, clean air chamber, doors sealed air tight
- 5" hard rubber ball casters with foot brakes
- Control panel includes: On/Off rocker switch, On/Off indicator light, Filter indicator light, operation hours counter

BENEFITS:

- Small footprint
- Easily transported
- Discharges clean air back into workspace

APPLICATIONS:

• Welding/Maintenance Shops, School Shop Environments, Anywhere a Fixed Filtering System is Not Practical



Portable Units • Welding Source Capture

* Available with 7' or 10' Arm (shown below); Also Available without Arm for Fixed Station or Hard Duct

HEPA SYSTEMS • THE PHS

APPLICATIONS - Welding, Soldering, Brazing, Light Oil Mist, Fumes

MODELS:

PHS-7/PHS-10 7' or 10' Arm, 1.5-HP/1-PH Blower, Poly Pre-Filter,

24x24x12 HEPA Filter

PHS 1.5-HP/1-PH Blower, Poly Pre-Filter,

24x24x12 HEPA Filter

The PHS features a portable design (26"x26"), while maintaining a high CFM. When floor space is at a premium and performance is in demand, the PHS meets the challenge!

The system is shipped assembled and ready to use. The PHS is available with a 7' or 10' arm, or without an arm for fixed station or hard duct.

The PHS is supplied with a 24"x24"x2" poly pre-filter (#1) and with a 24"x24"x12" HEPA filter (#3). The HEPA is a 99.97% filter. An optional 24"x24"x2" carbon filter is also available (#2). Accessing the filters is easy with a hinged door on the front and pull-out trays.







CARTRIDGE SYSTEMS • THE PCFS

APPLICATIONS - Welding, Dust, Powder, Grinding

MODELS:

PCFS-7/PCFS-10 7' or 10' Arm, 1.5-HP/1-PH Blower, CF Stand,

Clean-out Tray, Manual Air Cleaning Plenum

PCFS 1.5-HP/1-PH Blower, CF Stand, Clean-out Tray,

Manual Air Cleaning Plenum

The PCFS utilizes a multi-purpose cartridge filter.

The unit is compact and userfriendly, while offering a high CFM and easy positioning of the arm and hood.

The foot print is just 27" square - perfect for tight confines.

Swivel wheels and an easy push handle are an added benefit. The unit ships assembled and ready for use!

The PCFS is supplied with a unique sealed manual air pulse cleaning system (photos, at lower right).



Simply swing open the air plenum access door and the inside of the cartridge filter is accessible. For cleaning, use shop air - with an air wand. The cleaning procedure requires no pulse valves or electrical components, thus preventing needless failures. The unit is supplied with a filter monitor light.

The standard filter is a 12" x 24" polyester/cellulose media.

Optional cartridge filters available include: 12" x 24" flame retardant media or a 12" x 24" special coated filter for moisture/light oil applications. The unit is supplied with an access door for easy filter change and dust bin access.





MNX Series Cartridge Collectors

OVERVIEW:

Monoxivent offers the MNX collector with 4- to 24-cartridge capacity. The collectors feature computer-modeled pulse cleaning technology to easily "pulse off" dust from the surface of the filter, improving filtration efficiency and prolonging filter life.

The MNX delivers optimum performance and is one of the best values in the marketplace today. The MNX ensures steadfast, trouble-free opera-

The advantage can be found in the collector's design and components. It features a ledgeless design in combination with high efficiency filter media and patented cleaning technology, the MNX continues its strong performance in traditional applications such as metalworking.



It also generates new interest and respect in process applications where ledgeless construction is often a requirement. Providing higher efficiency and smaller footprints than any baghouse collector or even other cartridge collectors, the MNX adds up to long-term savings and improved performance.

FEATURES:

- Ledgeless construction eliminating dust build-up
- Compact design utilizing minimal floor space
- Powerful performance provides 30% more cleaning energy
- Cost savings fewer filter changeouts, less energy use
- Reliability; Easy system set-up; Easy maintenance
- Indoor or Outdoor use

BENEFITS:

- Removes harmful dust/particulate from work environments
- Cleaned air can be returned back to work setting, in some applications
- Pulse cleaning technology improves filtration efficiency and prolongs filter life
- High efficiency means smaller footprint
- Comply or exceed OSHA, EPA, State regulations

APPLICATIONS:

• Metal Working, Welding, Pharmaceutical, Food Processing, Trade Schools, other Fine Dust/Particulate







MNX Series Cartridge Collectors

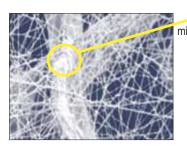
Standard Features & Equipment Options

Collector Design Mild Steel Construction	Standard X	<u>Optional</u>
Stainless Steel Construction		Х
High Temperature Construction		Х
Direct Drive Fans		X
Chamber and Exhaust Silencers		X
Filter Cleaning System	X	
Inlets	X	
Abrasion Resistant Inlet		X
Air Management Modules		X
Extended Dirty Air Plenum	.,	Х
Ledge-Free Hopper	Х	V
Steep-Sided Hopper		X X
2-Mod Hopper Explosion Relief Vents		X
Sprinkler Taps	Х	^
Sprinkler Taps Sprinkler Heads	^	Х
Service Platform (OSHA Compliant)		X
Damper Pack		X
Drum-Full Indicator		X
Lined Clean Air Plenum		X
Bag-Out Kit (Filter & Discharge)		X
Bag-In/Bag-Out Kit (Filter & Discharge)		X
Cartridge Filters		
Nanofiber Filters	X	
HEPA Afterfilters		X
Paint System		
Prime Coated Interior	X	
Acrylic urethane finish over alkyd enamel	Х	
primer. Paint system passes a 350-hr. salt		
spray test. Custom Color		Х
Hostile Environment Coating		X
Epoxy Coating		X
Lpoxy coating		Α
Hopper Discharge		
Drum Cover and Hose		Х
Slide Gates		X
Rotary Valve and Transitions		X
Screw Conveyors		X
Electrical Controls, Gauges, and Enclosures		
Solid State Timer in NEMA 4 Enclosure	X	
Delta P Control, Delta P Plus Control		X
Custom Panels		X
Magnehelic Gauge	Х	
Photohelic Gauge Standard & Weatherproof		Х
Basic Cold Climate Kit		X
Heavy-Duty Cold Climate Kit		X
Solenoid Enclosure (NEMA 7 & 9)		Х

Cartridge Filter Technology

Nanofiber Filter Media is the distinguishing factor in Monoxivent's cartridge filters. The Nanofiber Media traps more dust on the surface of the filter than conventional depth loading types of filter media such as cellulose, polyester, or cellulose/polyester blends. The resulting dust cake is easily cleaned off during the automated collector cleaning cycles, ensuring longest filter life and highest efficiency rated MERV 13 based on ASHRAE 52.2 test standards.

Nanofiber Media



Nanofiber filter media combines both large and small fibers to trap more particle sizes without restricting airflow.

Commodity Filter Media



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

MNX Filter Media Pleats are shorter and stiffer, which helps minimize dust entrapment and simplify filter cleaning. With the 1.5" option, the pleat wall is less likely to collapse or bend, which can trap dust and prevent its release. However, the 2" option allows for more versatility with regard to CFM.

1.5" pleat: 190-sq. ft. 2" pleat: 254-sq. ft.

MNX Cartridge Filters downward airflow design delivers the highest filtration performance while using less energy. The MNX collector, its filter cleaning system, and the nanofiber filter cartridges together complete the most powerful dust collection solution available.

MNX Series Filter 1.5" Pleat



MNX Series Filter 2" Pleat





Cyclone Collectors



OVERVIEW:

Cyclones are available in both pull through and blow through configurations. Monoxivent's After Filters are of the tube-type design. A fan may be added to the After Filter to make it a stand-alone collector. A multitude of accessories and configurations are available. Contact a representative to custom design a system for your application.

FEATURES:

- Pull through and blow through configurations
- Tube type after filter options available
- Variety of different dust storage options available

BENEFITS:

- Removes harmful dust/particulate from work environments
- In some applications, cleaned air can be returned to work setting

APPLICATIONS:

 Cabinet Shops, Metal Grinding, Trade Schools, Furniture Making

Downdraft Tables

OVERVIEW:

Monoxivent offers two standard downdraft tables, as well as custom designs to meet a variety of applications. The MNX-DDT's are self-contained dust collectors designed as a workstation for capturing contaminant used in grinding and finishing operations. The MNX-DDT-2000 has a 3-HP motor and has a performance up to 2,000 cfm. The MNX-DDT-3000 has a 5-HP motor and has a performance up to 3,000 cfm. The MNX-DDT-2000 has a bed measuring 52"x52", while the -3000 measures 52"x78". The



models have a powerful 200 fpm minimum downward airflow capture, hinged side-wing panels, built in fluorescent light, filter cartridges featuring nanofiber technology, a MERV 13 filtration efficiency rating, and an ergonomic design. The unit is constructed of 12 and 14 gauge steel. Large particles are collected in the 1.4 cubic foot capacity dust drawer(s). The media in each cartridge incorporates an outer layer of ultra fine Ultra-Web microfibers that intercept small particles at the surface of the media. Cartridge dimensions are 13.8" wide and 26" long. Independent laboratory testing has determined that Ultra-Web cartridges have a Minimum Efficiency Reporting Value (MERV) of 13 based on the ASHRAE 52.2-1999 test standard. Ultra-Web cartridges also achieve start up efficiencies of 99.9% on 0.2-2 micron dust particles.

FEATURES:

- · Self-contained dust collectors
- 200 fpm minimum downward airflow capture
- · Filter cartridges featuring nanofiber technology
- Pneumatic pulse cleaning technology

BENEFITS:

• Downdraft air pattern pulls harmful fumes and particulate from breathing zone

APPLICATIONS:

• Grinding and Finishing Operations, Welding, most other Light Dust/Particulate

CO, NO2 Fume Detection



OVERVIEW:

Monoxivent's fume detection systems are offered as either a stand alone system or as a system with remote sensors for CO or NO2. The stand alone systems feature two alarm levels (audio/visual), LED display, sensor, and two relays. Remote sensors are connected through a central panel. These systems are advanced microprocessor-based, featuring a high-quality stand alone controller, a unique high-tech enclosure, and all necessary characteristics to provide continuous, effective, and fully integrated monitoring of toxic and combustible gases. Other gas monitoring available.

FEATURES:

- Advanced microprocessor based
- Unique high-tech enclosure
- Stand-alone and multi-sensor systems available

BENEFITS

 Continuous, effective, and fully integrated monitoring of toxic and combustible gases

APPLICATIONS:

 Parking Garage, Vehicle Maintenance Bays, Warehouses



Slotted Fume Hoods

OVERVIEW:

Slotted Fume Hoods are available in a vast array of sizes with numerous accessories. Side skirts are a common addition. The hood may also be connected to a welding table. A stainless steel construction is an option. Also, larger sizes are an option.



FEATURES:

- Typical hood depth: 6" for standard models
- Standard offering includes 34", 46" and 58" wide SFH models
- Custom design available

BENEFITS:

- Air pattern pulls harmful fumes and particulate from breathing zone
- Allows for table or wall mount in confined spaces
- Options include table, side skirts, adjustable slot design, stainless steel construction

APPLICATIONS:

• Welding, Metal grinding, Trade Schools, Fume Capture, Light Dust and Particulate



Custom Fabrication

OVERVIEW:

Monoxivent's custom design team helps customers from initial design to delivery. The Crawford/Monoxivent team of designers and fabricators utilize the company's three lasers, CNC punching capabilities, metal forming options, and top-tier welders. Custom processes may be implemented on a majority of products in Monoxivent's standard catalog and some entirely unique applications.

Some examples include:

- Oversized, custom hose reels (up to 18" diameter hose, 7' drum width)
- · Custom slotted fume hoods
- Rail and gantry systems for vehicle exhaust and welding applications
- Oversized exhaust hoods
- Hose reels on boom arms
- Custom cartridge collectors
- Stainless steel exhaust stacks
- Other examples on-line at <u>monoxivent.com</u> - click Application Spotlights











BI - Backward Incline Fans

BI - Backward Incline Blower shown without accessories and with weather cover (right)

BI SERIES OVERVIEW:

Monoxivent's BI Series fans are AMCA certified. The belt drive utility blower meets today's demand for efficient and dependable ventilation. It is offered from 70 - 18,500 CFM. The fan has eight discharge positions. Clockwise or counter-clockwise rotation is available.

D Series Radial Blade Fans



D SERIES OVERVIEW:

Monoxivent's D Series fan is a direct drive, radial blade type blower. The housing and wheel are constructed of cast aluminum. The standard motor configuration is TEFC, however other motor options are available. Wall mount brackets are standard or the D Series may be configured to connect directly to a hose reel or welding arm.

Exhausting Hose

1000/2000: Metal interlocking hose has a unique floppy-type interlocking construction, allowing the hose to move and bend easily. The 1000 is constructed of 302-stainless steel, while the 2000 is constructed of electro galvanized carbon steel.

3000: Monoxivent's "no crush" hose. The convoluted neoprene design has been specifically formulated to handle 600-degree F temperatures. The hose, which does not contain a wire helix, returns back to its' original shape if "crushed" by any vehicles or other machinery.

4000: Monoxivent's most common hose for vehicle exhaust source capture. The hose easily withstands temperatures at 600-degrees F and is ideal for use with hose reels or overhead exhaust systems. The hose has exceeded 1000-degrees F during certified testing and is rated up to 1250-degrees F with intermittent use.

5000: May be used for hose reels, overhead exhaust systems, underground systems, welding, industrial use, light-duty material handling, and more. The 5000 has been tested, using the bake test for Continuous Duty at 350-degrees F. The hose has been tested, with an air passing standard, for Intermittent use up

to 550-degrees F.

6000: Serves as a welding extraction hose. The 6000 is flame retardant and vinyl coated with a polyester embedded steel-wire helix. The helix is permanently bonded for a continuous, uninterrupted inner and outer surface.

7000: The 7000 Series is unique with an outer corrosion resistant mechanical bond helix. A variety of temperature ratings are available within the series, from 300-degrees F up to a maximum of 2010-degrees F. Hose fabric varies depending on required temperature rating.



1000/2000 SERIES HOSE



3000 SERIES HOSE



4000 SERIES HOSE



5000 SERIES HOSE



6000 SERIES HOSE



7000 SERIES HOSE



FRP - Fiberglass Reinforced Plastic • UnderDuct



Visit <u>underduct.com</u> for complete technical data, overviews, application spotlights!

OVERVIEW:

UnderDuct by
Monoxivent provides
the most versatile
and cost effective Underground FRP (Fiberglass Reinforced
Plastic) Duct on the
market today! UnderDuct provides a
wide range of solutions from the most
demanding environments to standard
layouts.



Monoxivent's manufacturing source has over 40 years of experience and is a leader in the Under-Slab Fiberglass Duct market. Monoxivent has a nation-wide network of sales representatives and a top-tier inside support staff that provides engineering, design, sales, service, and marketing. UnderDuct is offered both in single wall and pre-insulated double wall con-



struction to meet any ventilation needs. Monoxivent 824 Low Smoke Class 1 duct has been approved for direct burial.

MARKETS:

Supply, return, and exhaust systems include, but are not limited to: auditoriums, auto exhaust, banks, botanical centers, churches, high rise office, hospitals, libraries, parking garages, residences, restaurants, schools, super markets, swimming pools, and zoos.

DURABILITY:

Monoxivent's UnderDuct fiberglass HVAC ductwork provides excellent resistance to corrosion and leakage. The corrosion resistance qualities are maintained throughout both the inside diameter (ID) and outside diameter (OD) allowing for a wide range of applications.

EASE OF USE

Monoxivent's UnderDuct fiberglass duct can be directly placed onto a pea gravel bed in a graded trench, then backfilled with pea gravel eliminating concrete encasement. Simple joining methods provide for easy and quick installation, and the FRP duct is impervious to minerals or salts present in soil.

EFFICIENCY:



Monoxivent's UnderDuct systems can be sealed to achieve a water and air tight system. A leak-free system and smooth interior surface will ensure the air reaches its destination efficiently and without contamination.



MATERIAL INTEGRITY:

Monoxivent's UnderDuct FRP fiberglass duct is fila-

ment wound with two chemically inert materials – glass and resin. The finished product provides longer underground service life than galvanized sheet metal, stainless steel, or PVC coated sheet metal. The filament winding provides greater hoop strength resulting in a stronger duct than other methods of construction such as hand lay-up. The finished product is lighter than steel while offering superior acoustical qualities and corrosion resistance.

TESTING:

Monoxivent's UnderDuct products have met the Flame and Smoke requirements of a Class 1 duct per Underwriter's Laboratories (UL) 181 and Uniform Mechanical Code (UMC) 10-1. We are verified by an ASTM E-84 testing laboratory recognized by the following building code organizations under the Council of American Building Officials: ICBO; BOCA; SBCCI.

VERSATILITY:

UnderDuct FRP products are available in straight lengths, standard and custom fittings, or in shop fabricated sections. Single and double wall duct can be shipped in prefabricated assemblies. Pre-insulated double wall duct has many advantages, including assured uniformity of insulation, permanent protection of insulation, and all-in-one installation.



FRP - Fiberglass Reinforced Plastic • UnderDuct/UD-VE



Green Building with UnderDuct: Underground FRP Duct is Environmentally Sound, Sustainable

UnderDuct is Environmentally Sound due to the "green" aspects of our fiberglass reinforced plastic underslab duct. FRP duct is a key component of sustainable building. The quality and strength of our FRP duct means a longer life, which saves resources, and maximized airflow uses energy more efficiently.



- Smooth and Improved Air Flow
- Energy Savings with Insulated FRP Duct
- Maximizes Air Flow and Efficiency

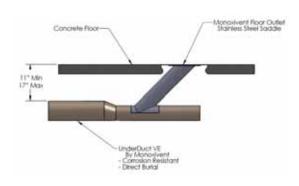


- Resistance to Mold, Corrosion, Leakage, Moisture Damage
- 824 Low Smoke and Flame Class 1 Rating
- Long-life Duct
- Energy Savings
- Allows for "Open Concept" Design in Buildings
- Laminated Joints for Complete Seal



UnderDuct-VE Now Available: Corrosion Resistant Underfloor Duct for Vehicle Exhaust Removal

UnderDuct, by Monoxivent, is pleased to announce our new product: UnderDuct-VE. The corrosion resistant underfloor exhausting duct is rated to 325-degrees F. The duct does not need concrete encasement. The duct's smooth bore allows for more efficient airflow and less pressure drop.









Sean Hartnett/photos



FRP - Fiberglass Reinforced Plastic • Corrosion Composites



Visit <u>corrosioncomposites.com</u> for complete technical data, overviews, application spotlights!

OVERVIEW:

Corrosion Composites by Monoxivent is a source for corrosion resistant Fiberglass Fabrication Services.

Fiberglass laminated composites are light weight, high strength, non conductive, and corrosion resistant. Monoxivent assists with design, engineering,

drawing, manufacturing, inspection, and installation. Monoxivent brings together years of fiberglass experience and manufacturing expertise. For many industrial, Water, and Wastewater applications where corrosion is a problem, fiberglass is the material of choice.



For Industry, Water and Wastewater, Infrastructure:

- Duct
- Stacks
- Tanks
- Scrubbers
- Flumes
- Hoods
- DampersManholes
- Troughs
- Tank Covers
- Stack Liners
- Baffles
- Weirs
- Trenches
- Ladders
- Platforms
- Pressure Vessels
- And More!

DURABILITY:

Monoxivent's Corrosion Composites provide excellent resistance to corrosion and offer a











very long service life. Laminates are designed for wind, seismic, snow, pressure, vacuum, and temperature.

STANDARDS:

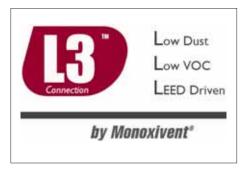
Corrosion Composites adhere to ASTM, SMACNA, and other industry standards.

EXPERIENCED TEAM:

Monoxivent's design team offers engineering and layout support for custom solutions. This coupled with a manufacturing sources featuring over 40 years of experience, a 70,000-sq. foot facility, and state of the art equipment makes Corrosion Composites an excellent source for FRP products.



FRP - Monoxivent Innovations



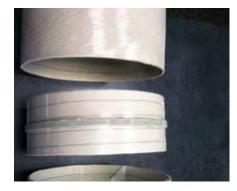
LOW VOC COUPLING TO JOIN MONOXIVENT FRP DUCT: THE L3 CONNECTION

To comply with LEED requirements of dust and VOC control, Monoxivent offers the L3 Connection System. A protective strip that is removed on the job site is incorporated into the duct and fittings during the fabrication

process. Simply peel the strip, apply the specially designed Low VOC adhesive and grab those extra LEED points!







L3 Connector - Benefits:

- No dust from grinding
- Low VOC in adhesive
- Tested to 15 PSI
- Meets LEED specification requirements

DOUBLE WALL INSULATED DUCT CONNECTION

Monoxivent now supplies as standard our new double wall duct connection that incorporates an FRP alignment sleeve with every field joint. Installation is made easier with the added benefit of eliminating internal gaps for a higher quality finished duct system.



LABORATORY FUME HOOD DUCT

Lab Duct can handle a wide variety of chemical fumes, including strong acids and caustics. Condensate formed in the duct system can concentrate these chemicals due to evaporation, making them even more corrosive. Because a Lab is con-



sidered occupied space, the structural and exterior surface of the duct requires a low smoke and flame rating per UL-181, as well as low fire-gas toxicity.

HYBRID-CF DUCT

Monoxivent's Hybrid-CF (Corrosive Fume) duct has an interior layer of corrosion resistant vinyl ester resin while the structural and exterior layers are fabricated with Monoxivent's 824 Un-

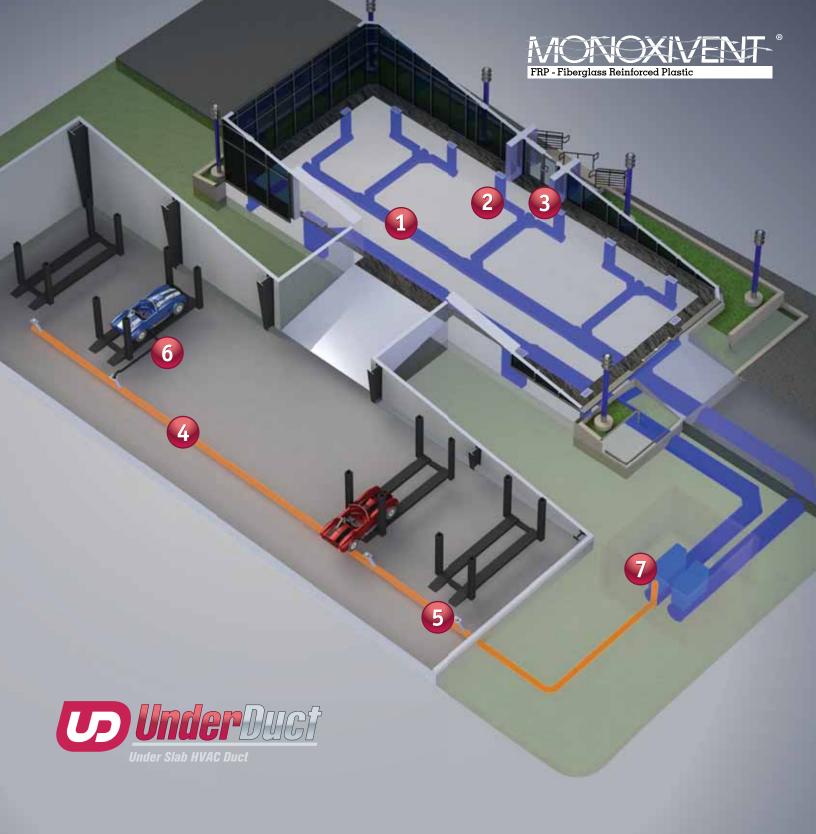


derDuct Resin. This unique blend offers the required corrosion resistance often needed with the protection of a low smoke, low flame Class 1 Duct that is required for use in occupied buildings.

Applications:

- Hospitals
- Aquariums
- Dog kennels
- Exposed Vehicle Exhaust Duct
- Swimming pools





UNDERGROUND DUCTWORK SOLUTIONS

- 1 Monoxivent's Double Wall Insulated UnderDuct
- 2 Monoxivent's Single Wall UnderDuct Register Boots
- 3 Floor Mounted Register Grills (by others)
- 4 UnderDuct-VE (Vehicle Exhaust) Ductwork
- 5 Monoxivent 23800 Floor Exhaust Outlets
- 6 Monoxivent 3000 Series No Crush Hose
- 7 Monoxivent Custom Mechanical Equipment Connections

