




# MONOXIVENT®

## Source Capture Systems



# PRODUCT OVERVIEW



MONOXIVENT®
Source Capture Systems

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, as it has been for over 60 years, 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 new office, production, and fabrication facility in 2013. The corporate offices are located in a building adjacent to the manufacturing facility in Rock Island, IL. 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. Over-200,000 sq. ft. of office and production space for Monoxivent, and parent Crawford Co., is located in Rock Island, IL.

Monoxivent also acquired additional capabilities and support in 2000. Monoxivent now has "in-house" access to laser-cutting centers, a CNC punch, a plasma cutting system, and a team of specialty-weld designers. Monoxivent is proud to offer products "Made In The USA" by its' team of experienced fabricators.

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, cyclone dust collectors, free hanging filter units, FRP (fiberglass rein-forced plastic) Solutions, 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.






***Monoxivent is a division of Crawford Co. Crawford specializes in heating, ventilation, air conditioning, plumbing, laser cutting, welded fabrication, and brewing equipment. Learn more at: crawford-company.com***

# 2. MONOXIVENT PRODUCT OVERVIEW

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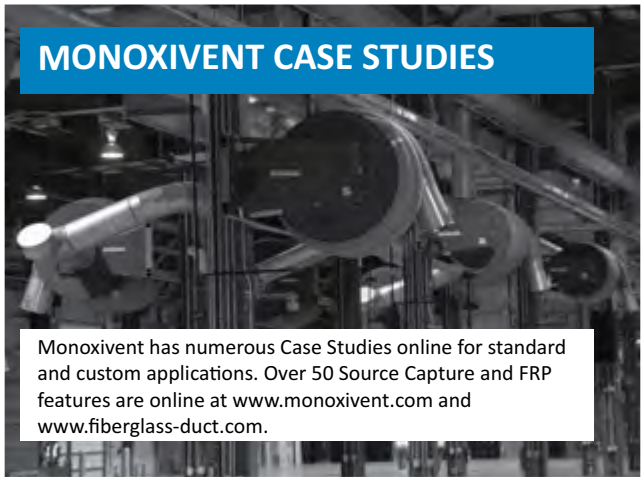

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Visit our websites for complete technical data, product overviews, application spotlights, and for the latest news from Monoxivent!

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


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## MONOXIVENT CASE STUDIES

Monoxivent has numerous Case Studies online for standard and custom applications. Over 50 Source Capture and FRP features are online at www.monoxivent.com and www.fiberglass-duct.com.

## MONOXIVENT HISTORY

Monoxivent, founded in 1953, has grown from a small shop to a thriving corporation.




The "Monoxivent brand" originated under the KENT-MOORE 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.

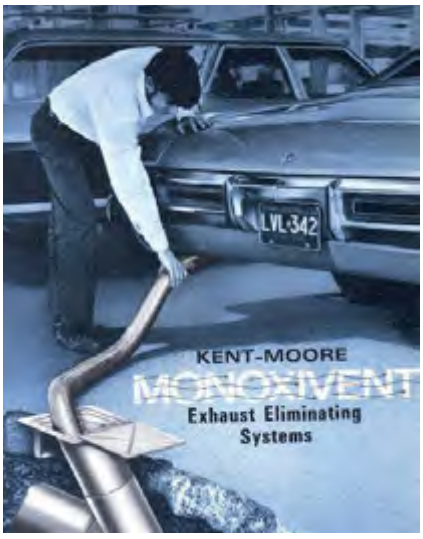
The Monoxivent Jr. was an early top seller and was targeted towards gasoline service stations. The system offered an inexpensive, yet practical method of eliminating fumes. A version of this is offered today with high-temperature hose and door ports.




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. The business grew throughout the nation in the 1980's and 1990's.

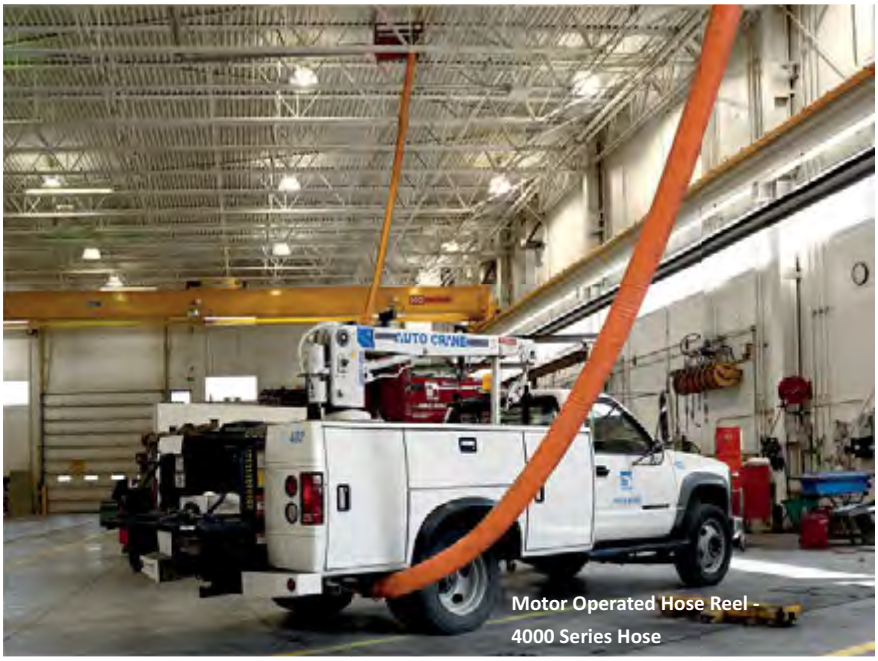
The prefix "DSP" was added to the corporate name in the 1990's. Today the company is referred to as Monoxivent once again.




Crawford Co. purchased Monoxivent in 2000 and brought the company into its' corporate mix.

In recent years, 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 1,000 items!

# 3. HOSE REELS, 9000 SERIES - VEHICLE EXHAUST REMOVAL



Motor Operated Hose Reel - 4000 Series Hose

**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



Blank Spring Hose Reel



Motor Operated Hose Reel, with 4000 Series Exhaust Hose - Chain Drive Tube Type Motor

# 4. HOSE REELS, 9000 SERIES - VEHICLE EXHAUST REMOVAL

## SPRING HOSE REELS




Spring Operated Hose Reel, with 5000 Series Exhaust Hose

### 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

## MOTOR HOSE REELS



Motor Operated Hose Reel, with 4000 Series Exhaust Hose

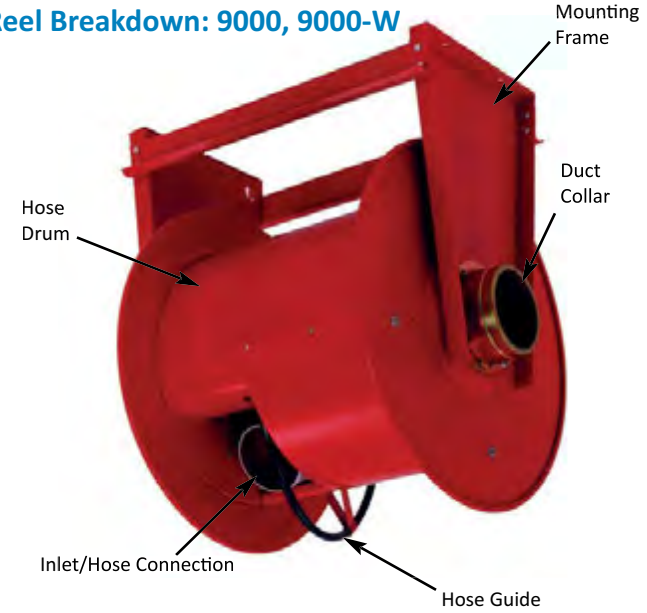


Motor Operated Hose Reel, with 4000 Series Exhaust Hose - Chain Drive, Tube Type Motor (shown with hinged cover open)

### 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 4-button hanging pendant or radio remote control
- Reel equipped with manual override on motor

## Reel Breakdown: 9000, 9000-W




| Model | Hose Dia. | Hose Capacity | Drum Dia. | Drum 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.*

# 5. 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 |
| **RC** | Remote Control for Operation of Motor HR |
| **P2** | 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 |




DMHR
D Series Blower

## Hose Reel Mounting: 9000, 9000-W

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.



23827



TCA

## 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 Series 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 exhaust systems, welding, industrial use, light-duty material handling, and agricultural use. The 5000 Hose withstands temperatures up to 350-Degrees F.



4000 Hose



5000 Hose

# 6. HOSE REELS, XL & L SERIES - VEHICLE EXHAUST REMOVAL




XL SERIES

XL-24-5 with 8” Diameter Hose, 24” Drum - 5’ Width




L Series Hose Reel - Dual Spring Cassette

L SERIES



XL Hose Reel System at Manufacturing Facility

**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 Series 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





XL Hose Reels Installed and During Production, Fort Lee

# 7. OVERHEAD SYSTEMS - VEHICLE EXHAUST REMOVAL



11000 Series Overhead Cable Balancer System, with 5000 Series Hose

**OVERVIEW:**
Monoxivent's conventional overhead systems are the user-friendly 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.

The package can be completed by adding a direct-mount fan, which allows for a complete stand alone system. The system can also connect to ductwork and a central fan.

**FEATURES:**
• 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



BAL-T
15 lb. Balancer



NORFI
Balancer

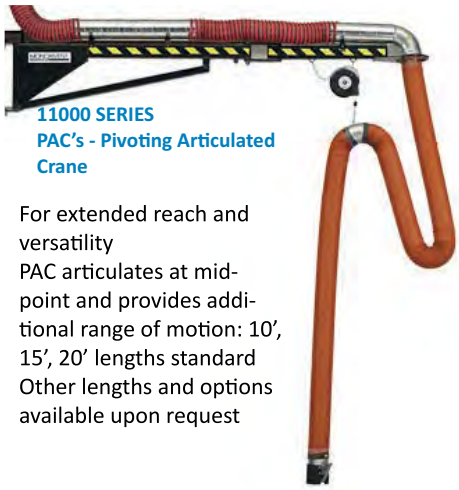


11000 Series Overhead PAC (Pivoting Articulated Crane) System, with 4000 Series Hose

**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 hose/adapters available for a variety of applications

# 8. OVERHEAD SYSTEMS - VEHICLE EXHAUST REMOVAL



**11000 SERIES**
**PAC's - Pivoting Articulated Crane**

- For extended reach and versatility
- PAC articulates at mid-point and provides additional range of motion: 10', 15', 20' lengths standard
- Other lengths and options available upon request



**11000-Boom with 4000 Series Hose**

- For extended reach and versatility
- Boom is rigid, one-piece extension: 7', 10', 13' lengths standard
- Other lengths and options available upon request



**11000 Series, 15' PAC with Hose Drop**

**PU-KIT SERIES**
**Pull-Up Kits**



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



**Heavy Duty PAC, 24', High Temperature Hose Drop**





**RTS - Retractable Telescoping System**

- Most economical system for overhead exhaust removal
- RTS incorporates three hose lengths with diameters of 5", 4", and 3" that telescope into one another
- In stored position - secured with chains and hooks, which are also used to connect to vehicle tailpipe
- The upper section features high visibility hose, the middle section is a smooth bore hose, while the lower section features heavy-duty no crush neoprene hose
- Weight: 19 pounds-Stored length: 7'
- Main duct: 14'-16' above floor
- Adjustable stainless steel duct saddle provided

# 9. UNDERFLOOR SYSTEMS - VEHICLE EXHAUST REMOVAL



Underfloor Exhaust Outlet Assembly with self-storing configuration, including saddle and no-crush 3000 Series hose

**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 underfloor in the ductwork. In the plug-in configuration the flex hose simply plugs into the floor outlet. 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 3000 Series 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 shop ceiling
- 3000 Series Hose features heavy construction and is no-crush neoprene hose

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



Underfloor Exhaust Outlet Assembly with custom cut design in cover



# 10. 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 Equipment, Military Equipment, all Diesel Applications.






## TCA SERIES

| | |
|---|---|
| **Applications:** | Hose Reels, Conventional Overhead Systems, Plug-In for Underfloor |
| **Options:** | Locking Hand Dampers, Sleeves, 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 # | Size | Description |
|---|---|---|
| TCA-4 | 4" | Tapered Cone, SS |
| TCA-5 | 5" | Tapered Cone, SS |
| TCA-6 | 6" | Tapered Cone, SS |
| TCA-8 | 8" | Tapered Cone, SS |



## TPA-RB SERIES

| | |
|---|---|
| **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" |
| **Features:** | Rubber Coated, Internal Stop Bar |

| Model # | Size/Description (Rubber Coated) |
|---|---|
| TPA-RB-4 | 8" Opening to Fit 4" Hose |
| TPA-RB-5 | 8" Opening to Fit 5" Hose |
| TPA-RB-6 | 8" Opening to Fit 6" Hose |
| TPA-RB-8 | 8" Opening to Fit 8" Hose |


23827 with 3000 Series No-Crush Hose

# 11. NOZZLES AND ADAPTERS



23897



23827



23827-SC

## 23800 SERIES

**Applications:** Hose Reels, Conventional Overhead Systems, Underground Exhaust (23827 only)
**Options:** Spring Clamps, Sleeves, Spring Hinged Dampers
**Used With:** Automobiles, Light Trucks, Motorcycles, ATV's
**Sizing:** 3", 4", 5", 6"
**Features:** Neoprene Fabrication, Oval or Round Mouth

| Model # | Size | 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 |
| 23897 | 4-5" | Neoprene, 6" Dia. Mouth, No Crush Hose |
| 23897-SC | 4-5" | Neoprene, 6" Dia. Mouth, Spring Clamp, No Crush Hose |
| 23897-SL | 4-5-6" | Neoprene, 6" Dia. Mouth, Fabric Hose |
| 23897-SC-SL | 4-5-6" | Neoprene, 6" Dia. Mouth, Spring Clamp, Fabric Hose |

8000-SC



8000-VG



## 8000 SERIES

**Applications:** Hose Reels, Conventional Overhead Systems
**Options:** Spring Clamps, Vise Grips, Locking Hand Dampers, Sleeves, Screens, Handles
**Used With:** Automobiles, Light Trucks, Heavy Duty Trucks, Diesel Applications
**Sizing:** 4-8"
**Features:** Rubber Coated, Sold with Spring Clamp or Vise Grip

| Model # | Size/Description |
|---|---|
| 8004 | 6" Opening, fits 4" Hose, with SC/VG |
| 8005 | 6" Opening, fits 5" Hose, with SC/VG |
| 8006 | 6" Opening, fits 6" Hose, with SC/VG |
| 8084 | 4" Hose with 8" Mouth, with SC/VG |
| 8085 | 5" Hose with 8" Mouth, with SC/VG |
| 8086 | 6" Hose with 8" Mouth, with SC/VG |
| 8088 | 8" Opening to fit 8" Hose, with SC/VG |





## Y KIT ASSEMBLY

**For dual exhaust applications the Y-Kit Assembly is a great fit.**

Y Kits are offered in 3" through 6" diameters standard, utilizing 3000, 5000, and 7000 Series Hose. A variety of nozzles and adapters are available. Larger sizes and configurations available upon request.




*1. Mechanical Oval Rubber Body Adapter, Quick Release, Vehicle Exhaust*

*2. Mechanical Round Rubber Body Adapter, Quick Release, Truck Exhaust*

*3. Round Exhaust Funnel Floor Stand*

*4. Custom Mechanical Oval Rubber Body Adapter, Rapid Action Clamp, High Performance Vehicle Exhaust*

## 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.

# 12. PORTABLE ELIMINATOR - VEHICLE EXHAUST REMOVAL

## The Portable Fume ELIMINATOR

**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.



Standard Eliminator with 45-degree Stack Nozzle for Truck Application

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 top-and mid-body exhaust pipes. For under chassis, simply uncouple the hose on the ver-tical 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



Standard Eliminator with 45-degree Stack Nozzle for Truck Application



Steel Base Plate Assembly with Radial Blade Blower, Discharge Hose, Power Cord Reel, TCA Adapter

# 13. PORTABLE ELIMINATOR - VEHICLE EXHAUST REMOVAL




Hose Reel Eliminator Model connected to truck using extended mast



Steel Base Plate Assembly with Radial Blade Blower, Discharge Hose, Power Cord Reel, TCA Adapter

## Eliminator, System Highlights:

- Portable Unit
- Compact Size
- Easy Maneuverability
- Telescoping Mast
- Adjustable Height
- No Contact with Vehicle
- Fits all top-, mid-body, and upper chassis
- exhaust pipes
- Versatile Hose Storage Options: hose reel
- option, hose storage mast
- All Models Ideal for: Truck, Auto, Agricultural Equipment, Construction Equipment Applications!

## Eliminator, Summary of 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’ 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



Eliminator Hose Reel Model connected to truck using extended vertical mast



Basic Base Plate Model Eliminator for Truck Application, attached to Overhead Exhaust System

The Portable Fume ELIMINATOR

# 14. FUME DETECTION, EXHAUSTING RAIL SYSTEMS

## $CO$, $NO_2$ & $CH_4$ FUME DETECTION




FDS Controller




Remote or Stand Alone Sensor

**OVERVIEW:**
Monoxivent's fume detection systems are offered as either a stand alone system or as a system with remote sensors for Co, NO2, and CH4. 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 AND BENEFITS:**
- Advanced minroprocessor based
- Unique high-tech enclosure
- Stand-alone and multi-sensor systems available
- Continuous, effective, and fully integrated monitoring of toxic and combustible gases

**APPLICATIONS:**
- Parking Garages, Maintenance Bays, Warehouses

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### 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 work-place 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 / equivalent pipe dia. 5 in.
Material: Aluminum
Weight: 20 lb./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. 7 in.
Material: Extruded Aluminum
Weight: 26 lb./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. 9 in.
Material: Extruded Aluminum
Weight: 44 lb./ft.
Operating Temperature: 302° F (150° C)



# 15. EXHAUSTING RAIL SYSTEMS

## 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 small 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 small 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 small air volumes and lighter weight equipment and accessories, while the ALU models are geared toward higher air volumes and larger equipment.









ALU150 Rail with Spring Hose Reel and Hose Reel Trolley



Technorail with 11000 Series Balancer Drop

# 16. SOURCE CAPTURE, DESIGN WORKSHEET




Monoxivent assists with exhaust system design. Our assistance provides you with an optimum system within budget. We ask that you take a moment to fill out the worksheet below. The design worksheet can be submitted to your local representative or direct via email to: info@monoxivent.com.

## SECTION #1

**PRIVATE PASSENGER VEHICLES**

Please Circle the Type of Vehicle: Cars Vans Pick-up Trucks High Performance Other _____

Make and Model of Vehicles: _____

_____

Please Circle if Dynometer Testing is Performed: Yes No
If Yes, is it: Engine Dyno Chassis Dyno Single Exhaust Dual Exhaust

**COMMERCIAL & INDUSTRIAL VEHICLES**

Please Circle the Type of Vehicle: Truck Bus Construction Equip. Military Vehicle Other _____

Make and/or Model, Number of Vehicles: _____

_____

Please Circle if Dynometer Testing is Performed: Yes No
If Yes, is it: Engine Dyno Chassis Dyno

Are Natural Gas Vehicles Incorporated? Yes No
Will the Vehicles Experience Regeneration? Yes No
Type of Exhaust Pipe, Circle all that Apply: Single Exhaust Dual Exhaust Horizontal Exhaust
Raincap Curved Stack Straight Stack

## SECTION #2

**ENGINE DATA**

Please Circle the Type of Vehicle: Diesel Gas 2 Cycle 4 Cycle

Engine Mfg. _____ Model _____ C.I.D. or Liters _____
_____ _____ _____

Are Engines Turbocharged? Yes No If Yes, What is the Maximum Boost Pressure? _____ p.s.i.

Maximum Rated RPM of Engine _____ Maximum Operating RPM of Engine _____

## SECTION #3

**BUILDING CONSIDERATIONS**

The Building is an Existing or New Structure (circle) Type _____

Number of Bays? _____

Overhead Crane? Yes No

Electrical Requirements: ____ / ____ / ____

Other Potential Obstructions: _____

_____

# 17. FUME EXHAUST HOODS

## Overhead Hoods



**OVERVIEW:**
Overhead Hoods are custom designed to your application and can be manufactured from numerous materials and thickness

**BENEFITS:**
- Customizable to fit your application
- Options include hanging brackets, blast gates, curtain strips, internal baffles

**APPLICATIONS:**
- Welding, General Ventilation, Plating Stations, Fume Capture, Oil/Mist



Overhead Canopy hoods for high temperature application, shown with optional blast gates

## 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. Available materials are: galvannealed, steel, stainless steel, aluminum, and corrosion resistant FRP. Also, custom sizes and elements are available.

**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 the 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 Slotted Fume/Canopy Hood



8’ SFH with Hinged Side Shields, for Welding Table Application



SFH with Table and Side Skirts



Standard SFH-34

# 18. SOURCE CAPTURE ARMS, BOOM/PAC

**OVERVIEW:**
Welding fume capture arms provide a safe and versatile solution for capturing weld fumes, smoke, dust, and other hazardous airborne particulate. Welding arms can be attached to swivel booms and PAC's for extended reach.

**FEATURES:**
- Easily articulated
- Adjustable friction joints
- 7', 10', 14' arms available
- Optional PAC/Boom available; Mini Arms for lab applications

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

**APPLICATIONS:**
- Welding/Maintenance Shops, Trade Schools, Training/Union Halls, other Industrial Shop Environments, Lab Environments

---

**15000 SERIES**
**Internal Support Arm**
- Internal support flex arm: 7', 10', 14' length
- 6" or 8" Diameter
- Three adjustable pivot points
- Package systems include: mounting bracket, support structure, hood/handle, and damper - optional direct mount blower available
- Swivel range 180-360 Degrees
- Aluminum tubing internal support, 6000 hose is flame retardant
- Hood constructed of high-quality, impact resistant, and high-temperature polycarbonate material for 6" models; 8" models include stainless steel hood



**15320**
**Telescopic Arm**
**(shown with D Series Blower)**
- Telescopic range: 4'-7'
- 4", 6", 8" Diameter
- Direct mount blowers available, other fan options available
- Ideal for vocational schools, small booth areas, over work benches
- Internal support structure
- Arm articulates left-to-right, as well as to the front
- Hood has independent pivot from arm






**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 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

# 19. SOURCE CAPTURE ARMS, BOOM/PAC

**PAC SERIES**
**Pivoting Articulated Crane**
**(shown with 15000 Arm)**

- PAC length: 10', 15', 20'
- Allows for versatile positioning, with accessories (welding arm shown), at any point with extended radius
- PAC has full pivoting wall/column bracket and center pivoting joint
- Mount bracket is one-piece die-stamped 5/16" industrial plate
- Horizontal sections of PAC constructed of 2" x 4" tubular steel, joined by a heavy-gauge pivoting pin, allowing for easy and free movement




**SB SERIES**
**Swivel Boom**
**(shown with 15000 Arm)**

- Boom length: 7', 10', 13'
- One piece pivoting extension
- Many options attach to swivel boom, including 15000 arm, and more
- Boom supplied with pivoting wall/column bracket constructed of one-piece die, stamped 5/16" industrial steel plate
- The sections are welded to-gether using vertical tubular sections



**MNX SERIES**
**Mini Arm**

- 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 '
- Available in 2", 3", 4"




**15000-EXT SERIES**
**External Support Arm**

- External support arm: lengths range from 5' to 36'
- 4", 5", 6" or 8" Diameter
- Package includes: blower (optional), wall/column mounting bracket, arm, exter-nal support structure, and polycarbonate hood with handle
- Three adjustable pivot points
- Optional light kit available



# 20. PORTABLE UNITS, WELDING SOURCE CAPTURE



PCFS, Portable Cartridge Filter System

**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 practical.

**FEATURES:**

- Offered in both cartridge and HEPA filter configurations
- 7’ and 10’ arm length configurations 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:**

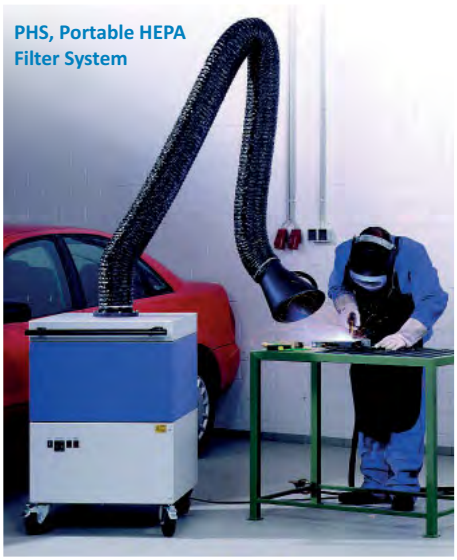
- Small footprint
- Easily transported
- Discharges clean air back into workspace

**APPLICATIONS:**

- Welding/Maintenance Shops, School Shop Environments, Anywhere a Fixed Filtering System is not practical

## 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
- Voltage:
  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



PHS, Portable HEPA Filter System

# 21. PORTABLE UNITS, WELDING SOURCE CAPTURE

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

## HEPA SYSTEM, 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" x 26"), 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 SYSTEM, 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 user-friendly, 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, 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 monitoring light.



The standard filter is a 12"x24" 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.



## FILTOO - MOBILE FILTER UNIT



- Mobile filter unit that can be used for applications requiring the filtration of fumes, dust, and even gases. The polluted air is extracted and directed into the filter unit by either a self-supporting suction arm, downdraft table or suction hose.
- Several stages of filtration exist and the clean air is then returned to the work space. The Filtoo is a plug and play system that is ready for operation. It is only necessary to connect the intake elements before commissioning the unit.
- The housing is constructed of heavy gauge steel and powder coated inside/out. The filter elements are accessible via maintenance access door. The unit is equipped with multi stage filtration to cover wide range of dusts, fumes and particulate.



# 22. DOWNDRAFT TABLE, FUME DETECTION

## DOWNDRAFT TABLE, STANDARD MODEL



**OVERVIEW:**
Standard Downdraft Tables are engineered to protect manufacturing environments and collect dust and fumes created from multiple handheld fabricating processes. When attached to an exhauster powered dust collector, the downdraft table design captures contaminants to be drawn into the collection system and away from the worker's breathing zone.

Downdraft tables provide an effective dust containment method for cutting, grinding, polishing and buffing. The modular design allows multiple down-draft tables to be placed together in a work area and connected to a single pull-through dust collector. Standard Downdraft Tables are an efficient, eco-nomical way to help comply with OSHA Clean Air Standards and to protect em-ployees from hazardous dust, smoke, and fumes generated by various indus-trial processes.

**** Note, custom downdraft table configuration available.***

# 23. 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 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 configuration
- 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
- Woodworking





# 24. CUSTOM FABRICATION

**OVERVIEW:**
Monoxivent's custom design team helps customers carry projects from 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
- 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

**PHOTOS:**
24" Diameter Stainless Exhaust Stacks; Stainless Steel Fume Hoods; Welding Heavy Gauge Bracket; XL Hose Reels with Bracket Extension; Fabrication Area at Monoxivent/Crawford facility











# 25. EXHAUSTING HOSE, FANS

## EXHAUSTING HOSE



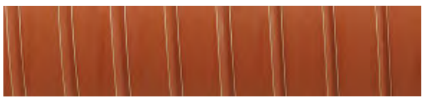
### 1000/2000 SERIES

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.



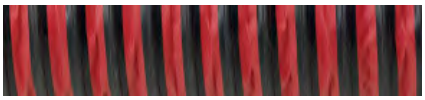
### 3000 SERIES

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 SERIES

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 SERIES

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 SERIES

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.

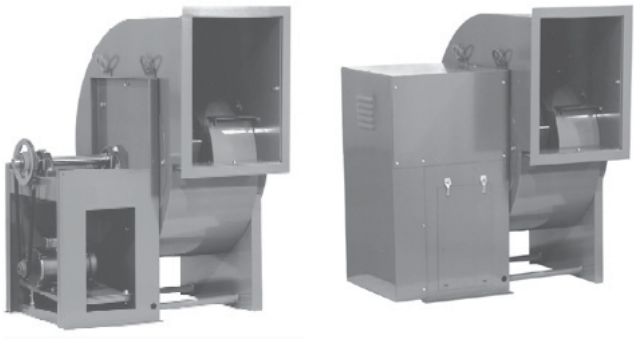


### 7000 SERIES

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 2010-degrees F. Hose fabric varies depending on required temperature rating.

## BI - BACKWARD INCLINE FANS

**OVERVIEW:**
Monoxivent's BI Series fans are AMCA certified. The belt drive utility blower meet's 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.



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

## D SERIES RADIAL BLADE FANS

**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.




**(L) D Series Radial Blade Blower with Zinc Coated wall/column bracket**
**(R) D Series Radial Blade Blower with foot mount base**

## 26. FRP SOLUTIONS

FRP Solutions by Monoxivent®

Monoxivent provides quality solutions with Fiberglass Reinforced Plastic (FRP) products. Our FRP products are used in many industrial, water, wastewater, underground, industrial/commercial and HVAC applications where corrosion is a problem.

Custom solutions for your corrosion problems in even the harshest environments are our specialty. Working with the experienced team at Monoxivent is a guarantee that you'll receive superior customer service along with quality products.

- Versatile
- Code Compliant
- Green Building
- Low Smoke, Flame
- Factory Assembly
- Low VOC Joint
- Custom Configuration




**OVERVIEW:**
UnderDuct is leading the way for code compliant LEED driven underground HVAC systems. UnderDuct is a corrosion resistant, high strength, light weight, Class 1 duct material, per NFPA 90. UnderDuct is ideal for displacement ventilation, allowing for the most economical long term energy savings. UnderDuct is shop fabricated with a minimum number of field joints.

Monoxivent has a nationwide 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 construction to meet any ventilation needs.

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

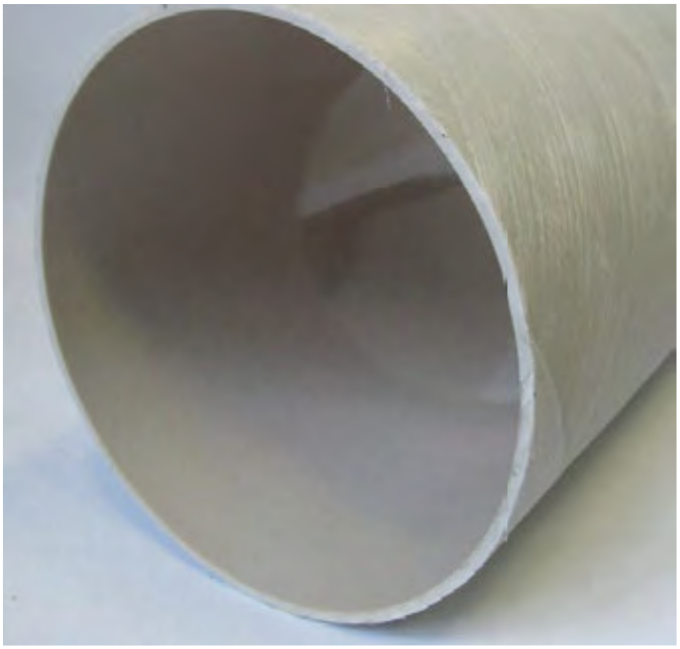




## UNDERDUCT - SINGLE WALL DUCT

Our Class 1 rated single wall duct, meets 25/50 flame/smoke requirements of ASTM E 84. Monoxivent UnderDuct 824 Low Smoke has been approved for underground applications. It is an excellent choice for corrosive environments where flame and smoke development are a concern, such as laboratories and swimming pools.

Monoxivent's single wall register boot (below) is shown during installation. The corrosion resistant boots are high strength and meet the same standards as typical single wall UnderDuct. Register boots are available in double wall construction as well.

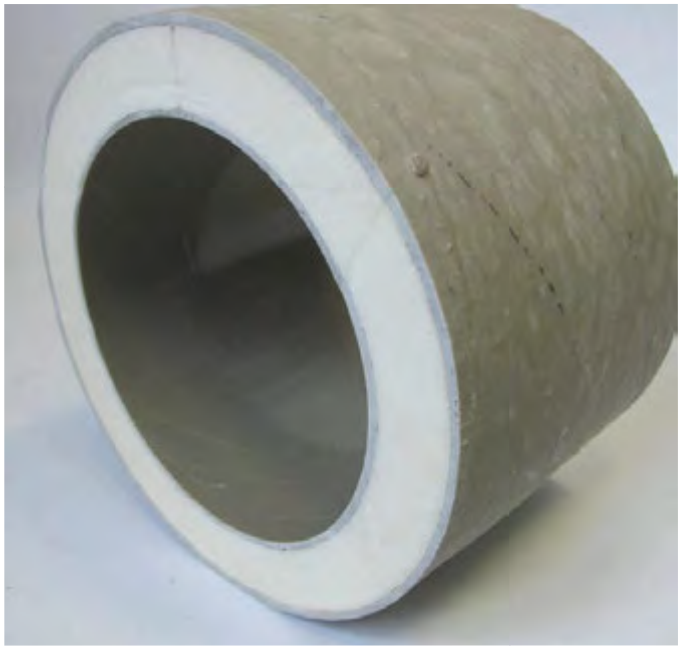




## UNDERDUCT - DOUBLE WALL DUCT

Double wall Monoxivent UnderDuct, also a Class 1 rated duct, will eliminate any thermal losses and save time and money compared to insulating on site. When supplied with the standard 1" insulation, the duct has a k factor of 0.16 and an R Value of 6. Also available in R-10 and R-14 by request.

***Double Wall Insulated UnderDuct fully complies with the latest version of the International Energy Conservation Code (IECC) which requires specific Rvalues determined by ASTM testing methods.***



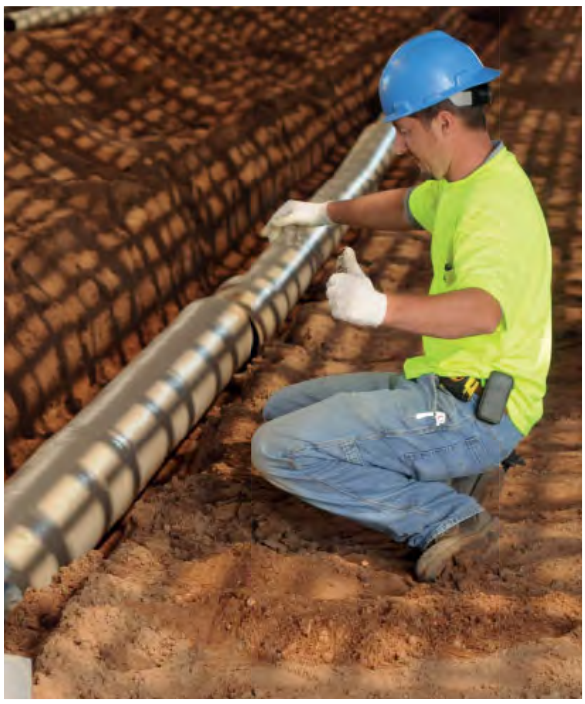


UnderDuct VE
by Monoxivent®







## UDVE - Corrosion Resistant Underfloor Duct for Vehicle Exhaust Removal

UnderDuct by Monoxivent, is pleased to announce: 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 air-flow and less pressure drop, making it the perfect match with Monoxivent under-ground exhaust equipment for a complete Source Capture package.

Under-Duct VE is the ONLY non-metallic vehicle exhaust duct certified to meet building codes by the ICC (International Code Council) as outlined in IMC 510.8.

**IMC 510.8, DUCT CONSTRUCTION**
"Nonmetallic ducts utilized in systems exhausting nonflammable corrosive fumes or vapors shall be listed and labeled. Nonmetallic duct shall have a flame spread rating of 25 or less and a smoke-developed rating of 50 or less, as tested in accordance with ASTM E 84. Ducts shall be approved for installation in such an exhaust system."

**UNDERDUCT-VE BENEFITS**

- 1 Source System for Vehicle Exhaust Removal and Underground FRP Duct
- Corrosion Resistant to Exhaust Gas and Condensate
- Corrosion Resistant to Ground Conditions
- Tested and certified to 500° F
- Approval for Direct Burial
- One stop shopping for a complete ICC approved Underground Vehicle Exhaust System
- The duct is designed to withstand both high water table conditions and wash water run-off

## Corrosion Composites by Monoxivent®



- Light Weight
- High Strength
- Non-Conductive
- Corrosion Resistant
- Ducts, Hoods, Stacks, Pipes, Platforms, Tanks, Scrubbers, Custom Items and More!



**OVERVIEW:**
Corrosion Composites 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.

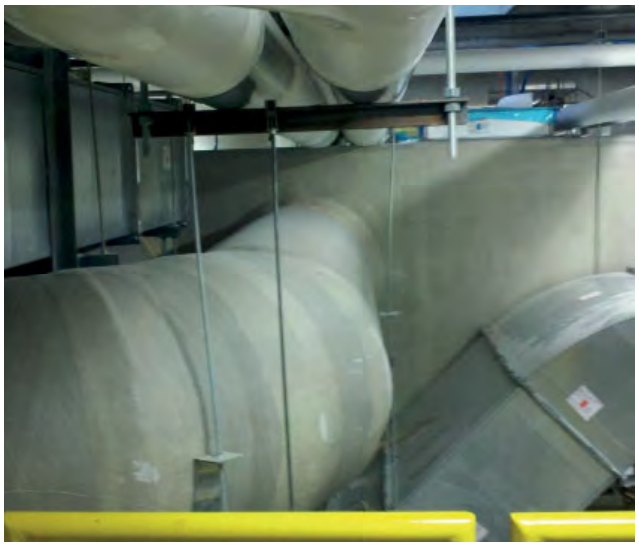
**MARKETS:**
Corrosion Composites is found within industry, manufacturing, water and wastewater markets. Products include: duct, scrubbers, dampers, tank covers, weirs, platforms, stacks, flumes, manholes, stack liners, trenches, pressure vessels, tanks, hoods, troughs, baffles, laders and more!

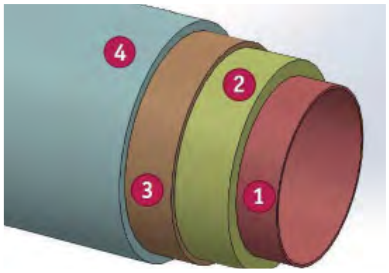
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## HD Hybrid Lab Duct by Monoxivent®

**OVERVIEW:**
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 considered 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. This product blends the interior corrosion barrier with an exterior Class 1 duct material.

**APPLICATIONS:**
- Hospitals
- Aquariums
- Dog kennels
- Exposed vehicle exhaust duct
- Swimming pools
- Laboratories
- Industrial applications

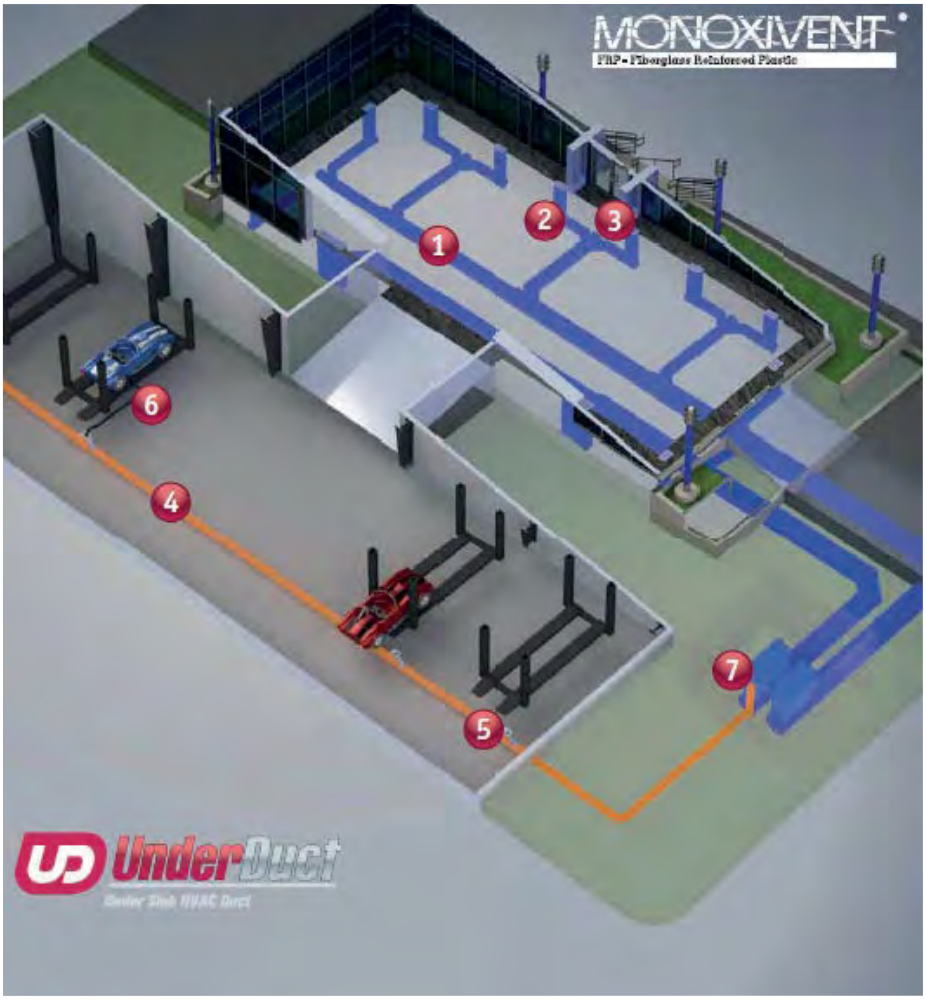





1. Vinylester Interior, Fire Retardant Corrosion Liner; 2. Modified Acrylic Structural Layer, Class 1 Rated for low smoke/flame; 3. Modified Acrylic Exterior, Class 1 Rated for low smoke/flame; 4. Exterior Coating, Factory Assembled Corrosion resistant gel coat



## 30. FRP SOLUTIONS



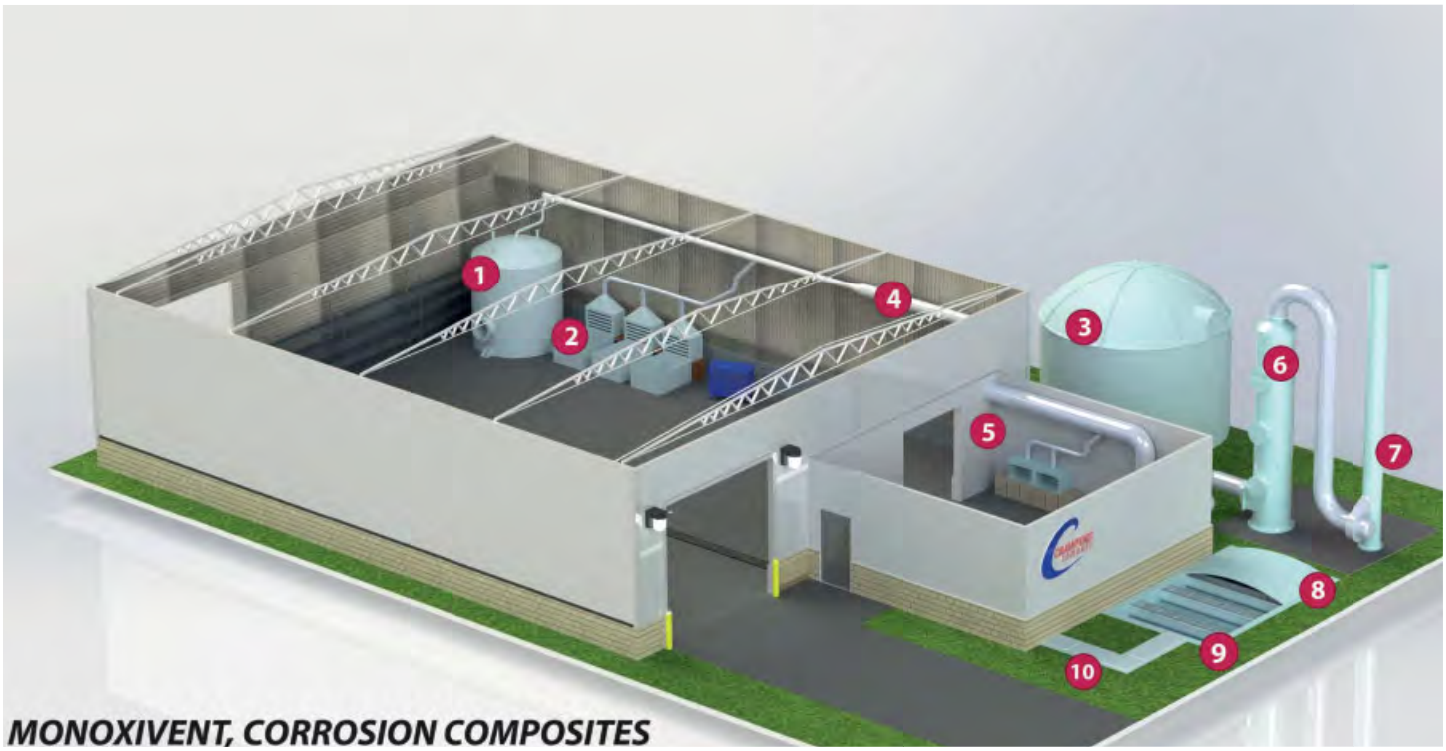

FRP Solutions by Monoxivent®

### UNDERDUCT INSTALLED GENERAL LAYOUT:

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

### CORROSION COMPOSITES INSTALLED GENERAL LAYOUT:

1. Chemical Storage Tank
2. Plating Line, Tank and Hoods
3. Domes Tank Cover
4. Exhaust Duct
5. Lab Duct
6. Scrubber
7. Stack
8. Arched Tank Cover
9. Troughs
10. Flat Channel Cover

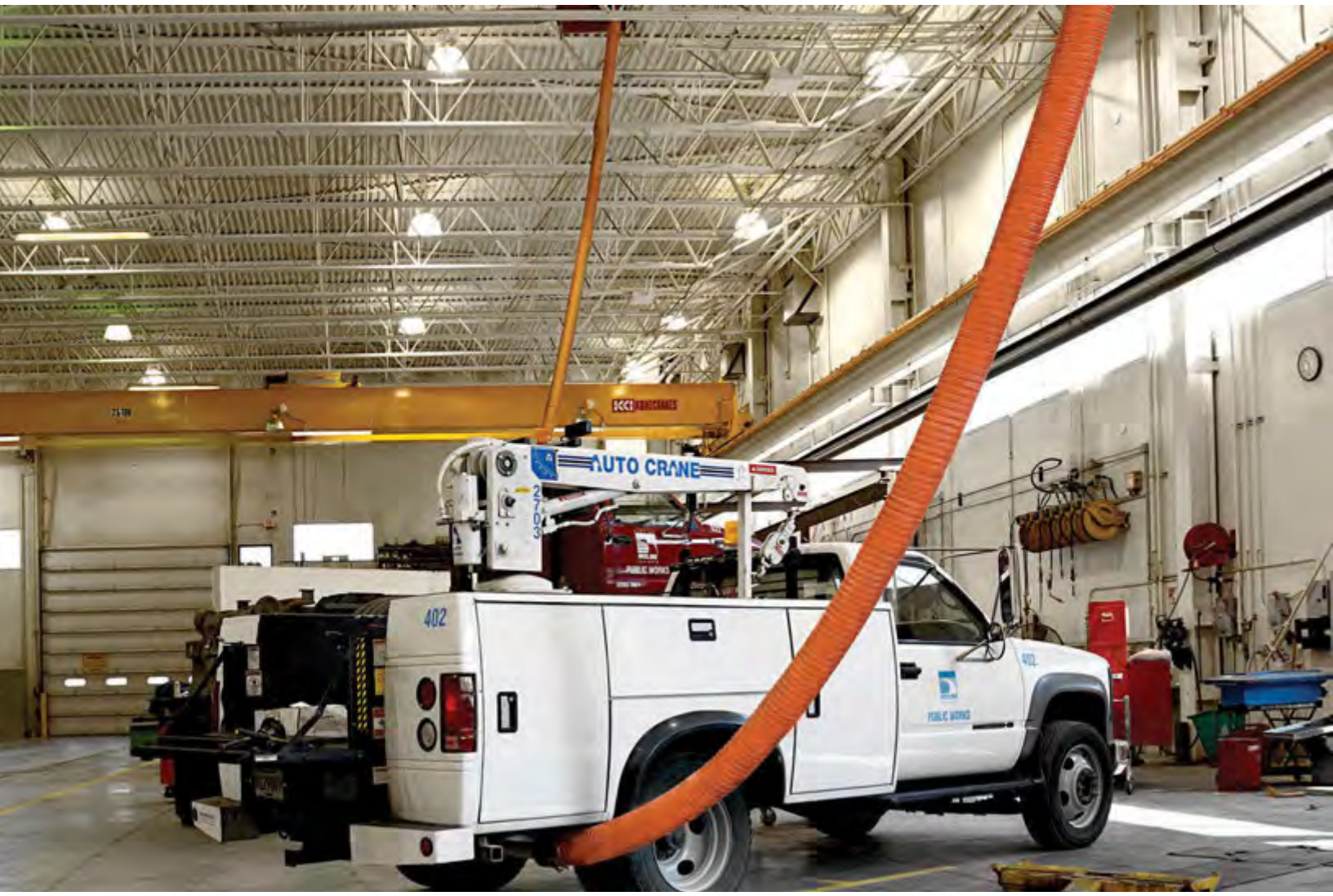



*MONOXIVENT, CORROSION COMPOSITES*










MONOXIVENT®
Source Capture Systems

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