PLYMOVENT®
clean air at work

Do you protect your fire fighters?

REMOVE DIESEL EXHAUST FROM YOUR FIRE STATION

EVER WONDER ABOUT THE VALUE OF CLEAN AIR?

We do. For more than 30 years we have made it our business to ensure clean air in fire stations. We provide high quality products to protect fire fighters and others from exposure to hazardous diesel exhaust. We offer a broad range of exhaust extraction systems, supported by complete engineering services. Contact us to find out what genuine commitment to customer requirements really means.

WHY PLYMOVENT

- A genuine commitment to customer needs
- System solutions
- Expertise gained over decades
- High quality products
- Global presence

DANGERS OF DIESEL EXHAUST

Chemical	Health effect*
Benzene	Group 1A, carcinogen to humans
Polynuclear aromatic hydricarbon	Group 2A, suspected human carcinogen
Benzene "alpha" pyrene	Group 2A, suspected human carcinogen
Formaldehyde	Group 2A, suspected human carcinogen
Benzofuran	Group 2B, possibly carcinogenic to humans
Carbon monoxide	Life threatening to humans
Nitric oxides	Life threatening to humans

*Source: OSHA.gov

REMOVE THE DANGERS OF DIESEL EXHAUST

Hazardous vehicle exhaust emissions in a fire station are a fire fighter's most significant cancer health risk and could be a serious legal liability for the fire department.

Eliminate this hazard from your fire station with Plymovent vehicle exhaust capture and removal systems. From existing stations to new turn key facilities , our totally automatic start-up and disconnect source capture systems are the recommended method for controlling exhaust emissions at your station.

Your fire fighters deserve nothing less.

SOURCE CAPTURE

PLYMOVENT SOURCE CAPTURE SYSTEMS: AN INDUSTRY STANDARD

At source capture of airborne particles, prior to their spreading in the local environment, is the most efficient method to achieve a safe and healthy working environment. It minimizes the amount of air that needs to be removed, thereby reducing the total investment in air handling equipment and also reducing the total energy consumption.

A key component to our system is the sealed nozzle design, in both a pneumatic and magnetic version: the Grabber®. With the Grabber®, the Plymovent system can provide a virtually 100% source capture performance hereby meeting various regulations.

The Grabber® connects to the tail pipe, capturing and eliminating virtually all exhaust fumes, plus it is simple to use:

- For the magnetic version just attach it to the tail pipe and you are done. We call this the Plymovent "click and seal" principle.
- For the pneumatic version just attach it to the tailpipe, push the fill valve and quickly ensure a positive seal around any size tailpipe; capturing and eliminating the chance that dangerous exhaust fumes will escape into your station.

DESIGNED FOR PURPOSE

Each system is designed to remove hazardous exhaust to provide a healthier working environment. Based on years of experience working in the air treatment business, Plymovent has developed a totally reliable approach, we call it ''engineered solutions''.

This approach ensures we offer an optimal solution for providing clean air in your working environment taking such important elements into account as value for money and efficient operation.

The philosophy of Plymovent is to deliver quality systems that are safe, user friendly, regulation compliant and that will enhance the quality of life for your fire fighters and personnel. That is why we have developed a line of source capture systems designed to meet your station's needs:

- Back In Systems - for single bay applications.
- Drive Through Systems - for drive thru bays with up to four vehicles.
- Vertical Stack Rail Systems - for vehicles with overhead exhaust stacks.

SOLUTIONS

VERTICAL STACK RAIL SYSTEM

FANS

We offer a wide range of fans covering most requirements in a variety of applications.

RAILS

We offer various aluminium rails equipped with features answering to the demands from different applications.

VSR CATCHER

- Entry guide
- Sealed entry gate
- 30 cm lateral movement to either side

STR / SBT TROLLEY

- Self supporting
- Internal wheels
- Adjustable impact cushions
- Bi-directional release

BALANCER

- Adjustable
- Strong but light weight
- Back up safety chain
- Closed housing

HOSE SADDLE

- Easy adjustment
- Full support (for the hose)
- Extends the life of the hose

HOSE ASSEMBLIES

- Multiple lengths
- High temperature resistance

WHAT IS THE BEST SOLUTION FOR YOU?

We can provide a diesel exhaust removal system specifically tailored to your needs.

DRIVE THROUGH SYSTEMS

BACK IN SYSTEMS

SAFETY DISCONNECT

- Protects system from damage
- 360 degree swivel
- Soft cover
- No hose obstruction
- Easy to operate and handle

GRABBER®

- Virtually 100% sealed
- High temperature resistance
- Pneumatic and magnetic version.
- Sizes for all applications

CONTROLS

We offer fully automatic control systems which will operate your exhaust system in the most efficient way.

BACK IN SYSTEMS

KEY ADVANTAGES SBT SYSTEM:

- Models handle up to 12 metres deep back-in bays
- Auto-disconnect at the exit door
- Attach the Grabber® from the vertical position
- Aluminium track: light-weight and strong
- End stops with rubber shock absorbers take up kinetic energy from trolleys
- Adjustable release points depending on the speed of the vehicle
- Pre-fitted yellow/black extraction hose
- Virtually 100% source capture through a unique automatic Grabber® nozzle; available in sizes to fit all emergency response vehicle tailpipe sizes
- Automatic start- stop of fan by an exhaust sensor
- Safety disconnect coupling; fail safe system, easily re-connectable
- Suitable for existing fire stations and new design-built stations

The Sliding Balancer Track System (SBT) has set the standard for vehicle emission control for fire and emergency response vehicles around the world.

The SBT system is the preferred system for back-in apparatus bays, and is designed to connect to any motor vehicle tailpipe while capturing virtually 100% of the exhaust emissions. The SBT system is used in single, back-in bay applications where the vehicle tailpipe is within 12 metres of the door. It is a fully automatic system, including fan activation and system disconnect from the exiting vehicle. The SBT system is fully code compliant, and there is a one-step connection to the system as a vehicle enters the station. If you are looking for an exhaust removal system that you can connect at the door before backing in and have it automatically disconnect when you leave, the SBT is right for your application.

DRIVE THROUGH SYSTEMS

The Straight Rail System (STR) is the preferred system for drive through apparatus bays.

The Plymovent STR system is designed to connect to any motor vehicle tailpipe and captures virtually 100% of the exhaust emissions. This system is ideal for drive through bays or bays with up to four vehicles parked in tandem. Everything within the system is automatic, from the fan activation to the automatic release from the exiting vehicle. There is a one-step connection to the system as the vehicle enters the station. Also, the STR system is code compliant, and has solid one-piece extruded aluminium rail profiles offering strength and durability.

KEY ADVANTAGES STR SYSTEM:

- Models to handle up to 30 metres
- Exhaust hose sizes for all vehicle types
- Auto-disconnect at the exit door
- Door-to-door removal of harmful emissions
- Speed absorbing shock system
- Front and rear door release
- Expandable design
- Allows for up to four vehicles in tandem
- Adjustable release points depending on speed of call-out release
- Virtually 100% source capture through a unique automatic Grabber® nozzle; available in sizes to fit all emergency response vehicle tailpipe sizes
- Automatic start-stop of fan by an exhaust sensor
- Safety disconnect coupling; fail safe system, easily re-connectable
- Suitable for existing fire stations and new design-buildtstations

VERTICAL STACK RAIL SYSTEM

KEY ADVANTAGES VSR SYSTEM:

- Floating suspension
- Adjustable capture stack
- Fits any vehicle stack
- One-piece aluminium rail
- A fully automatic system
- Expandable system to almost any length
- Adapter cone designed for both empty and loaded vehicles
- 30 cm lateral movement to either side
- Flexible duct connection
- Sealing rubber lips
- Automatic return to position after lateral movement
- Secure wire; fail safe
- Suitable for existing fire stations and new design-built stations

The Vertical Stack Rail System (VSR) is the solution for vehicles that have an upstack exhaust and need to move through an apparatus bay.

The Plymovent VSR system is designed for vehicles with overhead exhaust stacks. With no operator intervention needed, the "V" shaped catcher guides the vehicle tailpipe into the rail profile. The rail profile is a free-floating system that allows side-to-side movement of the entire system and automatically aligns itself with the vehicle's tailpipe. The system is fully automated from fan start to disconnect. Along with being completely code compliant, the VSR system offers offers a solid one piece extruded aluminum rail profile that provides strength and durability.

IMPORTANT FACTS...

...ABOUT DIESEL EXHAUST

- The EPA has determined that the size of the average diesel exhaust particle size is 0.2 microns. These particles are typically not visible to the human eye.
- Diesel exhaust particles are often too small to be captured by onboard filters. Toxic gases are not captured by particulate filters, and only partially by activated carbon filters. The Plymovent source capture system captures these particles and gases before they enter the fire station, and expels them to the outside.
- As a fire truck exits the station, diesel exhaust is expelled with force. The Plymovent source capture system prevents it from being spread throughout the fire station* including the living quarters.
- The Plymovent source capture system captures diesel exhaust before it enters the fire station, thereby preventing diesel exhaust from entering the breathing zone.
- Diesel exhaust particles and gases are suspended in the air, so exposure to this pollutant occurs whenever a person breathes air that contains these substances.
- Like all fuel-burning equipment, diesel exhaust contains nitrogen oxides. Nitrogen oxides can damage lung tissue, lower the body's resistance to respiratory infection and worsen chronic lung diseases, such as asthma.
- Plymovent source capture systems provide a sealed nozzle system which have been proven in over 50.000 installations over the past 30 years. **

* The operation of exhaust extraction systems can be affected by various factors including proper deesign of the system, operating procedures, and service and maintenance. Exposure levels should be checked upon installation and periodically thereafter to ensure that they fall within applicable regulations and exposure limit values.

** Plymovent systems are made code compliant, please ensure the system is properly designed, operated, serviced and maintained.

WHY CONTROL EQUIPMENT:

■ FINANCIAL REASONS

A fully automatic controlled system will enable you to substantially lower your use of electricity and overall energy consumption. This creates a solid and viable investment for your station.

■ ENVIRONMENTAL REASONS

The control equipment which we have in our product range enables an on-demand use of the system. The result of installing our control equipment is a reduction of electricity consumption and lower heating cost due to the fact that the system is only used when needed. Obviously lower energy consumption will also have a positive effect on the global environment.

Investing in a Plymovent system will not only save you money by reducing your use of energy, it will also enable you to help reducing global warming.

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REFERENCE

We have installed over 50.000 source capture systems across the world. Here are some examples:

China	Hong Kong	Germany	Frankfurt	Spain	Granada	USA	Lexington, KY
England	Norfolk	Germany	Bremen	Sweden	Stockholm	USA	Los Angeles, CA
England	Oxfordshire	Germany	Kassel	Sweden	Gothenburg,	USA	Raleigh, NC
Finland	Helsinki	Germany	Hamburg	Sweden	Malmö	USA	Charlotte, NC
France	Lisses	Hungary	Budapest	USA	Baltimore County, MD	USA	Atlantic City, NJ
France	Cateau	Ireland	Dublin	USA	Boston, MA	USA	Kansas City, KS
France	Noailles	Italy	Bologna	USA	Chicago, IL	USA	New Orleans, LA
France	Nanterre	Montenegro	Podgorica	USA	Cincinnati, OH	USA	Winnepeg, Manitoba
Germany	Munich	New Zealand	Aukland	USA	Dallas, TX	USA	Camrose, Alberta
Germany	Berlin	Portugal	Azores Islands	USA	Detroit, MI		
Germany	Cologne	Serbia	Belgrade	USA	Las Vegas, NV		

Plymovent cares about the air you breathe. We offer products, systems and services which ensure clean air at work, anywhere in the world.

We respect the environment and we deliver high-quality products. Our expertise gained over many years and our genuine commitment to customer requirements enable us to provide precisely the solutions you need.

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