CUSTOM DESIGN

Car-Mon can custom design and build beyond our product line and deliver a custom solution that is tailored to our customers’ needs. We have nearly seventy years of experience dealing with a variety of applications.

Our engineers look forward to the challenge and invite you to take advantage of our free design service.

Car-Mon’s Free Design Service can save time & headaches

SEVENTY YEARS AND STILL PROVIDING INNOVATIVE SOLUTIONS
EXHAUST FAN

Belt Drive Fans
A critical component of any system when removing noxious fumes is the exhaust fan. Car-Mon Products, Inc. proudly builds and provides fans with an extra measure of durability and an uncompromising emphasis on quality. Heavy gauge material, close-tolerance running clearances, and rigid manufacturing standards are common to Car-Mon fans. Every fan is individually built and tested here at our factory.

Car-Mon belted fans include variable pitch motor drive which allows for adjustment when actual field conditions are different than design. Belt drive fans are offered in utility set and inline arrangements for convenient choice in appropriate mounting and ducting arrangement.

Direct Drive Fans
Direct drive fans are offered in flange mount and base mount styles. Flange mount fans can be directly mounted to hose storage reels or wall/ceiling platforms to be used with hose drops or exhaust arms. A common use for our direct drive fans are with a single hose or exhaust arm. Typical motor sizes range from 1/3HP to 3HP, and single or three phase multi-voltage industrial grade motors are utilized.

Rest assured that a fan from Car-Mon will provide reliable service for your project needs.
OVERHEAD SYSTEM

When designing an overhead system, a wide range of components is available to choose from. It is important to select a storage and connection approach that is both compatible with the building and consistent with the expected vehicle exhaust output.

Hose Reel

Series TSR is a hose storage suspension system that provides exceptional versatility and convenience in a compact equipment package. With the TSR reel the flex is retracted onto the hose drum when not in use. The reel supports the hose for easy handling. Because of hose flexibility, it can be easily connected to a variety of exhaust outlets without struggling to position the vehicle to suit the exhaust system.

As with all Car-Mon products, the Series TSR reels are built with an uncompromising emphasis on strength and quality, with heavy gauge welded steel frame and drum. The TSR comes as a complete assembly ready for mounting including the frame, hose drum, and specified retraction system (winch, spring, or power). Standard TSR reels are designed for overhead mounting and store 25' of 3", 4", 5", 6", 7" or 8" diameter hose. Custom reels are built for greater hose lengths and diameters, and for other mounting conditions.

- **TSR-P**: Power operated fully motorized operation with 1/3HP direct drive gearmotor.

- **TSR-S**: Spring operated - A short pull on the hose assembly releases the drum to automatically rewind the hose.

- **TSR-W**: Closed circuit winch system includes drum winch, 1/8” 7×19 aircraft cable, and pulleys.

DEP Package

The Car-Mon DEP diesel exhaust package includes a hose assembly with a stack adapter and flange connection, spring retractor and hose sling for raising and lowering the hose assembly, and telescopic pole for positioning the adapter. Stack exhaust pipes are generally very high off the ground, and the DEP package of equipment is well balanced for easy placement and usage. For areas without an overhead crane the DEP is an excellent option to consider for a cost effective hose drop.

Down Drop

A decision of any exhaust fume removal system is how to arrange the hose assemblies for convenient usage. One method of hose usage is to have ducting come down to a point near the ground level and connect to our down drop fitting. Down drop fittings can be provided as a single or dual hose connection. Sizing of down drops has many choices and can be tailored to system needs. This fitting / ducting can typically be fit between overhead doors to allow for convenient reach to vehicle exhaust pipes. Where flex hose can be an expensive component of a system the down drop arrangement would minimize hose length for a cost effective approach to fume removal.
AT Arm

Series AT Articulated Boom is ideal for maintenance facilities with crane bays. The articulated support arm and ducting has a flexible center joint; swivel platform mounts to a structural column or wall for 180° rotation. This design approach offers extensive positioning capability within the work bay. It will accommodate a large range of hose types, diameters, and exhaust intakes.

Pipe Boom

Car-Mon PB series pipe boom is used for extending out from a column or wall to reach an interior work area. It is constructed of 1/8” wall, seamless mechanical tubing, with a welded angle iron base. The arm swivels around four machined roller bearings with adjustable positioning blocks for smoother rotation and greater load bearing strength.

The boom is engineered for use with several attachment configurations, including WX series arms, TSR hose reels, and spring retraction. Lengths and diameters will be determined by the customers’ use and building layout.

TLC Drops

The TLC telescoping drop assembly is a cost effective design that is a self-contained storage device; ideal for car dealerships and light duty maintenance work. It is delivered fully assembled from the factory for easy bolt up installation. Hose is stored inside an outer hard shell that has a durable wrinkle powder coat finish.

CO-X

The Series CO-X exhaust package is a compact, economical, and easy-to-install package for repair facilities. Equipment in the package includes a direct-drive fan, wall or ceiling platform, and hose assembly. A wide variety of hose and exhaust adapters are available.
UNDERFLOOR SYSTEMS

The primary reason to use an underfloor system is to provide an exhaust connection, as near to the vehicle exhaust pipe as possible to minimize the amount of hose needed and reduce the hassle in handling the components. This approach is particularly affective in applications where low exhaust vehicles are prevalent such as automobile dealerships. However, underfloor systems are also well applied to heavy equipment facilities where overhead cranes interfere with the operation of ceiling mounted exhaust systems. By using floor fittings that accommodate larger diameter flexible hose, exhaust connections can be placed strategically to serve large equipment bays without excessively long flexible hoses. In these applications large vertical stack vehicles can be served by the use of a diesel cane in conjunction with a hose assembly from the floor unit.

Disappearing

The disappearing style unit has many benefits and can be used in several different types of facilities. It is an efficient design that will take up very little space, mounting flush to the floor surface, with the hose storing inside the unit. Made from laser cut and machined stainless steel, this rugged design can withstand several tons if driven over. Its unique hinged door swivels and lifts conveniently allowing the door to lay flush.

Plug-In Units

The benefit to a plug-in unit is the flexibility that you have with hose length. It accommodates longer lengths for reach across large bays as well as stack configurations.

Custom

As with all Car-Mon products, custom solutions can be provided throughout the range of our product line. We take great pride in our ability to engineer and manufacture every component and product shipped from our factory. Because of our in house capabilities, Car-Mon can custom design and build beyond our product line and deliver a custom solution that is tailored to our customer’s needs.

DISAPPEARING UNITS USED AT DEALERSHIPS ACROSS THE UNITED STATES.
WELDING EXHAUST

When designing welding exhaust systems it is critical to have good communication with clients and exhaust system professionals. A comprehensive review should be performed to gather current and key information including building layout, welding booth and table sizes, work area obstructions, types of welding performed, etc. A wide range of system components are available and it is important to review the work areas to help select the appropriate source capture equipment for the end user.

Fume Capture Arms

Car-Mon fume capture arms are offered in many diameters and lengths, and allow positioning for fume removal. Our arms are constructed with external support features so airflow is smooth and unobstructed. Standard length is up to 15' and if greater reach capability is needed an extension boom is available.

- WXS series arms are available in 7' to 15' length and up to 8” diameter, and can be applied to a wall or ceiling platform for mounting.
- WXH series arms have standard lengths of 3' and 5', and are supplied with flexible hose and fume receptor.
- WXA series arms are available in 2' to 3' lengths, and articulate in a horizontal path. The arms may be fixed mounted, or may be mounted to a wall or base vertical standard for up/down sliding and more precise positioning.
- WXL series arms are standard in 3' to 5' lengths, and 3” to 4” diameters, for application to light fumes or lab fume control. Standard construction is of aluminum, and mounting options include wall, ceiling, and table base.

Stationary filter units

Media filter units allow recirculation of filtered air within the facility. Stationary units may be ducted to source capture equipment such as arms or hoods, or may be non-ducted, free hung in the space. Available in several configurations and sizes.

CMX Filtration

In general welding fumes are allowed for recirculation if filtered appropriately. Car-Mon offers a portable filter unit with arm, and stationary filter units

CMX Portable

A portable filter unit includes an exhaust arm for source capture, and allows movement for on and off table work locations. Using a double inlet double width belt drive fan, this unit is set for maximum performance.

Fume Hoods

Car-Mon Series FH fume hoods are engineered to collect fumes across a wide area while maintaining optimum air flow and velocity, drawing contaminants away from the operator. Built of heavy gauge galvanized steel for years of durable service, they are excellent for stationary booths because they require no operator positioning. Standard stock sizes of 3’, 4’, 5’ and 6’ booths with special sizes, materials and configurations also available.

Welding Tables

Car-Mon builds high quality welding tables with tubular steel frame and leveling feet. A wide range of sizes is available. As with all Car-Mon products, custom solutions can be provided beyond our standard product line. It is important to work with our representatives, engineers, and end users to gather important information for the project to be well evaluated.
Our History

Car-Mon has been a leader in the carbon monoxide industry for over 60 years. The first known underfloor system to be used specifically for the removal of vehicle exhaust was designed by Cornell Imming of O.A. Wendt Company, a Chicago heating and vent contractor, in 1943. This was for a new prototype Cadillac dealership that was to occupy the first two floors of a multi story building. The showroom was on the first floor with the maintenance shop on the second floor. As part of the ventilation contract, a design to remove the exhaust fumes was to be submitted to General Motors for approval.

The system Mr. Imming designed involved a fabricated steel receptacle with a hinged door that was placed into the flooring and connected to sheet metal ducting that ran between the second floor and the ceiling of the first floor. Wound metal flexible hose with a funnel like fitting was used to extend from the receptacle and connect to the vehicle exhaust pipe. When not in use, the hose assembly was slid back into the receptacle and stored in the ducting.

GM was delighted with the design, adopting it for other facilities of this type being built in urban areas including St. Louis, Kansas City, and Omaha. An underground version that fit into sewer tile was soon developed which rapidly became the exhaust system standard for new automobile dealerships.

By 1946 the name Car-Mon Products was coined and a new HVAC product line emerged. What started as an innovative solution to an exhaust problem has developed into a stand-alone manufacturing company that is still engineering based. We regularly design and build creative custom equipment for special applications as well as a wide range of standard products for vehicle exhaust, welding fume removal and dust collecting.