

## Overhead and Underfloor Exhaust Systems

### **Hanging Overhead with Tubing Sling and Winch** (*Far left*)

This system approach typically has a lower installation cost and applies to both new and existing buildings. A variety of tubing types and adapters are available to handle most fume exhaust systems. The winch system raises and lowers tubing assembly and features rubber-grip safety handle, ratchet hold mechanism, galvanized aircraft cable, pulleys and tubing sling. All Car-Mon duct systems are designed for efficient airflow, ruggedly built for long life and minimum maintenance, utilizing longitudinal-seam pipe with crimp and bead for easy installation. Tees are supplied with flanges, gaskets and hardware for easy, air-tight tube assembly attachment. Available in single or multiple units to do any size job.

### **Optional Balancer and Mounting Frame** (*Inset*)

Balancer replaces winch and cable system to support and retract tubing. Frame can be supplied to support an exhaust fan or ducting. A specialized version of this system, Series EVH, is designed specifically for emergency vehicles, and includes mounting frame, special tubing, retracting mechanism, and automatic-release exhaust adapter. Separate brochure available.

### **Series AT Articulated Arm Assembly**

The Series AT Articulated Arm consists of two sections of structural tubular steel connected by a pivot joint, and mounted on a welded bracket by a second pivot joint. The arm supports two lengths of rigid ducting, connected by flexible tubing over the center pivot, and connected to the system ductwork by a swivel fitting. The Series AT Arm provides a horizontal extension of ductwork with exceptional positioning flexibility and control. Available in lengths to suit most situations.

### ***Specification:***

The articulated arm assembly will be the standard product of a United States manufacturer of carbon monoxide exhaust systems. It will be of welded construction consisting of a minimum 2" x 4" x 1/8" structural tubular steel in two sections joined by a pivot assembly with a lubricated synthetic journal bearing between the sections to provide a wide range of horizontal motion. It will have a structurally sound mounting platform of welded construction with load bearings suitable for the required reach and applicable exhaust arrangement. The two sections will be made to the lengths specified. The duct will be held on top of the arm by mounting brackets with elevation adjustment for proper alignment to join the rigid duct sections. There will be a section of high temperature flexible tubing of non-adhesive construction at the pivot joint of the arm. The arm will have a swivel to connect to the system ductwork to provide bind-free operation.

The articulated arm assembly shall be Series AT, as manufactured by Car-Mon Products, Inc. of Elgin, Illinois.

### ***Options:***

Stainless steel duct

Stainless steel induction hood with high temperature tubing, stainless steel intake fitting, and lift ring for special dynamometer applications

Stainless steel hood with high temperature Kevlar shroud

Friction brake at all pivoting members

Adjustable stops at all pivoting members

Flexible tubing drop with spring balancer and adapter

### **Series PB Pipe Boom**

As a support arm for Series EX Welding Arms, Series TSR Tubing Storage Reels or tubing drops, the Car-Mon Series PB Pipe Boom greatly extends the range of the fume capture equipment. Mounted to a wall or column, the Series PB boom provides both horizontal extension and swiveling capability – 180 degrees with a wall mounted bracket; 270 degrees column mounted with offset bracket. The Series PB makes it possible to deliver essential fume exhaust capabilities to many areas otherwise impossible to service, such as where traveling overhead cranes preclude standard mounting of overhead exhaust equipment.

#### ***Specification:***

Tubular boom shall be of all welded construction, utilizing 1/8" wall, seamless mechanical tubing of specified diameter with low restriction 90-degree elbow. It shall be of the length shown on drawings and equipped with a steel angle iron flange to which the exhaust extraction assembly will attach with mating flange gasket and bolts. The mounting base and rotating bearing assembly shall be of welded construction utilizing a 1-1/2" x 1-1/2" x 3/16" structural angle iron mounting frame, with 1/8" back plate and two formed bearing platforms with integral steel tubular support sleeve. The bearing assemblies are to be comprised of ultra high density, lubricious synthetic material of an appropriate load bearing capacity with an upper structural angle locking flange and ball bearing race; a stainless steel swivel is to be supplied for connecting to system ducting providing bind-free rotation. Pipe Boom shall be Series PB, manufactured by Car-Mon Products, Inc., Elgin, Illinois.

#### **Boom Mounted Reel (*Top right*)**

An alternative to the ceiling-mounted reel; provides increased positioning flexibility, or for use when mounting needs dictate. Boom swivels 180 degrees from wall mounted bracket; 270 degrees if column mounted with offset bracket. Modular design facilitates on-site installation.

#### **Underfloor Systems (*Lower right*)**

Car-Mon's new, all stainless steel Series 93 floor units are the strongest, most durable anywhere, with stainless steel door and door frame, 20 ga. stainless steel body and stainless steel saddle. Lay-flat door assembly features stainless steel continuous door hinge and pin, fastened to door frame with stainless steel bolts. 2-piece telescoping construction allows easy height adjustment for flush installation. Entire unit is self-supporting from the ducting.

Available in single- and double-tube models for a variety of tubing sizes. Acceptable piping mediums include PVC, fiberglass or stainless steel spiral duct. Available flexible tube types are HTX, Silicone (CL), Stainless Steel (SS), Galvanized (GA) and Nu-flex (NU).

Special units for bus maintenance, diagnostic lanes and other special applications are available.