# Source Capture Systems for Welding Smoke and Other Fume Exhaust Applications

*Illustrated:* 

Series EX-120 12' Welding Exhaust Arm Series EX-100 10' Welding Exhaust Arm Model M Fume Receptor with Type PT Weldproof Tubing Series FH Fume Hood

# **Series EX Welding Exhaust Arms**

A full line of versatile arms to provide spot exhaust for a wide variety of fume removal applications. Modular construction and gas cylinder counterbalances make possible a wider range of standard sizes, as well as custom assemblies for nearly any need. External arm does not impede airflow; greatly improves reliability and ease of maintenance.

Standard lengths include 7', 10', 12', and 15' horizontal extensions. Receptors can be positioned almost anywhere within the nominal radius. Arms feature full 360-degree rotation when mounted on a ceiling platform, 180-degree rotation on wall-mount platform. Arms can be used individually with a fan or as a part of a multiple drop air cleaning system.

### Specifications:

### EX 070, EX 100, EX120 & EX150

Welding arm assembly shall consist of a double ball bearing swivel, support arm, non-conductive tubing and ABS thermoset polymer receptor. Swivel assembly to be double ball bearing operated with one bearing track above and one bearing track below a rotating angle-iron cylinder base. Support arm to be comprised of three operating sections with gas cylinder counterbalances and/or externally-adjusted tensioning controls at each pivot joint, tubular hand grip, fume receptor positioning ball, and tubing support straps. Internal support members, pivot joints or adjustment are not acceptable. Arm is to be factory-assembled and pretuned for ease of installation and function.

Welding arm assembly shall have flexible tubing diameter as specified and a maximum reach of 7', 10', 12' or 15' as specified. Welding arm assembly shall be Series EX with Type PT tubing and Model M receptor as manufactured by Car-Mon Products, Elgin, Illinois.

### EX030, EX 050

The welding exhaust arm shall be of welded construction utilizing tubular steel. It shall be factory assembled, including a two-section support arm with gas cylinder counterbalance, tensioning discs, tubular hand grip, fume receptor positioning ball, tubing support strap, and base for table mount, wall mount or ceiling mount as specified. Internal support members, pivot joints or adjustments are not acceptable. Arm to be assembled and pretuned at factory for ease of installation and function.

Welding arm assembly shall have a flexible tubing diameter as specified and a maximum reach of 3' or 5' as specified. Welding arm assembly shall be Series EX with Type PT tubing and Model M receptor as manufactured by Car-Mon Products, Inc., Elgin, Illinois.

# Series EXA Ergonomic Positioning Arm

Car-Mon's exclusive Series EXA Articulated Ergonomic Receptor Positioning Arm provides

fingertip control of receptor positioning for hanging overhead drops anywhere within confined welding areas. Mounts to booth wall or on a vertical standard for additional elevation range. Available in lengths for any size booth. Ideal for small, confined spaces that cannot accommodate any other receptor positioning method.

### Specification:

Ergonomic arm shall be of all welded construction, utilizing 2" x 2" x 1/8" mechanical square tubing, with 3/8" thick mounting plate, pivot joints with pin shaft, positioning ball and socket. Hood and tubing to be attached to receptor positioning ball at end of arm. Typical hood to be Car-Mon Model M Receptor; typical tubing to be Car-Mon Type PT. Arm shall be of the length specified. Optional vertical standard shall be constructed of 2" diameter steel tubing, welded to base plate with vertical adjustment to be made by locking lever. Arm is Series EXA as manufactured by Car-Mon Products, Elgin, Illinois.

# Type PT Flexible Weldproof Tubing

Strong yet lightweight and extremely flexible, Type PT features a unique non-conductive nylon helix to eliminate the danger of electrical transfer and accidental arc flashes. The synthetic resincoated polyester fabric is spatter resistant, oil resistant and flame retardant, with an additional wearstrip for added durability.

### Specification:

The flexible tubing shall be manufactured using a flame retardant, oil resistant, red coated polyester fabric with spatter resistant characteristics. It shall be of single ply, double overlap construction with a totally enclosed nylon helix, and shall have a textured wear strip for abrasion resistance. The tubing shall be electrically non-conductive to eliminate any chance of conveying electrical current to the duct system and to avoid accidental arcing. It shall have a smooth interior surface to minimize friction loss. Weld receptors, flanges, etc., if furnished, shall be factory assembled. Field assembly is not acceptable.

The flexible tubing shall be Type PT Weldproof tubing as furnished by Car-Mon Products, Inc., Elgin, Illinois.

# **Model M Fume Receptor**

Formed from high impact rated, non-conductive ABS thermoset polymer compound, for durability and safety. Features an integral swivel collar, convenience handle, and corrosion-resistant collector screen. When attached to an unsupported tubing drop it is equipped with an omni-directional magnetic base that grabs securely to any convenient surface or weldment for full positioning control. An optional, built-in hand damper is available.

### Specification:

The welding fume receptor shall be formed from high impact rated ABS thermoset polymer compound with high heat resistance capabilities, in an elliptical, low resistance air entry design with flanged perimeter. It shall be complete with integral swivel collar, circular omni-directional magnetic base, convenience handle, and collector screen of corrosion resistant material.

The receptor shall be electrically non-conductive to eliminate any chance of conveying current to the duct system and to avoid accidental arcing. The omni-directional magnetic base shall allow easy positioning of the receptor near the welding point and shall hold the receptor firmly in place on the worktable or weldment.

The welding fume receptor shall be Model M of the size specified, as manufactured by Car-Mon Products, Inc., Elgin, Illinois.

### Other design options include:

Integrated lighting and controls
Other tubing lengths, diameters, and types
Special receptor configurations and/or materials
Custom arm configurations for special articulation requirements

### Also available:

Inverted-mount arms for Car-Mon portable air cleaners and pedestal applications, with full 360-degree rotation.

Custom welding tables and booths for virtually any requirement. Consult factory.

### **Series CMW Fan and Arm Package**

Complete fume exhaust package includes Series CMW direct-drive fan, wall or ceiling mount platform, and 7', 10', 12' or 15' welding arm.

Tubing diameter: 5", 6" or 8" Fan HP: 1/2, 3/4, 1, 1-1/2

### **Series FH Fume Hoods**

Engineered to collect fumes across a wide area while maintaining optimum air flow and collection velocity, drawing contaminants away from the operator's breathing zone. Available in 18-ga. galvanized or 20-ga. stainless steel for years of durable service, they are excellent for stationary booths and require no operator positioning. Stock sizes for 3', 4' and 5' booths; special sizes, configurations, materials and gauges also available.

### Unique problems? Custom solutions are our business.

Only Car-Mon has the engineering capability and manufacturing flexibility to solve many unique exhaust problems. If your special needs can't be handled with standard equipment, consult the experts at Car-Mon.

## Car-Mon Products, Inc.

1225 Davis Road Elgin, Illinois 60123 847 695 9000 847 695 9078 Fax