# SENTRY AIR SYSTEMS, INC.

# PLASTIC FUME EXTRACTION SYSTEMS



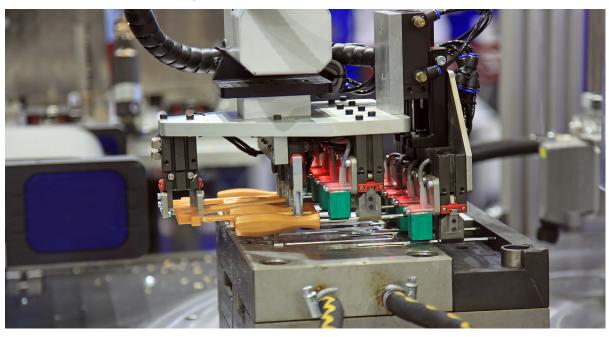
"Simple Solutions for Cleaner Air."™



# **Hazards of Plastic Fume**

The plastics industry uses a variety of techniques and machinery during the manufacturing process. Common methods include: Injection Molding, Extrusion, Blow Molding, Calendaring, Compression Molding, Finishing Processes, Purging and Maintenance. These processes emit fume, dust, and in some cases mist. When not adequately captured and filtered, workers are at risk of inhalation which may lead to a host of negative health effects.

Sentry Air Systems, Inc. offers an extensive line of Plastics Fume Extractors. These units are designed to be utilized as a respiratory safety engineering control during a variety of plastic manufacturing to help protect operators from over exposure to plastic fumes. Available configurations include portable extractors with self-supportive flex arms, extractors with flexible "python" hose, multi-operator extractors, downdraft bench assemblies and ceiling-mounted ambient air cleaners. The majority of these fume control extraction systems are ductless and recirculating, so they require no exterior venting or exhaust. Filtration media options include HEPA and other pleated media, Activated Carbon, and Specialty-blended carbon filter media.



#### **Plastic Polymers**

- Acrylic
- Acrylonitrile-butadiene-styrene ABS
- Epoxy
- Melamine
- Phenolics
- Polyamide
- Polycarbonate
- Polyester
- Polyethlene Terephthalate
- Polyethylene
- Polypropylene
- Polystyrene
- Polyurethane
- Polyvinyl Chloride
- Styrene-Acrylonitrile

# **Hazardous Contaminants**

- Acrylonitrile-butadienestyrene
- · Bisphenol A
- Cvanide
- Formaldehyde
- Hydrogen Chloride
- Isocyanates
- Nitrogen compounds
- Polyvinyl chloride
- Styrene
- Various additives including plasticizers, stabilizers, pigments, flame retardants, activators, lubricants, fillers, metals, and solvents

# **Health Concerns**

- Respiratory irritations
- Headache, nausea
- Inhalation of mist-containing legionella may increase risk for Legionnaires' Disease
- Some solvents are considered endocrine disrupters
- Some of the chemicals found in plastic are listed as known or possible human carcinogens



# **Portable Fume Extractors**



### Model 300 Portable Fume Extractor [SS-300-PFS]

A source-capture fume extractor with heavy-duty casters, 5" dia. flameretardant and self-supportive flex arm, small footprint, and high-quality filtration media.

#### **SPECIFICATIONS**

**Unit:** 15.5"L x 13"W x 16.5"H **Arm:** 5" Round x 68" L **Weight:** 40 lbs.

Noise: 61 to 66 dba (Low to High)

**Air Volume:** Up to 350 CFM High, Down to 50 CFM Low **Electrical:** 115/1/60, 2 amps; 220/1/50, 0.75 amps

Filter Media: HEPA, ASHRAE, Activated Carbon, and specialty-blended filter media

#### **FEATURES & OPTIONS**

- Variable Speed Controller Included (115V)
- Portability Handle IncludedMagnehelic Gage, Optional
- · Hour Counter, Optional



### Model 400/450 High Flow Portable Fume Extractor [SS-400/450-PFS]

This source-capture fume extractor features quiet operation, a powerful fan, a 6" diameter flame-retardant and self-supportive flex arm, and a variety of high-quality filtration media.

#### **SPECIFICATIONS**

**Unit:** 22.5"L x 20"W x 19.5"H **Arm:** 6" Round x 72" L **Weight:** 50-112 lbs.

Noise: 60 to 72 dba (Low to High)

Air Volume: Model 400: Up to 700 CFM High, Down to 50 CFM Low; Model 450: Up

to 950 CFM High, Down to 50 CFM Low

**Electrical:** Model 400: 115/1/60, 2.5 amps; 220/1/50, 1.5 amps; Model 450:

115/1/60, 10.7 amps; 220/1/50, 5.35 amps]

Filter Media: HEPA, ASHRAE, Activated Carbon, and specialty-blended filter media

#### **FEATURES & OPTIONS**

- Self Supportive, Flexible Arm Included
- Variable Speed Controller Included (115V)
- Portability Handle Included
- Magnehelic Gage, Optional
- Hour Counter, Optional



### Model 500 Heavy Duty Industrial Fume Extractor [SS-500-PFS-MP1]

The Model 500 is portable and requires no exterior-ducting or makeup air. The unit includes heavy-duty locking casters, a variety of extraction arm options, a variable speed controller and magnehelic gage. The particulate filters are easily cleaned with pressurized air and do not require removal of the filters.

### **SPECIFICATIONS**

**Unit:** 30" D x 30" W x 42.5" H

Arm: 7" Dia., 7' L (10' L HD Arm Available)

Weight: 332 lbs. Noise: 72 dba

**Air Volume:** Up to 1,300 CFM High, Down to 400 CFM Low **Electrical:** 115/1/60, 10.7 amps; 220/1/50, 5 amps **Filter Media:** (4) MERV 16 Micro-Pleat Particulate Filters

- Heavy-Duty Casters & Portability Handles
- 360° Rotating Source-Capture Arm
- Variable Speed Controller Included (115V only)
- Magnehelic Gage Included
- Cleanable Filters Included



# **Multi-Operator Fume Extractors**



# Model 400/450 High Flow Dual Arm Fume Extractor [SS-400/450-FSD]

The Model 400 and 450 Floor Sentry Double provides source-capture fume extraction to two operators simultaneously. These energy-efficient systems are equipped with two flame-retardant, self-supportive flex arms that provide equal suction at both inlets. This unit features heavy-duty casters for easy mobility and flex arms that are capable of 360 degree rotation.

#### **SPECIFICATIONS**

**Unit:** 22.5"L x 20"W x 19.5"H **Arm:** (2) 5" Round x 48" L **Weight:** 50-100 lbs.

Noise: 60 to 72 dba (Low to High)

Air Volume: Model 400: Up to 350 CFM High, Down to 50 CFM Low - Per Arm;

Model 450: Up to 475 CFM High, Down to 50 CFM Low - Per Arm **Electrical:** Model 400: 115/1/60, 2.5 amps; 220/1/50, 1.5 amps; Model 450: 115/1/60, 10.7 amps; 220/1/50, 5.35 amps

Filter Media: HEPA, ASHRAE, Activated Carbon, and specialty-blended filter media

#### **FEATURES & OPTIONS**

- Self Supportive, Flexible Arms Included
- Variable Speed Controller Included (115V)
- · Portability Handle Included
- · Magnehelic Gage, Optional
- Hour Counter, Optional



# Model 500 Heavy Duty Industrial Fume Extractor - Dual Hose [SS-500-PYTD-MP1]

The Dual Hose Model 500 Python Micro-Pleat Fume Extractor is engineered for heavy-duty, high-volume fume extraction applications for multiple operators. The system is equipped with two 12'L flexible Python hoses that provide powerful suction. Each Python hose includes a magnet capture hood that allows operators to secure the hose inlet to metal surfaces in hard-to-reach places. The particulate filters are easily cleaned with pressurized air and do not require removal of the filters.

## **SPECIFICATIONS**

Unit: 30" D x 30" W x 42.5" H

**Arm:** 5" Round x 12 ft. Flame Retardant Hose w/ Magnetic Capture Hood and Handle [25 ft. Hose Available] Upgraded HD hood w/ inlet grill & dual magnets available.

Weight: 282 lbs. Noise: 72 dba

Air Volume: Up to 650 CFM High, Down to 200 CFM Low - Per Hose

**Electrical:** 115/1/60, 10.7 amps; 220/1/50, 5 amps **Filter Media:** (4) MERV 16 Micro-Pleat Particulate Filters

- Heavy-Duty Casters & Portability Handles
- 360° Rotating Source-Capture Arm
- Variable Speed Controller Included (115V only)
- Magnehelic Gage Included
- Cleanable Filters Included



# **Downdraft Benches**



#### **Industrial Downdraft Bench [SS-440-DDB]**

This stainless steel downdraft bench is an effective source-capture solution for the extraction of fume, dust, and smoke at the work surface level. Equipped with a powerful Model 400 industrial air cleaner and high-quality HEPA filtration media.

#### **SPECIFICATIONS**

Bench: 48"W x 30"D x 35"H

Perforated Work Area: 30" W x 22" D

Weight: 150 lbs. Noise: 60 dba

**Air Volume:** Up to 700 CFM High, Down to 50 CFM Low **Electrical:** 115/1/60, 2.5 amps; 220/1/50, 1.5 amps

Filter Media: HEPA, ASHRAE, Activated Carbon, and specialty-blended filter media

#### **FEATURES & OPTIONS**

- Variable Speed Controller Included (115V)
- Magnehelic Gage, Optional
- · Hour Counter, Optional
- · Custom Sizes, Optional



## Portable Downdraft Bench - Sit [SS-435-DDB-SIT]

This bench is designed for easy portability and flexibility within the work environment to trap hazardous fume at the source of emission. Lockable casters make the unit easy to roll across a room and the no tool filter change design allows quick and easy filter replacement. The sitting height configuration is at a comfortable working height when seated in many standard chairs.

#### **SPECIFICATIONS**

**Bench:** 35"W x 25.5"D x 51.5"H **Perforated Work Area:** 30" W x 23.5" D

Weight: 150 lbs. Noise: 60 dba

**Air Volume:** Up to 700 CFM High, Down to 50 CFM Low **Electrical:** 115/1/60, 2.5 amps; 220/1/50, 1.5 amps

Filter Media: HEPA, ASHRAE, Activated Carbon, and specialty-blended filter media

#### **FEATURES & OPTIONS**

- Variable Speed Controller Included (115V)
- Magnehelic Gage, Optional
- Hour Counter, Optional
- Choice between Metal or Plexiglas doghouse



# Portable Downdraft Bench - Stand [SS-435-DDB-STAND]

This bench is designed for easy portability and flexibility within the work environment to trap hazardous fume at the source of emission. Lockable casters make the unit easy to roll across a room and the no tool filter change design allows quick and easy filter replacement. The standing height configuration is at a comfortable working height when standing in front of the bench.

#### **SPECIFICATIONS**

**Bench:** 35"W x 25.5"D x 56.5"H **Perforated Work Area:** 30" W x 23.5" D

Weight: 160 lbs. Noise: 60 dba

**Air Volume:** Up to 700 CFM High, Down to 50 CFM Low **Electrical:** 115/1/60, 2.5 amps; 220/1/50, 1.5 amps

Filter Media: HEPA, ASHRAE, Activated Carbon, and specialty-blended filter media

- Variable Speed Controller Included (115V)
- · Magnehelic Gage, Optional
- · Hour Counter, Optional
- Choice between Metal or Plexiglas doghouse



# **Ambient Room Air Cleaners**



# Model 2000 Industrial Ambient Air Cleaner [SS-2000-FH]

The Model 2000 Free-Hanging Air Cleaner is a highly efficient dual-stage industrial air filtration system that is effective in ambient air cleaning and the removal of airborne pollutants without the assistance of external ducting. This self-contained unit can be conveniently mounted in the customer's desired ceiling location without taking up any floor space.

#### **SPECIFICATIONS**

Unit: 45"L x 24"W x 24"H

Weight: 117 lbs.

Noise: 66 to 70 dba (Low to High)

Air Volume: Up to 2,000 CFM High, Down to 1,600 CFM Low

**Electrical:** 115/1/60, 8.7 amps

Filter Media: MERV 7 Pre-filter, MERV 14 Main Filter ASHRAE Bag

## **FEATURES & OPTIONS**

- Two-Speed Operation Control
- Four-Way Adjustable Grill
- · Quiet Operation
- · Reliable, Low Maintenance Operation
- Low Power Consumption
- Simple, Quick "No Tool" Filter Change
- · Long Filter Life
- · Sturdy Construction



#### Model 700 Commercial Ambient Air Cleaner [SS-700-FH]

The Model 700 Free-Hanging Air Cleaner is a commercial-grade air filtration system with a quad-filter chamber. It is highly effective for removing renegade and ambient pollutants without the need for external ducting, or make-up air. This compact unit is uniquely designed for multiple mounting configurations.

# **SPECIFICATIONS**

**Unit:** 32 5/8"W x 24 3/4"D x 14.5"H

**Weight:** 132-160 lbs. **Noise:** 71 dba

Air Volume: HEPA: Up to 600 CFM / ASHRAE: Up to 900 CFM / (2) ASHRAE: Up to 715 CFM / 8lb. CARBON: Up to 800 CFM / 16lb. CARBON: Up to 600 CFM /

HEPA/8lb. CARBON: Up to 480 CFM **Electrical**: 115/1/60, 4.9 amps

Filter Media: MERV 7 Pre- and Post-filter, HEPA, DOP95, (2) 8lb. Refillable Carbon &

Specialty Blended Carbon

- · Easy Access to Filters
- Adjustable Grill
- Quiet Operation
- · Reliable, Low Maintenance Operation
- Low Power Consumption
- Simple, Quick "No Tool" Filter Change
- Long Filter Life
- Sturdy Construction



# **Mist Collectors**



# Model 300 Mist Collector [SS-2000-FH]

The Model 300 Mist Collector is a compact and powerful air cleaner designed for mist collection on enclosed machinery. The most common application for this system is CNC mist elimination. In addition, this compact mist collector may be an excellent choice for other systems that produce coolant mist, water mist, and oil mist. Integrating this unit with existing machinery is easy because of its small footprint and convenient mounting options.

# **SPECIFICATIONS**

Unit: 15.5"L x 13"W x 21.25"H

Weight: 55-60 lbs.

Noise: 61 to 66 dba (Low to High)

Air Volume: Up to 300 CFM High, Down to 25 CFM Low

**Electrical:** 115/1/60, 2 amps

Filter Media: Washable Mist Pre-Filter, Activated Carbon Pre-Filter, HEPA, ASHRAE

#### **FEATURES & OPTIONS**

- Mounting Brackets, Included
- · Variable Speed Controller, Included (115V only)
- Long Filter Life
- · Reliable, Low Maintenance Operation
- · Hour Counter, Optional
- · Magnehelic Gage, Optional



### Model 400/450 Mist Collector [SS-400/450-MIST]

The Model 700 Free-Hanging Air Cleaner is a commercial-grade air filtration system with a quad-filter chamber. It is highly effective for removing renegade and ambient pollutants without the need for external ducting, or make-up air. This compact unit is uniquely designed for multiple mounting configurations.

# **SPECIFICATIONS**

Unit: 22.5"L x 20"W x 25.25"H

**Weight:** 50-112 lbs. **Noise:** 60-72 dba

Air Volume: Model 400: Up to 700 CFM High, Down to 50 CFM Low; Model 450: Up

to 950 CFM High, Down to 50 CFM Low

**Electrical:** Model 400: 115/1/60, 2.5 amps; Model 450: 115/1/60, 10.7 amps **Filter Media:** Washable Mist Pre-Filter, Activated Carbon Pre-Filter, HEPA, ASHRAE

- Mounting Brackets, Included
- · Variable Speed Controller, Included (115V only)
- · Long Filter Life
- · Reliable, Low Maintenance Operation
- · Hour Counter, Optional
- · Magnehelic Gage, Optional

