

NO₂

Methyl Alcohol

NH₃

Rust

Scale

Oil Smell

Hydrocarbons

Methyl Ethyl
Ketone

CO

H₂S

Particulate

SO₂

Ozone

NO

Purification and Filtration Systems for Compressed Industrial Breathing Air



"Save your breath with

NST[®]

MODERN SAFETY TECHNIQUES

Maximum Protection is Now Within Everyone's Reach!

Clean air is nothing to compromise on!

Now, there is no longer any reason to provide less than the best breathing air for workers. Modern Safety Techniques' (MST) unique, low temperature catalyst has made carbon monoxide removal simpler, and much more affordable.

Whether carbon monoxide removal is needed for your application or not, MST can provide you with a package of supplied breathing air products:

- Ambient air pumps
- Point of attachment systems
- CO removal systems
- Breathing air (non-CO) filtration systems
- CO monitors
- Calibration kits, and
- Complete accessories

Selection Process for

Is CO Removal Desired?

Supplied-air respirators are used to provide air to workers in contaminated atmospheres found in paint spraying, sand blasting, asbestos abatement and other applications. They are usually supplied by oil-lubricated air compressors. Contaminates such as oil, rust, water, dirt, scale and deadly carbon monoxide gas can find their way into the intake of the compressor, or be produced by the compressor itself, turning a protective breathing apparatus into a hazardous accessory. Even oil-less type compressors can intake carbon monoxide and other contaminants.

Chemicals found in various paints and other adhesives and solvents require the use of supplied-air respirators. In many instances, the use of cartridge-type negative pressure respirators are no longer "permissible practices!" (Consult NIOSH "Pocket Guide to Chemical Hazards" for information regarding the use of supplied-air-type respirators.)

OSHA Regulations

The Occupational Safety and Health Administration (OSHA) state(s) in 29 CFR1910.143(d) that air quality for "Breathing air shall meet at least the requirements of the specification for Grade D breathing air as described in Compress Gas Association Commodity Specification G-7.1-1989... Compressors shall be constructed and situated so as to avoid entry of contaminated air into the system and suitable in-line air purifying sorbent beds and filters installed to further assure breathing air quality." The Compressed Gas Association (according to G-7.1-1989) lists the following maximum allowable contaminate levels in Grade D air:

Contaminate	Maximum Allowable Contaminate Level
carbon monoxide	10 ppm*
carbon dioxide	1000 ppm*
condensed hydrocarbons	5 mg/m ³

* parts per million (Volume)



Methyl Alcohol

NH₃

Rust

Scale

NO₂

Hydrocarbons

Oil Smell

CO

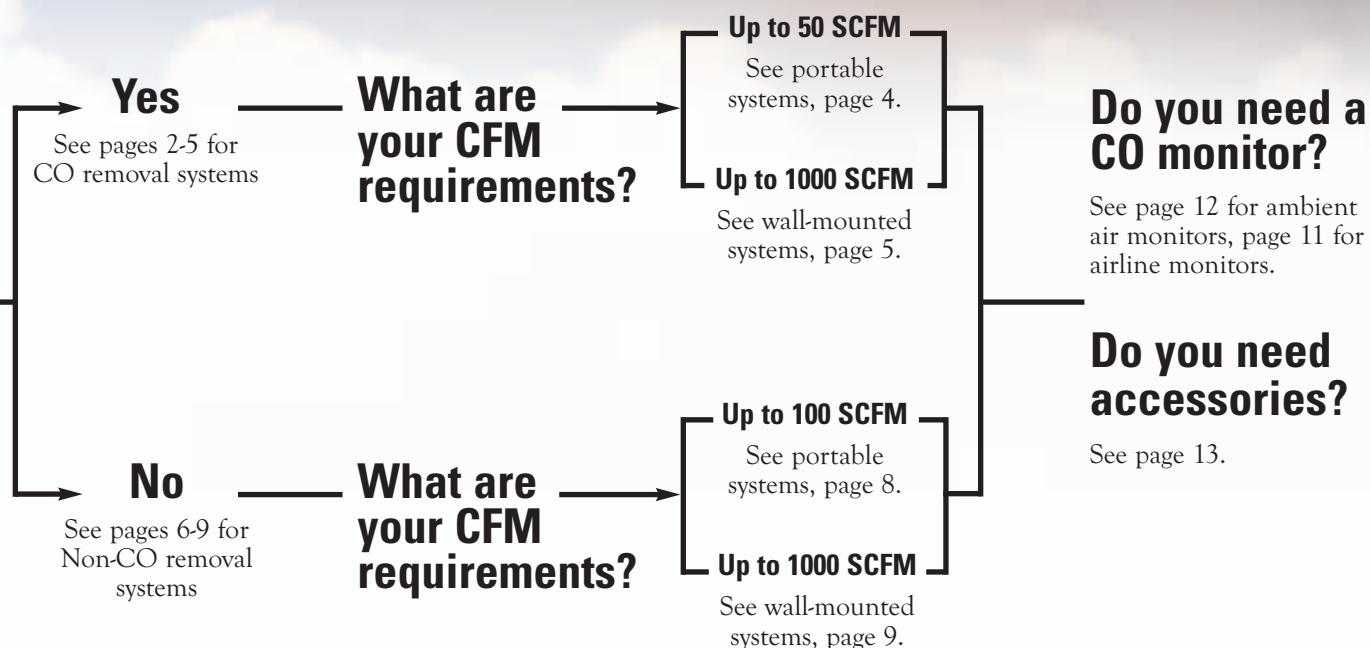
H₂SSO₂Methyl Ethyl
Ketone

Ozone

NO

Particulate

Purification and Filtration Systems



Racing Industry Picks MST's Technology to Protect Drivers from Carbon Monoxide

Since 1997, many top stock car racing teams have employed **MST's LT CAT™** low temperature carbon monoxide removal catalyst to purify their drivers' air. Unlike traditional filtration-only systems, the **LT CAT** catalyst chemically converts CO to carbon dioxide, protecting drivers from dangerous CO that can accumulate in the car while racing. Track Fresh CO Filters containing **LT CAT** catalyst have been sanctioning body tested and recommended, and have been in the winners' circle more times than any other form of respiratory protection for drivers.

Don't Just Filter...**Purify** with Our Low Temperature Catalyst to Remove CO



There is nothing else like it!

MST's unique LT CAT™ low temperature catalyst offers significant benefits over all other CO removal systems. Because we use a precious metal catalyst, our Respiratory Protector® Series Breathing Air Purification Systems convert CO to carbon dioxide without the limitations you find with every other CO removal system on the market today:

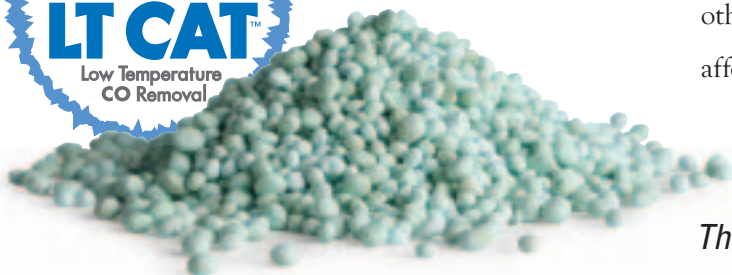
Removes CO and other toxic gases including: ozone, nitric oxide, sulfur dioxide, nitrogen dioxide, hydrogen sulfide, ammonia, acetaldehyde, methyl chloride, methyl ethyl ketone, acetone and methyl alcohol.

Lowest installed cost of any CO removal system (50%+ savings)

No expensive desiccant dryers

With our LT CAT catalyst, you don't need dryers. Other systems require very dry air to function (4% relative humidity). To get air this dry costs a lot of money, primarily for desiccant drying towers. When you factor in the cost of buying, operating

and maintaining a dryer, clean air for your workers can become very expensive.



Continuous operation

Our Respiratory Protector Systems are designed to operate continuously. All other CO removal systems require drying time to remove moisture from saturated dryers. Continuous operation is possible with other companies' equipment, but they require "twin towers," to alternate operation while moisture is purged...more equipment,

more complexity, more **cost!**

Greater operator comfort

The ultra-dry air from all competitive systems is very uncomfortable for breathing! Respiratory Protector Systems provide comfortably humid air for operators, avoiding overly-dry nasal passages and discomfort.

Greater portability

At only 19 or 31 lbs., our portable Respiratory Protector systems are easy to get to the jobsite.

Unique air distribution baffles

Maximize absorption and catalytic efficiency.

Total costs are much lower

By eliminating dryers, our unique design removes more than half of the cost for most systems compared to other CO removal equipment, making CO removal affordable for any operation.

The difference is the catalyst!

1st

Pre-filter
provides
particulate
removal

Stage

2nd

Coalescing
action for liquid
contaminates

Stage

3rd

Contains activated
charcoal for removal of
gaseous hydrocarbons,
tastes, and odors.

Stage

4th

Contains unique
low temperature
catalyst for removal
of carbon monoxide
and other toxic
gases.

Stage

WARNING

MST's Air Purification Systems will not increase the oxygen content of an air supply and should not be used when air entering the system is oxygen deficient.

Respiratory Protector® Portable CO Removal Systems



Model RP010AMST



APPROVED LR 104195

(Note: 5700 monitor approved for Class 1, Div. I, Groups A, B, C & D Hazardous Locations when utilizing only 9 volt batteries.)



Model RP050BMST



Accessory Port/Indicator Panel

- 1** Inlet connection for supplied air source
- 2** Pressure relief valve for added safety
- 3** Pre-filter provides first-stage particulate removal
- 4** Second-stage coalescing action of liquid contaminants
- 5** Automatic float drain expels liquid contaminants out of system
- 6** Third-stage contains activated charcoal for removal of gaseous hydrocarbons, tastes and odors
- 7** Fourth-stage contains unique low-temperature catalyst for removal of carbon monoxide and other toxic fumes. CO is converted to carbon dioxide.
- 8** Pressure regulator with indicating gauge for adjusting the correct pressure to operator's supplied air respirator system
- 9** Quick disconnects included for easy connection to supplied air respirator system
- 10** Carbon monoxide monitor; standard on all models
- 11** Accessory port/indicator panel (see inset, left)



Model RP008AMST
(Belt Mount)

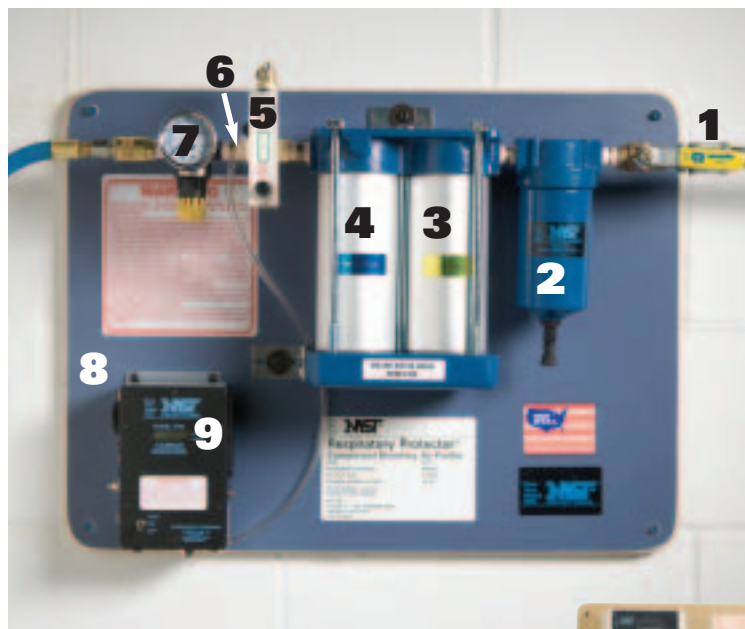
These are the only truly portable, continuous-use CO removal systems available! Operators enjoy extra freedom while breathing cleaner, humidified air.

In addition to weighing a mere 19 or 31 lbs., these Respiratory Protector systems come complete with CO monitor standard on all models. You can choose between the Model 5701 CO and oxygen monitor or the Model 5700 monitor with LCD display of CO in ppm.

Specifications	Model RP010	Model RP050	Model RP008 (Belt Mount)
Rated Air Flow (Max.) @ 100 PSI	10 SCFM (4.7 L/s)	50 SCFM (23.6 L/s)	8 SCFM (3.7 L/s)
Operating Pressure	100 PSIG Dynamic (6.9 bar)	100 PSIG Dynamic (6.9 bar)	100 PSIG Dynamic (6.9 bar)
Inlet Pressure (Max.)	150 PSIG Static (10.4 bar)	150 PSIG Static (10.4 bar)	150 PSIG Static (10.4 bar)
Outlet Pressure Range	0-125 PSIG (0-8.6 bar)	0-125 PSIG (0-8.6 bar)	0-125 PSIG (0-8.6 bar)
Operating Temp. Range	68-150°F (20-65°C)	68-150°F (20-65°C)	68-150°F (20-65°C)
Operating Relative Humidity (Inlet Air - Non Condensing)	30-100% RH	30-100% RH	30-100% RH
Outside Dimensions	13.5"L x 12.87"W x 6"D (343mm x 327mm x 153mm)	23.25"L x 20.75"W x 9"D (590mm x 527mm x 229mm)	8.5"L x 7"W x 4"D (216mm x 178mm x 102mm)
Weight (Including Monitor)	19 lbs. (8.6 kg.)	31 lbs. (14.1 kg.)	3.5 lbs. (1.6 kg.)
Replacement Filter Set	RCRP010	FX050	8026901

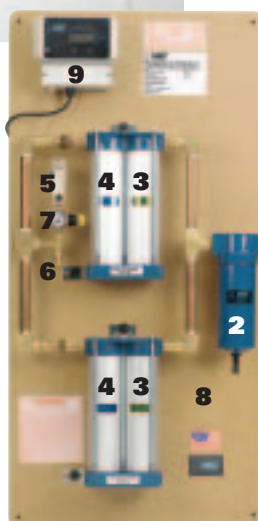
"Save your breath with
NST
MODERN SAFETY TECHNIQUES

Respiratory Protector® Wall Mount CO Removal Systems



Model RP010ANF-S1

- 1** Ball valve at inlet to facilitate filter changing operations
- 2** Pre-filter offers two-stage protection
- 3** Third-stage contains deep charcoal bed for removal of gaseous hydrocarbons, tastes and odors
- 4** Fourth-stage contains deep bed of low-temperature catalyst for removing carbon monoxide and other toxic gases
- 5** Flow meter
- 6** Pressure relief valve for added protection
- 7** High flow regulator with gauge to adjust main outlet air supply
- 8** Rugged panel board for mounting complete system
- 9** Carbon monoxide monitor (choose from four options)



Model RP050BMST-S1(2)
(Twin 50)

Like all Respiratory Protector systems, our wall-mount units employ LT CAT low-temperature catalyst, removing CO while eliminating the cost of desiccant dryers and providing a continuous flow of moist, comfortable breathing air. We offer wall-mount systems with capacities from 10 to 1000 SCFM.

If space considerations allow, our Twin 50 Model offers significantly lower replacement catalyst cartridge costs for larger systems.

Respiratory Protector wall-mount systems are available with four types of electrochemical carbon monoxide monitors. Our Model 2002 has a LED display for CO and comes in a heavy duty enclosure. The Model 5701 monitors both CO and oxygen. The 5700 has an LCD display for CO in ppm. The Model 5800 has green and red LED indicator lights for CO.

Specifications	Model RP010	Model RP050	Model RP050 (Twin 50)	Model RP100	Model RP200
Rated Air Flow (Max.) @ 100 PSI	10 SCFM (4.7 L/s)	50 SCFM (23.6 L/s)	100 SCFM (47.2 L/s)	100 SCFM (47.2 L/s)	200 SCFM (94.4 L/s)
Operating Pressure	100 PSIG Dynamic (6.9 bar)	100 PSIG Dynamic (6.9 bar)	100 PSIG Dynamic (6.9 bar)	100 PSIG Dynamic (6.9 bar)	100 PSIG Dynamic (6.9 bar)
Inlet Pressure (Max.)	150 PSIG Static (10.4 bar)	150 PSIG Static (10.4 bar)	150 PSIG Static (10.4 bar)	150 PSIG Static (10.4 bar)	150 PSIG Static (10.4 bar)
Outlet Pressure Range	0-125 PSIG (0-8.6 bar)	0-125 PSIG (0-8.6 bar)	0-125 PSIG (0-8.6 bar)	0-125 PSIG (0-8.6 bar)	0-125 PSIG (0-8.6 bar)
Operating Temp. Range	68-150°F (20-65°C)	68-150°F (20-65°C)	68-150°F (20-65°C)	68-150°F (20-65°C)	68-150°F (20-65°C)
Operating Relative Humidity (Inlet Air - Non Condensing)	30-100% RH	30-100% RH	30-100% RH	30-100% RH	30-100% RH
Outside Dimensions	24"L x 18"W x 5.75"D (610mm x 457mm x 146mm)	23.25"L x 20.75"W x 9"D (590mm x 527mm x 229mm)	48"L x 24"W x 5.75"D (1219mm x 610mm x 146mm)	24"L x 36"W x 7.75"D (610mm x 915mm x 197mm)	36"L x 36"W x 7.75"D (915mm x 915mm x 197mm)
Weight (Including Monitor)	18 lbs. (8.2 kg.)	31 lbs. (14.1 kg.)	53 lbs. (24.2 kg.)	86 lbs. (39 kg.)	125 lbs. (56.7 kg.)
Replacement Filter Set	RCRP010	FX050	FX050/2	FX100	FX200C

Air Filtration Systems (Non-Catalyst)

Here's Why Our Breathing Air Panels are the Best Available

For applications where CO removal is not desired, MST offers a complete line of Breathing Air Panels and airline monitor packages.

Like our CO removal equipment, our non-CO panels have significant advantages over competitive filtration systems. With a charcoal volume twice to eight times greater than other major suppliers, MST's Breathing Air Panels provide superior removal capability for hydrocarbon tastes and odors.

Our unique air distribution baffle design maximizes charcoal absorption efficiency by providing even air distribution throughout the cartridges.

**Removes water,
particulates,
hydrocarbons,
oil smell and taste**



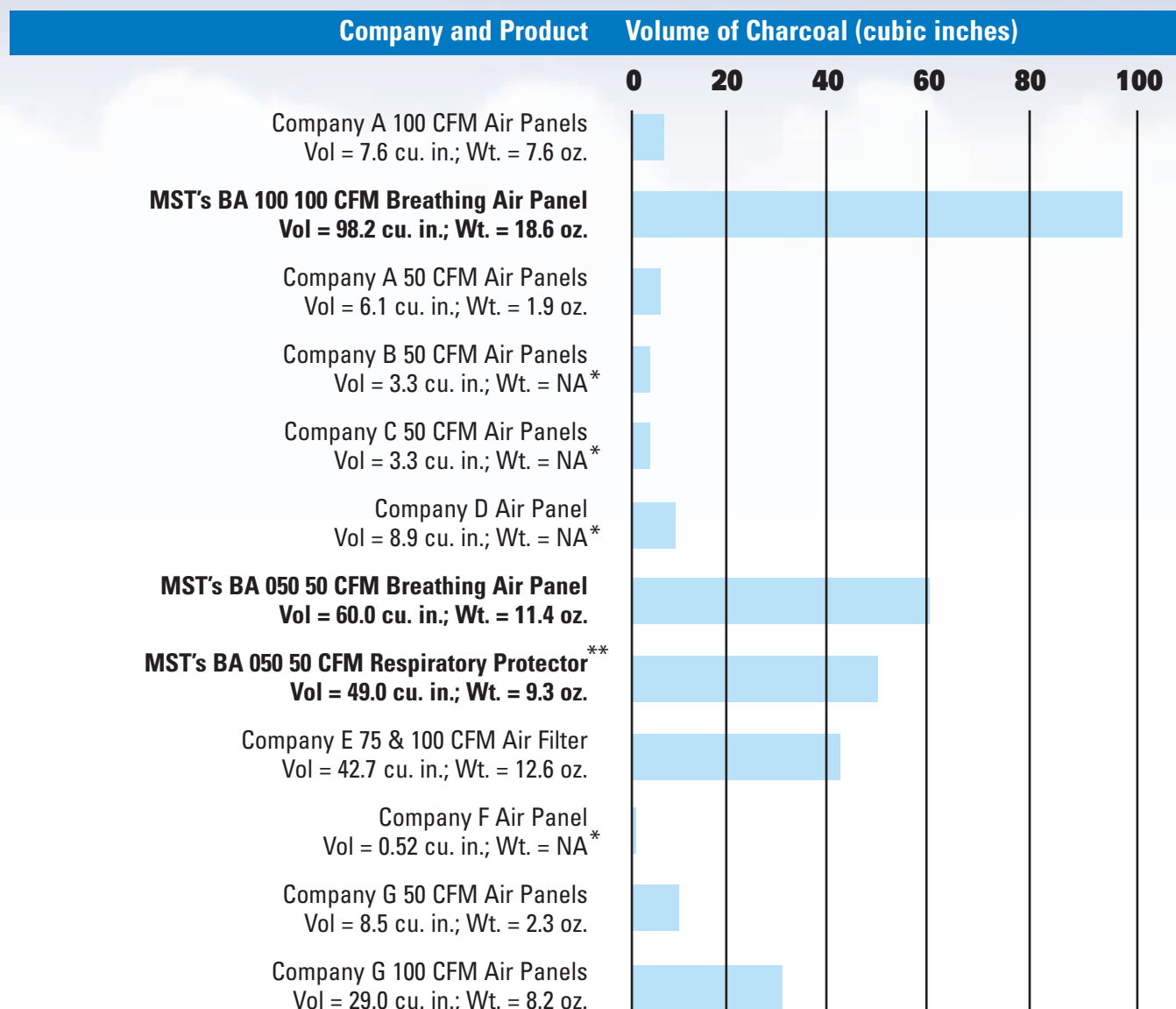
"Save your breath with

MST®

MODERN SAFETY TECHNIQUES

Charcoal Comparison Chart

The following chart is an indication of the hydrocarbon (tastes and odors) removal capability of various breathing filtration and purification systems.



Various Manufacturer's Systems

Note: *Impregnated Charcoal Paper – Weight Not Available

** MST's Respiratory Protector Removes Carbon Monoxide (CO)

Please call MST for specific test results.



Leading Competitors

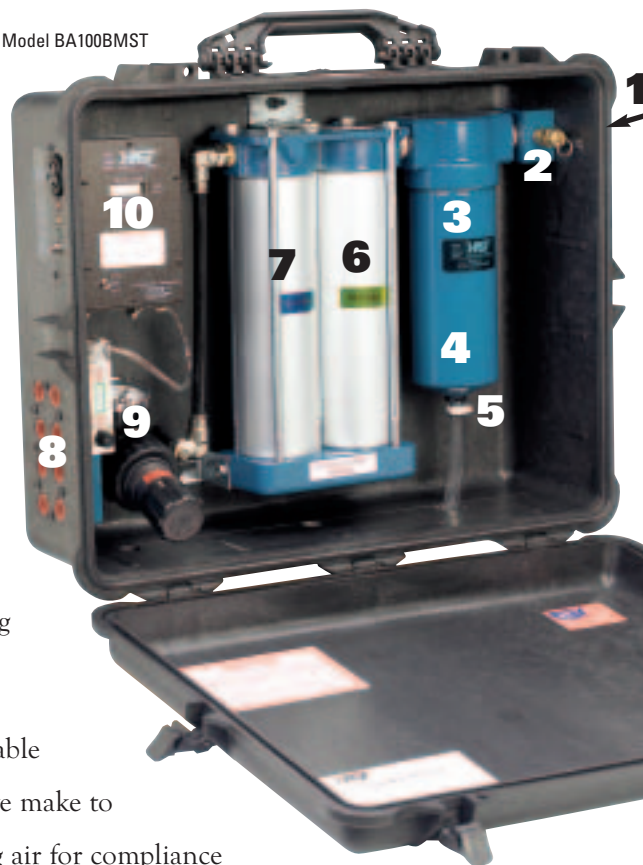
Portable Breathing Air Systems (Non-CO removal)

MST's four-stage filtration system is standard on every portable model and provides extra protection for longer filter life and better filtering capabilities than most other comparable filtering systems.

Pre-filter dual stage element removes particulate down to 0.3 microns and coalesces liquid down to 0.75 microns, at an efficiency rating of 99.97% (D.O.P.)

A carbon monoxide monitor is available on every breathing air filter system we make to continuously monitor your breathing air for compliance with applicable standards. Monitors offer digital display, with both audio and visual alarms. All monitors utilize an electrochemical sensor to measure CO levels. The MST Breathing Air Panel Series can be supplied with or without carbon monoxide monitors, depending on end user's specific situation. This option is available on request.

Model BA100BMST



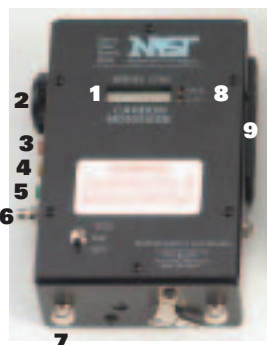
- 1 Inlet connection
- 2 150 PSIG pressure relief valve for added safety
- 3 Prefilter offers: first-stage particulate removal
- 4 Second-stage coalescing action of liquid contaminants
- 5 Automatic float drain expels liquid contaminants out of system
- 6 Third-stage contains activated charcoal for removal of gaseous hydrocarbons and tastes and odors
- 7 Extra fourth-stage contains more activated charcoal for extra filter life protection
- 8 Quick-disconnects
- 9 Pressure regulator with indicating gauge
- 10 CO monitor



APPROVED LR 104195

(Note: 5700 monitor approved for Class 1, Div. 1, Groups A, B, C & D Hazardous Locations when utilizing only 9 volt batteries.)

Model 5700
Carbon Monoxide Monitor



- 1 LCD digital display
- 2 Audible alarm
- 3 Visual alarm
- 4 Low-battery lamp
- 5 On/Off lamp
- 6 Powered remote alarm jack
- 7 User-replaceable electrochemical sensor
- 8 Calibration adjustment
- 9 Battery compartment for two, 9 volt batteries

Specifications	Model BA050	Model BA100
Rated Air Flow (Max.) @ 100 PSI	50 SCFM (23.6 L/s)	100 SCFM (47.2 L/s)
Operating Pressure	100 PSIG Dynamic (6.9 bar)	100 PSIG Dynamic (6.9 bar)
Inlet Pressure (Max.)	150 PSIG Static (10.4 bar)	150 PSIG Static (10.4 bar)
Outlet Pressure Range	0-125 PSIG (0-8.6 bar)	0-125 PSIG (0-8.6 bar)
Operating Temp. Range	68-150°F (20-65°C)	68-150°F (20-65°C)
Outside Dimensions	20.5"L x 16.75"W x 8.5"D (521mm x 425mm x 216mm)	23.25"L x 20.75"W x 9"D (590mm x 527mm x 229mm)
Weight (Including Monitor)	25 lbs. (11.3 kg.)	36 lbs. (16.3 kg.)
Replacement Filter Set	FB050	FB100

Wall Mount Breathing Air Systems (Non-CO removal)

Model BA100BA-S1



- 1** Inlet valve
- 2** Coalescent and particulate removal
- 3** Activated carbon
- 4** Extra activated carbon
- 5** Flow meter
- 6** CO monitor
- 7** Pressure regulator with indicating gauge



APPROVED LR 104195
(Note: 5700 monitor approved for Class 1,
Div. I, Groups A, B, C & D Hazardous Locations
when utilizing only 9 volt batteries.)

For larger capacity requirements, our wall-mount systems provide extra activated charcoal to remove particulate and coalesce liquids.

Breathing air wall-mount systems are available with four types of electrochemical carbon monoxide monitors. Our Model 2002 has a LED display for CO and comes in a heavy duty enclosure. The Model 5701 monitors both CO and oxygen. The 5700 has an LCD display for CO in ppm. The Model 5800 has green and red LED indicator lights for CO.



Model
BA600AAS1

Specifications	Model BA020	Model BA50	Model BA100	Model BA200	Model BA600
Rated Air Flow (Max.) @ 100 PSI	20 SCFM (6.9 L/s)	50 SCFM (23.6 L/s)	100 SCFM (47.2 L/s)	200 SCFM (94.4 L/s)	600 SCFM (283.2 L/s)
Operating Pressure	100 PSIG Dynamic (6.9 bar)	100 PSIG Dynamic (6.9 bar)	100 PSIG Dynamic (6.9 bar)	100 PSIG Dynamic (6.9 bar)	100 PSIG Dynamic (6.9 bar)
Inlet Pressure (Max.)	150 PSIG Static (10.4 bar)	150 PSIG Static (10.4 bar)	150 PSIG Static (10.4 bar)	150 PSIG Static (10.4 bar)	150 PSIG Static (10.4 bar)
Outlet Pressure Range	0-125 PSIG (0-8.6 bar)	0-125 PSIG (0-8.6 bar)	0-125 PSIG (0-8.6 bar)	0-125 PSIG (0-8.6 bar)	0-125 PSIG (0-8.6 bar)
Operating Temp. Range	68-150°F (20-65°C)	68-150°F (20-65°C)	68-150°F (20-65°C)	35-150°F (2-65°C)	35-150°F (2-65°C)
Outside Dimensions	16"L x 16"W x 5"D (406mm x 406mm x 127mm)	24"L x 18"W x 5.5"D (610mm x 457mm x 140mm)	24"L x 24"W x 5.5"D (610mm x 610mm x 140mm)	36"L x 36"W x 17"D (915mm x 915mm x 432mm)	36"L x 36"W x 17"D (915mm x 915mm x 432mm)
Weight (Including Monitor)	10 lbs. (5 kg.)	18 lbs. (8.2 kg.)	25 lbs. (11.3 kg.)	72 lbs. (32.7 kg.)	87 lbs. (39.5 kg.)
Replacement Filter Set	FB020	FB050	FB100	FB200	FB600

MST makes a number of additional panels not shown. Call us for full details.

Point of Attachment Products



Low Pressure Alarm System

This is an air distribution system that will alarm when the supplied air falls below a preset air pressure setting. When the inlet air pressure falls below the preset level specified in the model number, a pressure switch connects the internal 9 volt transistor battery to the alarm (rated 119dB(A)). The alarm will continue to operate until the pressure in the system exceeds the preset level.

SPECIFICATIONS

Unit Model Designation:
Power Requirements:

Standard Pressure Set Alarm Point:
Operation Temperature:
Maximum Inlet Pressure:
Operating Pressure:
Inlet Fitting Supplied:
Outlet Fittings Supplied, Standard:
Optional:

Size:

Weight (with Fittings):

MODEL 8021101-(XX)

8021101__PSIG (+/-5 PSIG)
Internal 9 Volt Transistor Battery (Eveready No 522 or equal)
83,75 and 65 PSIG (+/-5)
14° to 122°F (-10° to 50°C)
150 PSIG Static (10.4 bar)
100 PSIG Dynamic (6.9 bar)
(1) Plug, 3/8" II X 3/8" MPT
(4) Quick-disconnect, 1/4" II X 3/8" MPT
(4) Quick-disconnect, 1/4" Schrader x 3/8" MPT (MST P.N. 80166)
10 3/4" W x 9 3/4" H x 7" D
(273mm x 248mm x 178mm)
7 lbs. (3.2 kg.)



Point of Attachment Panel

The point of attachment panel removes any contaminants introduced between the purification/filtration panel and the point of attachment panel.

SPECIFICATIONS

Rated Air Flow:

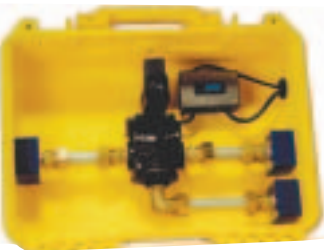
Size:

Weight:

Maximum Inlet Pressure:
Outlet Pressure Range:
Replacement Filter:

MODEL 8042601

133 SCFM (62.8 L/s)
(rated on dynamic pressure at 100 PSI)
16" L x 16" W x 5.75" D
(406mm x 406mm x 146mm)
11 lbs. (5.0 kg.)
125 PSIG (8.6 bar)
0-125 PSIG (0-8.6 bar)
80066



Automatic Shut-off/Back-up Diverter Device (ASODD)

MST's Automatic Shut-Off Diverter Device, (ASODD), is designed to supply compressed air from a main source and divert to a secondary air source when an outside signal has energized the ASODD's solenoid valve.

The main air source enters at 1/2" FPT and exists at 1/2" FPT. The ASODD's power requirement is 120 VAC and can be supplied through a supplied power cord. When an outside signal source energizes the ASODD's switching relay through the signal cord/plug, the ASODD's solenoid valve shuts off the main air source and allows the secondary air sourced to flow to the outlet. When the signal source de-energizes, the air flow will be diverted back to the main air source. The signal source can be any 1.0 amp maximum at 12 VDC.

SPECIFICATIONS

Size:

Weight:

Temperature Range:

Main Air Supply
Maximum Inlet Pressure:
Secondary Air Supply
Pressure Range:

Response Time:

Main Power Supply:
Switching Signal:

MODEL 8026201 ASODD

16" L x 13" W x 7" D
(406mm x 330mm x 178mm)
12 lbs. (5.6 kg.)
-20° to 130°F (-29° to 54°C)
150 PSIG (10.3 bar)
Equal or greater than main air supply and not greater than 150 PSIG (10.3 bar)
9ms at 90 PSIG
120 VAC
1.0 Amp Max. at 12 VDC

Air Shut-off Device (ASOD)

The MST Model 8010501 Air Shut-Off Device (ASOD) is a small, compact valving system designed to interrupt the air supply to MST's Breathing Air Filtration and/or Purification Systems should the carbon monoxide monitoring system in the Filtration and/or Purification system go into an alarm condition.

SPECIFICATIONS

Power Requirements:
Main Voltage:
Maximum Inlet Pressure:
Maximum Flow Rate:
Operating Temperature Range:

MODEL 8010501 ASOD

12 VDC
0.17 amp
150 PSI
100 SCFM
-20° to 120°F (-29° to 49°C)

Airline Monitoring Systems



APPROVED LR 104195

(Note: 5700 monitor approved for Class 1, Div. I, Groups A, B, C & D Hazardous Locations when utilizing only 9 volt batteries.)

LCD CO Airline Monitors*

MST offers CO airline monitors with LCD's, all employing an electrochemical sensor. You can select between a flow meter type or pressure regulator type, in 110 VAC or 12 VDC operation. All systems let you check carbon monoxide levels throughout your compressed air system.

SPECIFICATIONS

Size:
Weight:
Operating Pressure (Max.):

Sensor Type:

Range:

Accuracy:

Alarm-type:

Alarm Level Setting:

Air Sample

Other Features:

MODEL 5700-1 (110 VAC) or 5700-2 (12 VDC)

10 3/4" W x 9 3/4" H x 7" D
Less than 7 lbs.
100 PSI Max. (Flow meter to be set at 1 SCFH)

Electrochemical

0-199 PPM CO

+/-5% of Reading

Piezoelectric -85 dB(A) at 1 Ft. (Optional 119 dB(A) at 10 Ft.)

User Adjustable Factory Setting: 10 PPM (5 PPM if specified)

Non-Filtered

Protective Enclosure
Adjustable Sample Flow Meter
External Remote Alarm Jack
Low-Battery Indicator
Red Alarm Indicator
9 VDC Battery Back-up

MODEL 5700-3 (110 VAC) or 5700-4 (12 VDC)

13 1/4" W x 11" H x 5 1/2" D
Less than 7 lbs.
100 PSI Max.

Electrochemical

0-199 PPM CO

+/-5% of Reading

Piezoelectric -85 dB(A) at 1 Ft. (Optional 119 dB(A) at 10 Ft.)

User Adjustable Factory Setting: 10 PPM (5 PPM if specified)

Regulated / Filtered

Protective Enclosure
External Remote Alarm Jack
Low-Battery Indicator
Red Alarm Indicator
9 VDC Battery Back-up

* Also available: Model 2002 CO monitor in NEMA 12 enclosure with clear lid, digital readout, dual stage alarm relays and remote alarm jack. Can be powered by 12 VDC or 120/240 VAC.

LCD CO/O₂ Airline Monitors

MST offers two models, each employing an electrochemical sensor. You can select between 110 VAC or 12 VDC operation. Either let you check carbon monoxide and oxygen levels throughout your compressed air system.

SPECIFICATIONS

Size:
Weight:
Operating Pressure (Max.):

Sensor Type:

Range:

Accuracy:

Alarm-type:

Alarm Level Setting:

Ambient Operating Temperature Range:

Air Sample:

Other Features:

MODEL 5701-1 (110 VAC) or 5701-2 (12 VDC)

13 1/4" W x 11" H x 5 1/2" D
7 lbs.

100 PSI Max.

Electrochemical

0-199 PPM CO

+/-5% of Reading

Piezoelectric -85 dB(A) at 1 Ft. (Optional 119 dB(A) at 10 Ft.)

User Adjustable Factory Setting: 10 PPM CO (5 PPM if specified) 19.5 % Oxygen

32° to 104°F (0° to 40°C)

Regulated / Filtered

Protective Enclosure
External Remote Alarm Jack
Low-Battery Indicator
Red Alarm Indicator
9 VDC Battery Back-up

CO Monitoring System

MST'S airline carbon monoxide monitoring system is designed to take a continuous air source sample from the compressed air line and monitor for levels of carbon monoxide. If pre-set alarm level is reached, a visual and audible alarm will be energized and a red alarm indicator will light. The system is housed in a corrosion/water resistant carrying case.

SPECIFICATIONS

Size:
Weight:
Operating Pressure (Max.):

Sensor Type:

Range:

Accuracy:

Alarm-type:

Alarm Level Setting:

Ambient Operating Temperature Range:

Other Features:

MODEL 5800

10 1/2" W x 9 1/2" H x 4 3/4" D
(267mm x 241mm x 121mm)

5.5 lbs. (2.5 kg.)

100 PSIG DYNAMIC (6.9 bar)
(Flow meter to be set at (1.0) SCFH)

Electrochemical

0-199 PPM CO

+/-5% of Reading

Piezoelectric -85 dB(A) at 1 Ft. (Optional 119 dB(A) at 10 Ft.)

User Adjustable Factory Setting: 10 PPM (5 PPM if specified)

32° to 104°F (0° to 40°C)

Adj. Sample Flow Meter
Red Alarm Indicator
9 VDC Battery Back-up

Ambient Air Monitors

Wall Mount Single Gas Area Monitor (Diffusion Type)

The Model 2002 toxic gas monitor system is a cost effective single point, fixed monitoring system for gas analysis. The monitor is housed in a NEMA 12 enclosure with clear front panel and digital readout, and is designed to operate in forced air, diffusion, or remote sensing modes, allowing the instrument to fit many applications for gas detection in non-flammable atmospheres.

Designed originally to meet OSHA CFR 29 1910.134 standards for the measurement of carbon monoxide in Grade D breathing air, the 2002 has been upgraded to meet not only Grade D breathing air application; but applications such as ambient monitoring in factories, parking garages, boiler rooms, or other areas where single point gas detection is required. The sensor can be located directly in the housing or installed in a remote sensing head.

The 2002 is a fully enclosed monitor complete with digital readout, dual stage alarm relays and a clear front panel for easy viewing of gas conditions. Calibration pots are secured behind the clear panel for easy access. Alarm relay contacts and sensor chamber are secured behind the lower access panel, allowing full service and wiring of the system while mounted ready for use. Audible and visual alarms can be mounted on the inside or outside of the housing, or located remotely according to user needs.



Model 2002 Wall Mount Single Gas Ambient Air Monitor. Available for CO, H₂S, SO₂, CL₂ and O₂

SPECIFICATIONS	MODEL 2002
Dimensions:	8" W x 6.2" L x 3.7" D (200mm x 155mm x 92.5mm)
Weight:	2.2 lbs. (704 grams) - monitor with diffusion sensor only
Enclosure:	NEMA 12 Rated with Latching Cover
Display:	11mm LCD Single Line Display
Accuracy:	+/- 5% of Reading
Measuring Range:	
CO, H ₂ S, SO ₂ , CL ₂ Range	0-999 ppm in 1 ppm increments
O ₂ Range	0-25% in 1% increments
Power Supply:	12 VDC, 120 / 240 VAC
Alarm Relays:	Two, non-voltage, normally open and normally closed contacts
Maximum Relay Load (Dry Contact Only):	5 amp 250 VAC, 5 amp 30 VDC
Sensor Type:	Electrochemical
Rating:	Non-intrinsic safe design, NEMA 4 rating only



Pocket Gas Monitor Models TS6500-CO, TS6500-H₂S and TS6500-O₂

SPECIFICATIONS	TS6500 SERIES
Size:	4.25" W x 2.50" L x 1.00" D
Weight:	3.8 ounces
Alarm/display Levels:	CO: 15, 35, 50, 100 PPM H ₂ S 5, 10, 15, 30 PPM O ₂ : 16, 18, 19.5, 21, 22
Sensors:	Electrochemical
Battery:	3.5 VDC Lithium - Factory Installed

Pocket Gas Monitors

Affordable compact toxic gas and oxygen detection monitors, designed for field use. They are accurate, rugged, reliable, water and EMI resistant, and easy to read. Unlike models with digital displays the MST monitors utilize a unique series of amber and red lights, along with audible alarms, to warn of increasingly dangerous levels of toxic gases or inadequate levels of oxygen.

In addition, the MST TS6500-CO, the TS6500-H₂S and TS6500-O₂ are virtually maintenance-free, and guaranteed for one year. Once turned on, the monitors are designed to remain on for a full year with the only user maintenance being periodic calibration. As the monitors contain no field serviceable parts they should be returned to MST after one year, for service and a new one year warranty.

MST® Accessories & Optional Equipment



8008403 Remote Alarm offers added protection (119 dB (A)) in noisy areas (standard on all S1 Models).



8008503 Remote Strobe offers added visual protection in high noise areas. (Can only be used when monitor is powered by optional power accessories).



8039601 Air Horn Alarm System is used for explosive atmospheres. Operating pressure 20-30 PSI using a 100 PSI regulator.



Y-Jack Adapter easily allows operating two external devices.



8025601 External Relay Assembly provides normally open or normally closed terminals to activate (or deactivate) an external device.

All items in this column plug into powered remote jack.



8021601 Humidifier Prefilters



8009002 (66 SCFM) and 8010401 (133 SCFM) External Coalescing Prefilters



8022801 Electronic Filter Life Timer records actual filter use for easy maintenance scheduling



8023301 Low Pressure Warning System to alert operator(s) when inlet air pressure falls below safe levels



MST Monitor Power Accessories: 80247, 120 VAC Adapter, 8013501 Rechargeable Battery System and 80123 12 VDC Battery Adapter (9 volt replaceable batteries are standard). Provides up to 250 hours of continuous operation.



80123, 12 VDC Battery Adapter with Red and Black clips, 6' black cord and a 2.5 mm center positive (DC) inside socket.

MST monitor power accessories



8003101 Small Calibration Kit (10 Calibrations) and 8003102 Large Calibration Kit (50-60 Calibrations) available for MST Monitor. Includes zero and span gasses, regulator, calibration tool, case and instructions.



Replacement Filter Kits include all elements for complete filter change. Be sure to have correct part number for your unit. Contact local distributor or MST for assistance.



Ambient Air Compressor

Noise Reduction Baffle



MST, Inc. now has available a portable ambient air compressor for painters who do not have enough volume in their current compressed air system to accommodate the additional load required to operate a respirator.

MST's Fresh-Air pump is small, quiet, lightweight and ready to supply clean breathing air to one (1) worker.* The pump comes with an on-off switch and is wired for 110-120 VAC power, however, the pump can also be wired to operate from 220 VAC. The pump has replaceable filters to keep your air clean and help protect your workers from breathing contaminated air. Intake hose extensions are also available, if the pump cannot easily be placed in a non-contaminated atmosphere, to assure clean breathable air.

**Refer to Specifications - suitability for use is user's responsibility.*

Purification and Filtration Systems for Compressed Industrial Breathing Air



W A R R A N T Y

2 YEARS

CO sensor in 5700, 5800, 2002
Ambient 2002 CO, H₂S, SO₂, CL

1 YEAR

All MST filtration or catalyst systems
O₂ sensor in 5701
Ambient pocket monitors

"Save your breath with

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All MST products
are made in the USA.

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