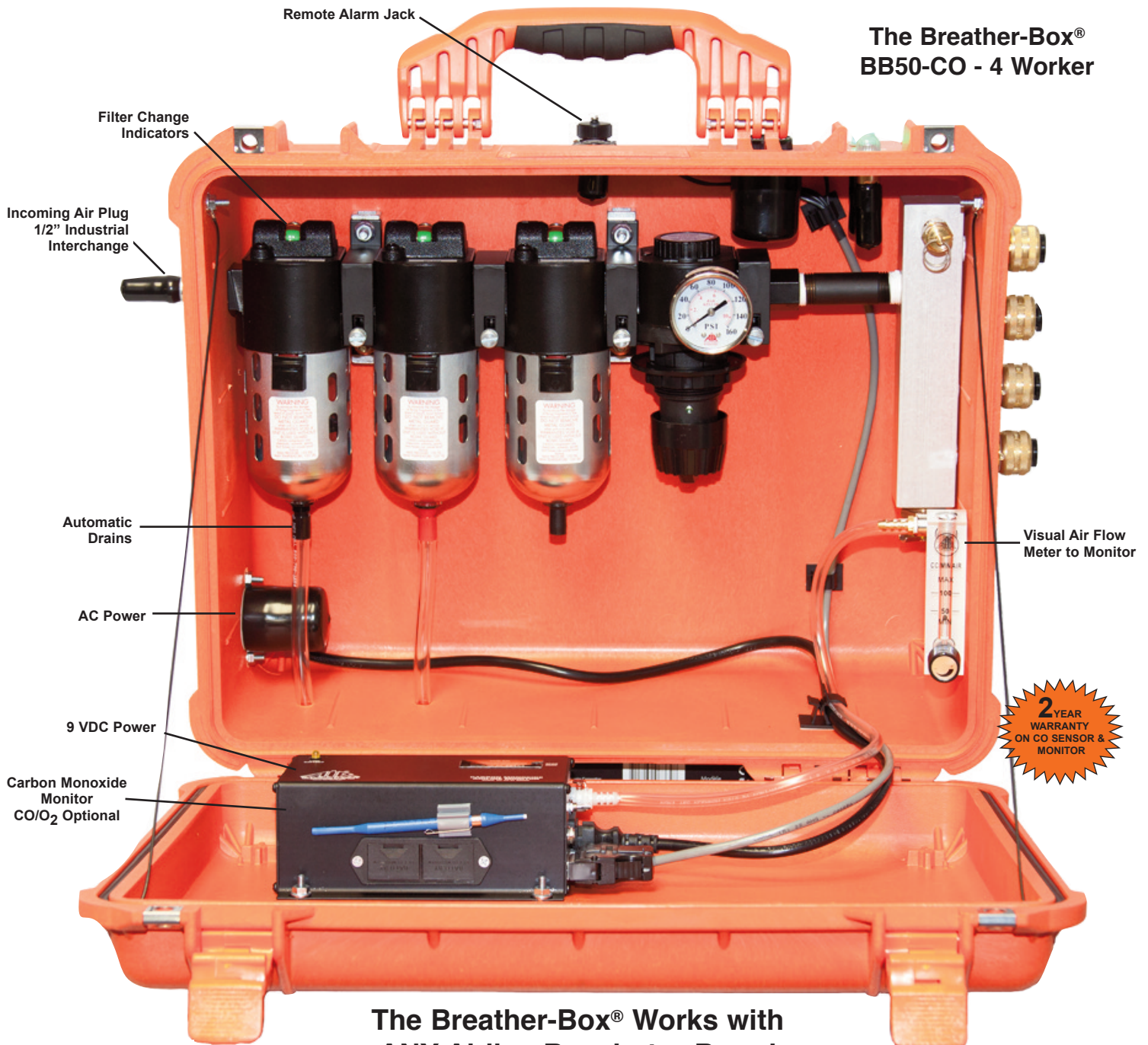


# The Breather Box®

*The Industry Standard in Grade-D Air Filtration*

**High Performance Grade-D Breathing Air Filtration Systems**

Connected to a mobile or plant compressor, the Breather Box® provides Grade-D breathing air for 1 to 8 users (based on model) and continuously monitors for Carbon Monoxide (CO).



The Breather-Box® Works with  
ANY Airline Respirator Brand

**Air Systems International, Inc.**

E-Mail: [Sales@airsystems.com](mailto:Sales@airsystems.com) Web: [www.airsystems.com](http://www.airsystems.com)

Toll Free: (800) 866-8100 Phone: (757) 424-3967

*The Industry Leader in Breathing Air Filtration & Portable Ventilation*



# High Performance Grade-D Breathing Air Filtration Systems

## What is Grade-D Air Quality?

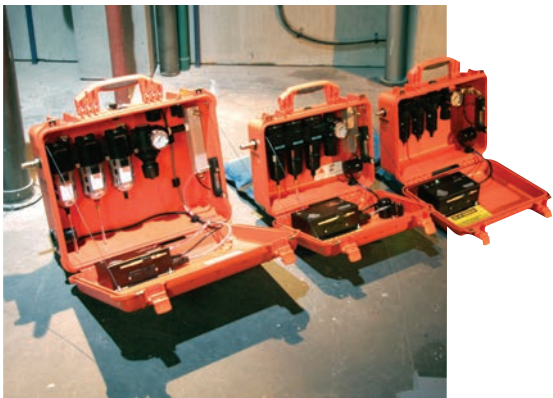
Breathing air quality standards have been developed by ANSI / Compressed Gas Association (CGA) G-7.1 - 1989, and adopted by OSHA under their respiratory standard 29 CFR, 1910.134.

### Air Quality Must Meet or Exceed The Following Requirements:

- Oxygen: 19.5%-23.5% (20%-22% Canada)
- Hydrocarbon (condensed oil) 5 mg/m<sup>3</sup> maximum (<1Mg/m<sup>3</sup> in Canada)
- Carbon Monoxide (CO): 10 ppm maximum (5 ppm in Canada)
- Carbon Dioxide (CO<sub>2</sub>): 1000 ppm maximum (500 ppm in Canada)
- Odor: No noticeable tastes or smells
- Water Content:
  - High pressure cylinder air** must have a dew point of at least -50° F (-45.6° C) at 1 atmosphere (14.7 psi).
  - Low pressure breathing air** must have a dew point of at least 10° F (5.56° C) below the ambient temperature at 1 atmosphere (14.7 psi)
  - Canada:** 5° C below lowest temperature, 27 ppm maximum water vapor
- Total Volatile Hydrocarbons (Canada): 5 ppm maximum

Air Systems' portable and fixed breathing air filtration systems meet or exceed **OSHA 1910.134, Canadian Z180.1 Breathing Air Standards and British Standard BS-EN 12021:1999 "Respiratory Protective Devices"** for Grade-D air.

Intrinsically safe  approved models available for **Class I, Division 1, Groups C and D environments.** Units are **9VDC operation only**



## Custom Filtration Models Up To 2,200 CFM

## Sizing a Type-C / CE Airline Filtration System

All of Air Systems' filtration products are designed to flow the NIOSH maximum amount of air a worker's respirator could demand. **NEVER** undersize a filtration system.

Air Consumption (CFM) and Pressure (PSI) ranges for representative types of respirators are listed below:

Pressure Demand	4 - 15 cfm @	60 - 120 psi
Constant Flow Half/Full Mask	4 - 15 cfm @	4 - 30 psi
Constant Flow Hood (Low Pressure)	6 - 15 cfm @	3 - 15 psi
Constant Flow Hood (High Pressure)	6 - 15 cfm @	25 - 110 psi
Vortex Cooling Tube (Option)*	15 - 25 cfm @	60 - 110 psi

*\*If a vortex cooling or heating tube is used by the worker, the total air consumed is calculated by the air consumption of the vortex device.*

**NIOSH requires that each respirator wearer be supplied with 15 cfm of Grade-D Air at the manufacturer's required pressure.**

### The Breather Box® - Portable Grade-D Air Filtration

Item No.	Description
BB15-CO	15 cfm Breather Box®, CO monitor (48 cfm flow capacity) - 1 coupling
BB30-CO	30 cfm Breather Box®, CO monitor (48 cfm flow capacity) - 2 couplings
BB50-CO	50 cfm Breather Box®, CO monitor (79 cfm flow capacity) - 4 couplings
BB100-CO	100 cfm Breather Box®, CO monitor (123 cfm flow capacity) - 4 couplings
BB100-CO8	100 cfm BBreather Box®, CO monitor (123 cfm flow capacity) - 8 couplings

Please specify 1/4" Hansen style or Schrader style fittings when ordering. Other fittings available for an additional charge.

### Airline Monitor Calibration Kits

Item No.	Description
BBK-20	Calibration kit for CO monitor - 20 ppm CO, zero air, regulator, tubing, and hard case - 17 liter size disposable cylinders
BBK-10	Calibration kit - same as above with 10 ppm CO gas for Canada



**Standard Breather-Box® Models from 15 CFM to 175 CFM**



**WARNING:** This product can expose you to chemicals including **Carbon Monoxide**, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, visit [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)