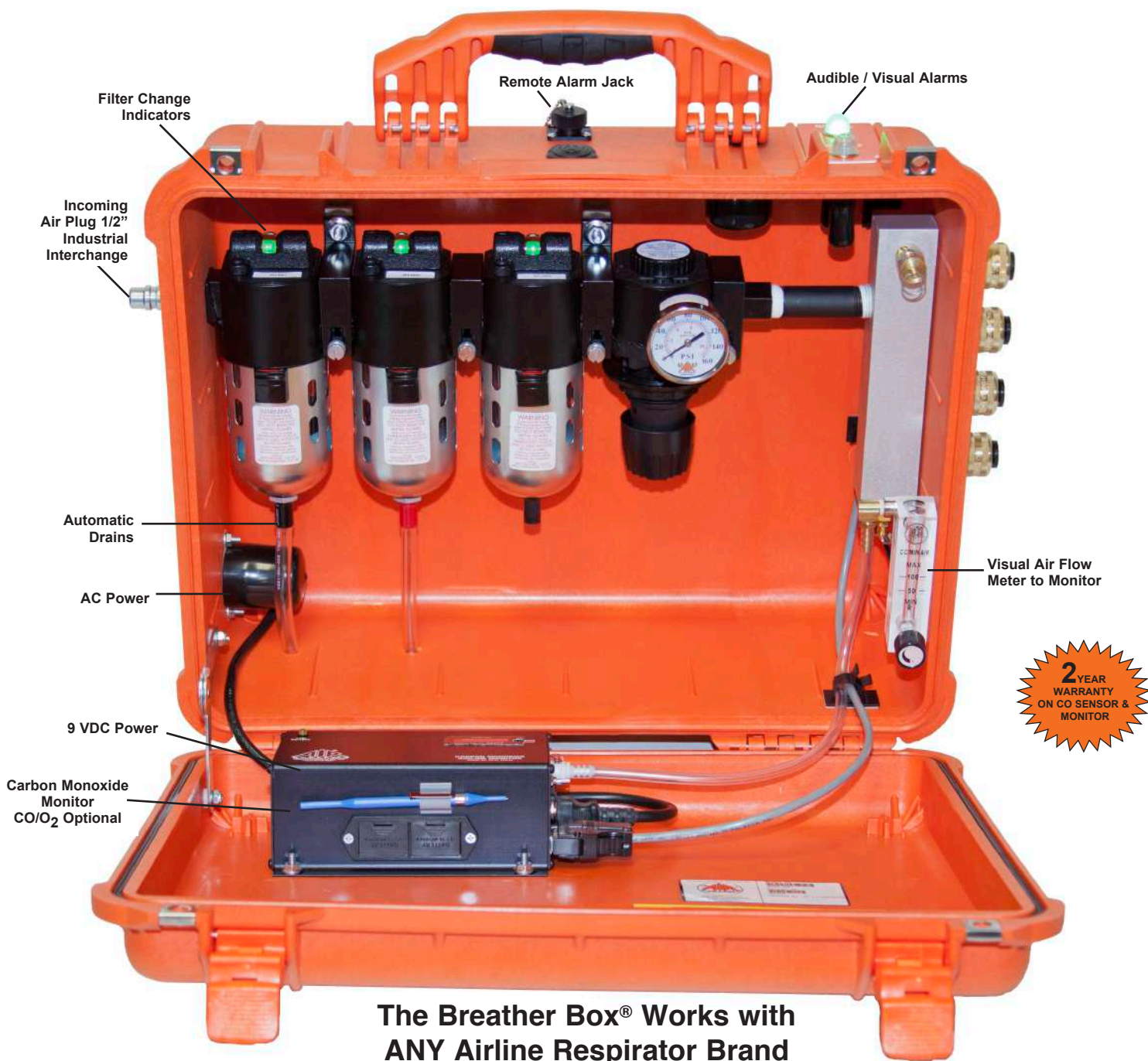


# The Breather Box®

*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).



**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*

# The Breather Box® Works with ANY Airline Respirator Brand

## 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.

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

## Custom Filtration Models Up To 2,200 CFM



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

## Portable Grade-D Air Filtration with CO Monitor

Item No.	Description
BB15-CO	15 cfm Breather Box®, 48 cfm flow capacity, - 1 coupling
BB30-CO	30 cfm Breather Box®, 48 cfm flow capacity, 2 couplings
BB30-CO3	30 cfm Breather Box®, 48 cfm flow capacity, 3 couplings
BB50-CO	50 cfm Breather Box®, 79 cfm flow capacity, 4 couplings
BB75-CO	75 cfm Breather Box®, 97 cfm flow capacity, 6 couplings
BB100-CO	100 cfm Breather Box®, 123 cfm flow capacity, 4 couplings
BB100-CO6	100 cfm Breather Box®, 123 cfm flow capacity, 6 couplings
BB100-CO8	100 cfm Breather Box®, 123 cfm flow capacity, 8 couplings
BB150-CO	150 cfm Breather Box®, 203 cfm flow capacity, three 1/2" industrial interchange couplings

See Master Catalog for Calibration Kit Ordering Information and Replacement Filters.

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

## Portable Grade-D Air Filtration - Intrinsically Safe (IS) CO Monitor

Model No.	Description
BB30-COIS	30 cfm Breather Box®, Intrinsically Safe, 48 cfm flow capacity, 3 couplings
BB50-COIS	50 cfm Breather Box®, Intrinsically Safe, 79 cfm flow capacity, 4 couplings
BB100-COIS	100 cfm Breather Box®, Intrinsically Safe, 123 cfm flow capacity, 4 couplings; 6 or 8 couplings for additional charge



CSA Approved for Class I, Division 1, Groups C and D environments (9 VDC operation only)