

Sizing a Type-C/CE Airline Filtration System

Sizing a filtration system, determining the size Breather Box® or panel to order, is based on air flow (CFM), pressure requirements (PSI) of the respirators being worn, and the number of workers.

Air Consumption (CFM) and Pressure (PSI) ranges for types of respirators:

Respirator Type	Air Consumption @ Pressure
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.*

Once the total number of workers is established and the type of respirator selected, multiply the number of workers by the respirator's maximum flow rate required per worker to determine total flow requirements:

**Example: 4 workers using 4 hood style respirators
4 x 15 cfm = 60 cfm required**

Filtration recommended: Air Systems' BB50-CO Breather Box®, 4 workers, with CO monitor (maximum flow capacity of 79 cfm). User must have enough compressor flow (cfm) capacity to supply the above respirators, plus additional air needs placed on the system, i.e. air tools, spray nozzles, sandblasting, painting, etc.



When ordering a Breather Box®, the customer **MUST** specify the fittings used on the respirator(s) selected. The Breather Box® fittings must be the same type as the respirator hose fittings to maintain NIOSH approval on the respirator and hose assembly.

NEVER Undersize a Breathing Air Filtration System!
All Air Systems' filtration products are designed to flow the maximum amount of air a worker could demand.

THE RESPONSIBILITY FOR QUALITY OF BREATHING AIR RESTS WITH THE USER

The air supply compressor should be located in a clean ambient air environment. This location should be tested periodically to ensure clean ambient air quality on a consistent basis. Total system air quality should be tested at the time the compressor is initially set up. If the compressor is moved, retesting air quality is recommended.

Should the location or environment significantly change, the air quality should be retested.