

### Respiratory Safety

# Portable Breathing Air Compressor System Grade-D Air Filtration

**ISSUE:** Pressure demand airline respirators require 70-120 psi of Grade-D breathable air per OSHA standard 1910.134. For short duration work, this pressure and air quality can be delivered by an air cylinder. For long duration work, a portable compressor and a Grade-D air filtration unit can be used to deliver Grade-D air to pressure demand respirators.

**Application:** The COMP-3™ Twin-Air™ Compressor system is designed to provide Grade-D breathing air for up to to 3 workers wearing pressure demand respirators. The TA-3 has twin ASME receiver tanks creating a mounting frame for the compressor. The receiver tanks allow compressor air to cool to within 10 degrees of the ambient temperature.



**Recommendation:** The COMP-3™ breathing air compressor system provides the entire package for operating 3 pressure demand airline respirators. The system is made up of three components: the TA-3 compressor, the 3-worker Breather Box® filtration unit, and 10 feet of ½" ID hose. The system operates on 115 VAC and requires a 20 amp service. ASME twin air tanks are supplied on a mobile platform; each tank contains a drain valve that must be opened periodically to remove water. If an electrical extension cord is used, a 10-3 gauge cord, maximum 50 feet, can be used to prevent the electrical circuit from "tripping" the electric motor. The Breather Box® should be calibrated at least once a month using calibration kit BBK-20. Up to 300 feet of respirator hose can be attached to the Breather Box® for work in remote areas. Do not operate the compressor in the vertical position as oil will be discharged into the breathing air hose and Breather Box®. **Not approved for use in hazardous locations.** 



#### **COMP-3™** System and Components

Description	ASI Part #
COMP-3™ Package: TA-3 Twin Air™ Compressor, 3 worker Breather Box®, and Connect Hose	COMP-3
TA-3 Twin Air™ - Compressor only	TA-3
Breather Box® - 3-worker (30 cfm)	BB30-CO
Breathing Air Hose - 10 feet of 1/2" Hose	H-10-5

#### **Calibration Kit**

Description	ASI Part #
Calibration kit for CO monitor - 20 ppm CO, zero air, regulator, tubing, and hard case 17 liter size disposable cylinders	BBK-20

## Compressors must be placed in a clean air environment per OSHA 1910.134

#### **TA-3 Compressor Specifications:**

- Rotary vane air compressor
- Pressure range to 110 psi output
- 2 HP electric motor,1750 rpm continuous duty thermally protected
- 115/230VAC 1-phase, 60Hz, 17.2 amps (Requires 20 amp service)
- Low maintenance 500 hours between oil changes
- 10" pneumatic tires
- 50,000 hour minimum vane life
- Built-in skid plate for stair climbing
- USDA approved food grade oil in compression end
- Automatic pressure unloading full modulation air control
- Breather Box® Grade-D air filtration package required with compressor
- · Noise level below 70 dbA at 3 feet
- ASME Coded 8 gallon Twin-Air<sup>™</sup> tank assembly, 8.5cf air storage

   @ 110 psi
- 1/2" 5000 series Hansen style coupling outlet
- · Weight: 150 lbs.



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