

Air Filtration and Proper Carbon Monoxide Monitoring



OSHA Regulations for Breathing Air and Bullard 41P Series Filters

OSHA regulations on respiratory protection require that employers have the obligation to ensure that "compressed breathing air shall meet at least the requirements for Grade D breathing air as described in ANSI / Compressed Gas Association Commodity Specification for Air, G-7.1-1989." (29 CFR 1910.134 (i) (1) (ii). This specification addresses oxygen content, condensed hydrocarbon content, carbon monoxide content, carbon dioxide content and odor.

OSHA regulations also require that the "employer shall ensure that compressors used to supply breathing air to respirators are constructed and situated so as to prevent entry of contaminated air into the air-supply system." (29 CFR 1910.134(i))

OSHA regulations go on to say "suitable air purifying sorbent beds and filters shall be used to further insure breathing air quality".

The Bullard 41P Series filters are designed to achieve this end by removing condensed hydrocarbons (oil mist), which is by far the most important particulate component of compressed breathing air that needs to be removed. The Bullard 41P Series filters are designed to reduce the condensed hydrocarbon level well below the OSHA and Grade D air limit of 5.0 milligrams per cubic meter of air

Since OSHA requires that the air intake be situated so as to prevent entry of contaminants such as particulates, there should not be any other particulates in the breathing air to begin with. The only particulates that normally can be present in compressed breathing air are condensed hydrocarbons. Therefore, any airline filter, such as the Bullard 41P Series filters, should be capable of filtering compressed breathing air so that it contains an amount of condensed hydrocarbons that is below the OSHA and CGA limit of 5.0 milligram per cubic meter under normal conditions of use.

The Bullard 41P Series filters are capable of processing up to 75 cubic feet of air per minute (100 CFM for the 41A unit), and will filter the air to meet the particulate requirement of OSHA and ANSI / CGA G7.1-1989 for breathing air used for respirators under prescribed conditions of use.

The Bullard 41P Series filters are not capable of removing carbon monoxide and other toxic gases. OSHA requires that for oil-lubricated compressors the employer "shall use a high temperature alarm, or carbon monoxide alarm, or both, to monitor CO levels".

The Bullard 41P Series filters – are also not capable of monitoring CO levels, however, Bullard has available the COHP CO monitor which - when used with Bullard 41P Series filters – does provide appropriate monitoring for carbon monoxide.

Additionally, Bullard has available a complete range of Clean Air Box filtration equipment with CO monitoring integrated as part of the filtration unit for effective compliance to CO monitoring requirements.

If you would like any further information on Bullard 41P Series filters or other air quality products, or if you have any questions concerning the use of the Bullard 41P Series filters, please contact Bullard's Customer Service Department at 1-877-BULLARD or via e-mail at info@bullard.com.

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