

GLOSSARY

abrasive blasting respirator	A continuous flow air-line respirator constructed so that it will cover the wearer's head, neck and shoulders. It is designed to protect the wearer from inhalation of, impact of, and abrasion by materials used or generated in abrasive blasting.
airline filter	Filter used in conjunction with other air compressor safeguards to supply cleaner air to supplied-air respirators. Filter cartridges trap and remove oil particulates, odor and organic vapors. Water vapor is removed by other mechanisms.
airline respirator (supplied-air respirator (SAR))	An atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user. An atmosphere-supplying respirator means a respirator that supplies the respirator user with breathing air from a source independent of the ambient atmosphere and includes SARs and self-contained breathing apparatus (SCBA) units.
air purifying respirator	A respirator in which ambient air is passed through an air-purifying filter, cartridge or canister that removes the contaminant(s). Air is passed through the air-purifying element by the breathing action or by a blower.
air sampling	Test of the amount of dust in the air workers breathe. Lightweight, portable equipment is used. Air sampling should be done by a trained professional.
assigned protection factor (APF)	The workplace level of respiratory protection that a respirator or class of respirators is expected to provide to employees when the employer implements a continuing, effective respiratory protection program.
compressor intake filter	Filter at the compressor intake to remove particulates from the intake air. NOTE: These filters DO NOT REMOVE CARBON MONOXIDE!
containment	All containment structures should be ventilated to maintain a continuous airflow and prevent any leakage of dust to the outside. Blast-cleaning machines and cabinets, abrasive blasting rooms, portable blast cleaning equipment are examples.
exhaust ventilation system	A system for removing contaminated air from a space, comprising two or more of the following elements (a) enclosure or hood, (b) ductwork, (c) dust-collecting equipment, (d) exhauster, and (e) discharge stack.
exposure	The amount of silica dust in a worker's environment that can be inhaled into the lungs.

GLOSSARY

fit check (user seal check)	A test conducted by the wearer to determine if the respirator is properly seated to the face.
fit factor	A quantitative measure of the fit of a particular respirator to a particular individual, and typically estimates the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn.
fit test	The use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual (See Qualitative Fit Test and Quantitative Fit Test).
high efficiency particulate air filter (HEPA)	A filter that removes from the air 99.97% or more of the aerosols having a diameter of 0.3µm.
industrial hygienist	An expert in recognizing and controlling workplace health hazards. Air monitoring is usually done by industrial hygienists.
MIOSHA	Michigan Occupational Safety and Health Administration - a program of the Michigan Department of Licensing and Regulatory Affairs, which conducts the enforcement of Michigan workplace safety and health regulations.
NIOSH	The National Institute for Occupational Safety and Health - the Federal Institute responsible for ensuring safe and healthful working conditions for all Americans by conducting research, recommending standards, providing technical assistance, and training health and safety professionals.
OSHA	Occupational Health and Safety Administration - the agency that enforces workplace safety regulations.
permissible exposure limit (PEL)	The time weighted average (TWA) concentration for a normal 8-hour workday and a 40-hour workweek, to which nearly all workers may be repeatedly exposed, day after day, without adverse health effects.
qualitative fit test	A pass/fail fit test to assess the adequacy of a respirator fit that relies on the subject's sensory response to the test agent (isoamyl acetate – banana oil, saccharin, irritant smoke – Bitrex).
quantitative fit test	A fit test that assess the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.
respirable dust	Airborne dust in sizes capable of passing throughout the upper respiratory system to reach the lower lung passages.
respirator	A personal device designed to protect the wearer from the inhalation of hazardous atmospheres.

GLOSSARY

tight-fitting facepiece A respiratory inlet covering that is designed to form a complete seal with the face. A half-facepiece covers the nose and mouth; a full facepiece covers the nose, mouth and eyes.

time-weighted average (TWA) The average of the exposure concentration variations or excursions usually calculated over an 8-hour workday.

$\mu\text{g}/\text{m}^3$ Micrograms (μg) per cubic meter (m^3). Airborne silica levels are usually described in $\mu\text{g}/\text{m}^3$ - the amount of silica dusts in each cubic meter of air. A typical worker breathes about 10 cubic meters of air a day.