

Work **Safe!** Bulletin

Safe Sandblast Cleaning

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Sandblasting equipment is used extensively throughout the province for the purpose of cleaning or preparing a variety of surfaces, using various types of abrasive materials. Workers who perform the sandblasting operation can be exposed to toxic materials, such as lead or zinc, while removing existing coatings from material surfaces. They are also exposed to hazards from the sandblasting agent, usually silica sand, therefore there are a number of safety precautions that must be undertaken by blast operators and other crew personnel:

Workers who are exposed to dusts containing silica are required to comply with Manitoba Regulation 100/88R Respecting Fibrosis and Silicosis.

Sandblasting operations are noisy and where exposure to noise levels exceeds 80 dBA the employer and employees are to comply with the requirements of Manitoba Regulation 227/94 Respecting Hearing Conservation and Noise Control.

Supplied-air hood respirators (NIOSH-approved, type C-1 9C,) operated on continuous flow mode, or a self-contained breathing apparatus in pressure-demand mode, are required. Respiratory protection at workplaces in Manitoba must meet the requirements of CSA Standard Z94.4 "Selection, Use and Care of Respirators."



The air supplied to the approved respirator must be free from contaminants. If an oil-lubricated compressor is used, air shall be supplied in accordance with CSA Standard Z180.1 "Compressed Breathing Air" or in accordance with equally rigorous standards.

NIOSH-approved air lines and subassemblies must be used to deliver contaminant-free air to the user. NIOSH approvals are invalidated if an air line or subassembly has been replaced with any other than the respirator manufacturer's.

Sandblast operators must wear an air-supplied hood that protects the head, neck and shoulders. This equipment must be inspected on a regular basis.

Operators must only remove their supplied air breathing equipment when they are well away from the work location as silica dust and other contaminants can remain suspended in air for long periods of time.

Coveralls that provide suitable protection from rebounding abrasives are a necessity.

Work gloves must protect the full forearm.

Operators must wear Grade 1, CSA approved safety footwear.

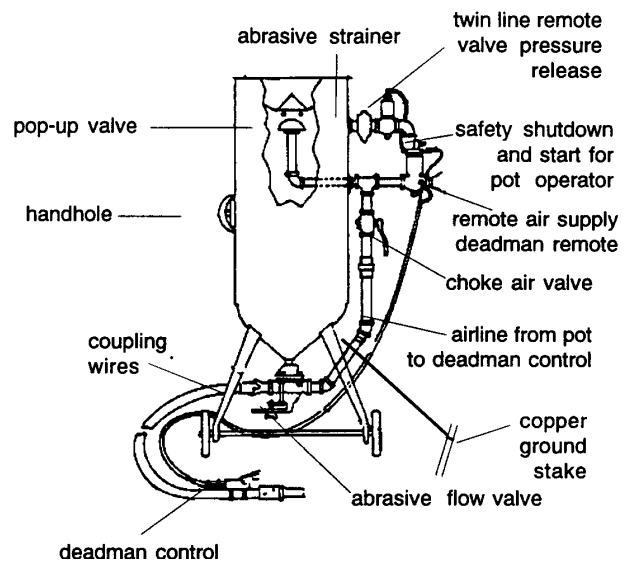
If an electrostatically conductive blast hose is not available the blast nozzle must be grounded.

Sandblasting operations shall be carried out so that the abrasive materials and other particulate materials are contained, and pose no hazards to workers or the public.

The sandblast pot must be grounded at all times.

The sandblast pot must be provided with a safety shut down and the sandblast pot must be shut off while being filled with abrasives.

The operator must blow out all air lines and hoses. The entire sandblasting unit must be carefully examined for defects before any work commences.



Sandblasting nozzles must be equipped with a remote control (deadman) switch that allows the operator to control the sandblast at the nozzle.

When sandblasting is to be conducted in a confined area the employer must comply with requirements of the publication Guidelines for Confined Entry Work as produced by Manitoba Labour Workplace Safety and Health Branch.

By following these simple guidelines risks to your safety, health and welfare, at work, can be reduced.