Roof Bolter Operator

Health Hazard Information Card HH-43

U.S. Department of Labor
Mine Safety and Health Administration

Black lung and silicosis are two disabling and sometimes fatal diseases caused by overexposure to respirable coal mine dust. Roof bolting machine operators frequently work downwind of continuous mining machines and are also exposed to dusts generated by their own machines. Samples collected from July 1, 2006, to June 30, 2007, on roof bolting machines indicate:

Roof Bolting Machines	Valid Samples Collected	Percent Greater than the Standard	Average Percent Quartz*
Operator Samples	**1,142**	**10.2**	**6.4**
MSHA Samples	**4,161**	**6.1**	**9.1**
All Samples	**5,303**	**7.0**	**8.5**

*On entities with reduced standards.

Roof bolting machine operators who are exposed to respirable coal mine dust containing greater than 5% quartz are likely overexposed to quartz and are at a greater risk of developing lung disease. **At any given time approximately 250 roof bolters are on a reduced standard due to quartz.**

MSHA has developed this guide to assist miners in using all available tools to **C**ontrol the **D**ust and **P**revent **B**lack **L**ung.

You should always:

- ✓ Work upwind of the continuous mining machine and other dust generating equipment as much as possible.

- ✓ Ensure that all dust controls on the roof bolter are in place and operating properly.

You should always:

- ✓ Maintain ventilation as specified in the approved ventilation plan (if applicable) where the roof bolter is working.

- ✓ Maintain drill bits in good condition (check frequently and change bits when worn).

- ✓ Position yourself upwind and out of active roadways when emptying the dust box.

- ✓ Leave idle equipment when it is parked downwind of the continuous mining machine.

- ✓ Select and use properly fitted respirators when the concentrations exceed the applicable respirable dust standard.

- ✓ Participate in your mines' free, confidential chest x-ray program. Mine operators are required to make these available to you at least every 5 years.

Examinations:

The on-shift examiner is required to check all dust control measures specified in the approved ventilation plan.

Additional checks should be made to ensure the dust control system is functioning properly. These include:

Dry dust collectors should be checked for:

Broken or missing latches on dust box door
Missing or leaking door gasket material
Proper fit and seal of the filter
Proper vacuum at the drill pot
System vacuum leaks
Dust in the exhaust side of the collection system – from filter through muffler

Wet drilling systems should be checked for:

Water supply leaks
Proper water pressure
Proper water flow through the drill steel

If you have questions about coal mine health matters, please contact your local MSHA office or see the MSHA website at www.msha.gov.