

Virginia Department of Mines, Minerals and Energy



ROOF BOLTER OPERATOR SAFETY HANDS OFF DRILL STEEL – THE SAFEST PRACTICE

Statistics show, year after year, that roof bolter operators sustain more lost time accidents and injuries than any other work classification. Roof bolter operators not only have the highest accident rate overall but also have the highest lost time injury rate in handling materials and machinery accidents. Roof bolter operators constantly use their hands while preparing, drilling and installing roof bolts. Many serious hand injuries, including finger amputations, have resulted when hands became entangled in rotating drill steel or were caught in pinch points.

Accident No. 1: Machinery/Glove Accident

On February 11, 2002, a roof bolter operator sustained serious injuries when his left hand became entangled around a bolt wrench being used to tighten a roof bolt. His injuries included two fractures of the left forearm, and other injuries to his wrist, hand and fingers. He was wearing a cloth glove inside a long-cuff rubber glove.



The victim was wearing this glove

Accident No. 2: Machinery/Glove Fatality

On May 29, 1999, a miner operating a roof bolting machine sustained serious injuries when his right hand became entangled around a piece of drill steel when he inadvertently activated the drill head rotation lever while gripping the drill steel. He sustained serious hand injuries, underwent surgery twice and died on October 31, 1999 as a result of surgery complications. He was wearing a rubber metacarpal glove.

Recommendations:

- Gloves that may adhere to drill steel should not be used during drilling operations.
- A bolt wrench should not be used as an extension to increase drill hole depth.
- Handling of drill steel should be eliminated through practices and or equipment technology.
- Wear proper gloves and remove rings and watches.
- Inspect drill steel, extensions and wrenches for jagged edges and burrs prior to using.
- Always keep hands away from pinch points.