



U. S. Department of Labor MSHA's Accident Prevention Safety Idea



SAFE ROOF BOLTING A HANDS-OFF OPERATION



Miners operating roof bolting machines have been injured by a rotating drill tool or bolt. During bolting the steel or bolt is an open and obvious inherent hazard. There is no circumstance when it is safe or proper for an operator to hold onto or to touch a rotating drill tool or bolt. Miners can enhance their safety by adhering to the following **Best Practices** when operating a roof bolting machine:

- Never touch or hold onto a rotating drilling tool, wrench, or bolt.
 - ⇒ Use an appropriate auger guide or deep-well auger chucks.
 - ⇒ Use an 8 to 12 inch starter steel initially to ensure a straight hole since the shorter steel will not bend. The finishing steel will then self-center in the starter hole ensuring that the drill steels do not bind or stick. Using starter steels saves time and prevents accidents.
 - ⇒ Wear metacarpal gloves that fit snugly. **NEVER BOLT WITH RUBBER GLOVES!**
 - ⇒ Wear snug fitting clothing to avoid being caught in moving components.
- Make sure that emergency shut-off switches (panic bars) are properly working.
- Make sure that operator controls are equipped with two-handed fast feed feature. This will virtually eliminate the possibility of inadvertent fast-feed activation and keeps the machine operator safely away from boom arm and canopy pinch points.
- Do not install any non-original equipment manufacturer lever extensions on the controls. Ensure that control handle separator guides are installed to control lateral movement of levers.
- Don't take shortcuts with two-piece coupled bolts! Fully connect the two pieces by hand. Using machine rotation for this can lead to a serious accident.
- Guard the machine controls from accidental activation that may result in the machine or machine components coming in contact with the operator.
- Provide proper storage areas for supplies and materials on the bolting machine. Take care to avoid placing materials in locations where they could interfere with or fall on machine controls.
- **KNOW YOUR MACHINE!** Report anything abnormal about the operation of the roof bolting machine such as increased feed speed, control levers sticking, jacks bleeding off, or slower than normal response. These slight inconsistencies in normal operation may indicate the beginning of a major and more hazardous problem.
- Review all safety bulletins associated with your machine. Keep these items on board with the operator's manual and review them periodically.

If you have a tip you would like to pass on, you can e-mail it
to zz-MSHA-MinersTips@dol.gov
If your tip is selected, you will receive credit in this space

Tag # AP2010-98552