Roof Bolting

Best Practice Series
BP-28

Roof bolter operators are involved in many fatalities in the mining industry.

To perform their jobs safely, roof bolter operators must follow these Best Practices.

- Never travel inby permanent roof supports, especially to mark a roof bolting pattern.
- Always visually examine the roof, face, and ribs immediately before any work is started.
- Always test roof, face, and ribs; do not take shortcuts.
- Keep a bar of suitable length on the roof bolting machine to scale down loose rock. **(Pry Up, Not Down!)**
- Ensure the ATRS system is in proper operating condition before installing bolts.
- Never operate the roof bolter when the ATRS is inoperative or does not make firm contact with roof.
- Only use manufacturers' approved extensions for ATRS systems.

- Ensure the roof bolter is in proper operating condition before installing bolts; this includes all levers, tram control, panic bar, etc.
- Know and follow the approved roof control plan; this includes all manufacturers' recommendations on installation of bolts and resin.
- Add additional supports at any indication of adverse roof conditions.
- Stay in a safe location under permanent support when installing roof supports.
- Always follow bolt installation sequence.
- Drill all holes to proper depth (not over one inch deeper than the bolt's length).
- Use the proper finishing bit when installing shell type bolts.
- Be sure resin is maintained at mine temperature before use.
- Check to ensure all bolts are installed in the proper torque range.
- Drill additional test holes if there is a question about adverse roof conditions.
- Roof conditions detected during drilling should be communicated by the roof bolter to coworkers.
- Never hold drill steel or place hands on drill pot while installing bolts.
- Control respirable dust.

Arrive Home Alive

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Mine Safety and Health Administration
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