

## Best Practices Roof Bolting BP Card No. 28



More fatalities occur to roof bolter operators than any other occupation in mining.

To perform their jobs safely, roof bolter operators must:

- Always visually examine the roof, face, and ribs immediately before any work is started in a place.
- **Never** travel in by permanent roof supports, especially to mark a roof bolting pattern.
- Keep a bar of suitable length on the roof bolting machine to scale down loose rock. (**Pry Up, Not Down!**)
- Always test roof, face, and ribs; do not take shortcuts.
- 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 contact the roof.
- Only use manufacturer's 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 manufacturer's 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.

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

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