Course Duration
Four (4) hours classroom (optional) + minimum of twelve (12) hours operating the drill. Total of 16 hours per operator, minimum.

Target Audience
This training is designed for personnel who operate P&H Mining Blasthole Drills for production.

Description
Operators will gain insight into the overall machine operation and learn required user maintenance areas. A four hours (per operator) optional classroom presentation is conducted which is followed by minimum of twelve hours (per operator) hands-on training with the drill in a production environment. Operators will be given the opportunity to operate the drill and practice the techniques covered in the optional classroom module.

Prerequisites
Students should have a basic knowledge of surface mining and blast hole drilling equipment.

Course Location
Field.

Course Objectives
Upon completion of this course the student will be able to:

- Make walk around safety and machine inspections
- Identify the location of the controls and warning systems.
- Understand the function of the controls and warning systems.
- Operate the drill in a productive and safe manner to avoid damage to equipment and reduce overall operating cost.

Main Concepts
- Major systems and components overview
- Cab controls
- E-stop
- Pipe handling systems and tools
- Drill set up
- Drilling blast holes
Classroom training, four (4) hours per operator (optional)

- Overview of the operators manual/handbook
- Overview of the drill systems and major components
- Overview of the cab controls and remote propel control
- Overview of GUI screens (for operational and maintenance/diagnostic purpose)
- Overview of proper start up, shut down and drill operation

Hands-on training on operating the drill, minimum of eight (8) hours per operator

- Safety
  - Safety equipment
  - Location and use of Emergency Stop Buttons
  - Fire suppression (if locally installed, local installer is responsible for training and documentation)
  - Pre-operational checks
  - Inspection of operational area
  - Job conditions (grade angles, visibility)
  - Using caution when approaching the bench crest
  - Pre-operational checks
  - Inspection of operational area
  - Job conditions (grade angles, visibility)
  - Using caution when approaching the bench crest

- Drill set up
  - HVAC controls, cab environment
  - Propelling the drill (remote or local)
  - Jacking & leveling the drill
  - Raising and lowering the mast (setting the mast at various angles)
  - Adding drill string (adding and removing pipes, use of deck tools)
  - Adding or removing drill bit, use of bit carousel
  - Location and use of Emergency Stop Buttons

- Operation
  - Communications
  - Traffic patterns
  - Location of power cables
  - Propelling the drill (remote & local)
  - Setting up on drill pattern
  - Forming the hole (collaring), use of water for dust control
  - Drilling to the proper depth to maintain bench grades. Drilling at angles.
  - Weather conditions, operation at night
  - Using extreme caution when operating near overhead power lines