Course Duration
Two (8) hour days (16 hours) with a minimum of eight (8) hours operating the drill (Additional one day (8) hours for non-English speaking customers allowing time for translation).

Target Audience
This training is targeted for blast hole drill operators of P&H/Komatsu 77XR Blasthole drill.

Description
The course introduced all levels of drillers to the safe and productive operation of P&H/Komatsu 77XR Blasthole drill. It focuses on critical knowledge and skills required to operate the P&H/Komatsu 77XR Blasthole drill.

Prerequisites
Operators should have a basic knowledge of blast hole drills.

Course Location
Field

Course Objectives
Upon completion of this course the student will be able to:
- Identify and use controls in the cab
- Identify and have general knowledge of all critical components
- Propel the drill in a safe manner
- Add and subtract drill pipe, change a bit
- Position drill on a pattern and pattern approach
- Identify and recognize potential risks and hazards and what to do
- Start up and Shut down the drill
- Conduct pre-operation inspections
- Operate the drill in a safe and productive manner

Main Concepts
- Review of relevant P&H/Komatsu reference material
- Blasthole drill motions and major components
- Cab controls
- Propelling and Tracks systems
- Collaring the hole
- Bit and pipe handling
- Drill rig set up, start up, and shut down
- Hazzard recognition and best management practices
Course Introduction
- Instructor and participants introduction
- Course objectives
- General, on site safety
- Knowledge evaluation

Source Information
- Operators Manual

Drill Overview
- Blasthole drill orientation
- Major systems overview

Safety Controls
- E-stops
- Fire Suppression (if applicable)
- Rig limits and warnings
- LOTOTO (Lock out tryout tag out)

Pre-Operations
- Work area inspection
- Walk around
- Fluid and hardware checks

Drill Set-up
- Leveling the drill
- Raising and lowering Mast
- Propelling/positioning the drill
- Bit and steel checks

Controls in the cab
- Describe every function (PODS), joystick, and GUI Display

Drilling
- Proper hole Collaring techniques.
- What to do if the steel is stuck and how to resolve.
- Proper air, water, rotation and down feed settings and how to adjust them.
- Finishing the hole and pulling the steel.
- Positioning the drill bit on the target using GPS and other means.
- Adding and subtracting drill pipe and Racking pipe in carousel
- Proper knowledge and use of cab controls
- Bit changes
- Propelling hole to hole, pattern to pattern, and on haul roads.
- Auto Drill
- GUI panel and system navigation
- Best Management Practices for Blast hole drills and operators

Course Evaluation and Wrap
- Post –assessment
- Course evaluation