



Course Duration

4 days

Target Audience

Electricians, Mechanics, Technicians and Engineers who will service and maintain P&H Mining Blasthole Drill.

Course Objectives

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

- Identify and explain the purpose of all the major Systems and components.
- Demonstrate proficiency in reading, interpreting and use mechanical and electrical schematics.
- Understand and describe maintenance and service procedures for main systems.
- Conduct failure analysis.
- Explain the inter-relationship of the drill systems.

Description

This course introduces the student to the operation and maintenance of the P&H Blasthole Drill. It focuses on critical knowledge and skills required in supporting current production models of the P&H Blasthole Drills.

The topics include Main systems and components, operation, maintenance troubleshooting and service. Maintenance and troubleshooting concepts are analyzed in a team environment, allowing the student to gain knowledge based on real world problems and experience.

Field Training

Main Concepts

- Machine Intro and Overview
- Machine Systems
- Power Unit
- Main Air
- Main hydraulics
- Auxiliary Hydraulics
- Rotary System
- Hoist/Pulldown System
- Rotary Carriage
- Mast
- Undercarriage
- Propel Systems
- Electrical and Control
- System Maintenance and Service

Course Location

Customer Location

Prerequisites

Students should have a basic knowledge of fluid power concepts, electronics and computers.

It is also suggested that students complete the Systems overview and machine overview eLearning modules prior to coming to the course.

Field Training



120A P&H Drill Systems Maintenance

Monday	Tuesday	Wednesday	Thursday
<p>Introduction</p> <ul style="list-style-type: none"> Review of Agenda Material Review Schematics Symbols Main Motions Machine Systems <p>Main Air System</p> <ul style="list-style-type: none"> System Overview Main Air System (Start Up) Main Air System Oil Circulation <p>Lunch</p> <ul style="list-style-type: none"> Main Air System Compression Main Air System Control Main Air System Air Production Maintenance and Troubleshooting <p>Q&A</p>	<p>Main Hydraulic System</p> <ul style="list-style-type: none"> System Overview Schematics Reading Closed Circuit Hydraulic Tank Hydraulic Pumps Hydraulic Propel Motors System Control Propel System Maintenance and Troubleshooting <p>Lunch</p> <p>Auxiliary Hydraulics</p> <ul style="list-style-type: none"> System Overview Schematics Open Circuit Pump Valve Banks VB1 VB2 VB3 Low Pressure Circuit Auto Leveling System Relief Maintenance and Troubleshooting <p>Q&A</p>	<p>Rotary System</p> <ul style="list-style-type: none"> Rotary Carriage Rotary Motors System Control Speed Maintenance and Troubleshooting <p>Hoist/Pulldown</p> <ul style="list-style-type: none"> Rotary Carriage Pulldown Motors System Control <p>Lunch</p> <ul style="list-style-type: none"> Speed Maintenance and Troubleshooting <p>Mast</p> <ul style="list-style-type: none"> Inspection and Maintenance <p>Q&A</p>	<p>Undercarriage</p> <ul style="list-style-type: none"> Sideframes Equalizer Axle Adjustments Inspection and Maintenance <p>Pipe Handling</p> <ul style="list-style-type: none"> Pipe Racks Breakout Wrench Winch <p>Lunch</p> <p>Electronics and Control</p> <ul style="list-style-type: none"> PLC/SLC GUI Panels Cabinets Cables Motors Maintenance and Troubleshooting <p>Q&A</p> <p>Review & Assessment</p> <p>Rap up</p>