

Design Drilling for Surface

Course Aim:

The course aims to embed the candidates with essential knowledge for social and economic transformation and contribute to the upliftment and economic growth of the mining and minerals sector.

Course Objective:

After completion of the course, the delegate will have an understanding of:

- Demonstrate an understanding of drilling blast holes in a surface mining operation.
- Prepare to drill blast holes.
- Drill blast holes.
- Complete the duties pertaining to the drilling of blast holes

Course Content:

- The legal and specified requirements pertaining to a safe, healthy work environment in the drilling of blast holes process and the consequences of not adhering to the above are explained.
- The specified actions to be taken, should sub-standard conditions and problems pertaining to the drilling of blast holes be encountered, are explained .
- The specified operating parameters and control methods and the consequences of not adhering to these are explained.
- Personal protective and safety equipment is verified, examined and used in accordance with specified requirements .
- Pre-use inspection is conducted in such a way as to identify all equipment defects that may impair production or cause damage to equipment or injury to people. Defects are reported or rectified as per site-specific requirements.

- The drilling of blast holes is stopped in accordance with specified requirements. Specified lock-out procedures are adhered to
- Reporting and recording are conducted in accordance with specified requirements

Target Audience:

All employees who are interested in following a career in the mining or mineral sector.

Duration:

4 Days

Training Program

Days	Content
Day 1	<ul style="list-style-type: none"> ■ Welcoming ■ Demonstrate an understanding of drilling blast holes in a surface mining operation. ■ The legal and specified requirements pertaining to a safe, healthy work environment in the drilling of blast holes process and the consequences of not adhering to the above are explained. ■ Hazards and associated risks, pertaining to the drilling of blast holes using a drill rig, identified through specified risk assessment procedures, and the actions to be taken should they be encountered are explained. ■ The specified principal components of the drill rig are identified and their functions are explained. ■ The specified actions to be taken, should sub-standard conditions and problems pertaining to the drilling of blast holes be encountered, are explained. ■ The specified communication requirements pertaining to the drilling of blast holes and the consequences of non-compliance are explained

	<ul style="list-style-type: none"> ■ The specified operating parameters and control methods and the consequences of not adhering to these are explained. ■ The specified factors affecting the optimum performance of the drilling of blast holes are explained.
Day 2	<ul style="list-style-type: none"> ■ Welcoming ■ Prepare to drill blast holes. ■ Personal protective and safety equipment is verified, examined and used in accordance with specified requirements. ■ Tools and equipment are verified, examined, and used in accordance with specified requirements. ■ Job instructions are interpreted correctly, and the sequence of operations is determined according to specified requirements. ■ Hazard identification and hazard control are conducted to comply with risk assessment requirements to eliminate, minimise or control risk of ill health and injuries. ■ Pre-use inspection is conducted in such a way as to identify all equipment defects that may impair production or cause damage to equipment or injury to people. ■ Defects are reported or rectified as per site-specific requirements. The work area is examined, and hazards and defects are reported or rectified in accordance with specified requirements. ■ Preparation work is performed, and consequences of inadequate preparation are described in accordance with specified requirements. ■ The uses of on-board safety systems are explained in terms of specified requirements.
Day 3	<ul style="list-style-type: none"> ■ Welcoming ■ Drill blast holes. ■ The machine is started up in accordance with specified requirements. ■ The machine operation is conducted, and defects are reported or repaired in accordance with specified requirements.

	<ul style="list-style-type: none"> ■ Holes are drilled at a rate that is in accordance with the pre-determined target within specified requirements. ■ The machine operations are co-ordinated in such a manner as to enhance teamwork and avoid conflict within complementary operations. ■ Relocation of machine is done in accordance with specified requirements. ■ The machines performance and condition are monitored, and hazards and defects are addressed in accordance with specified requirements. ■ Environmental and health elements are monitored, reported, or dealt with in accordance with specified requirements.
Day 4	<ul style="list-style-type: none"> ■ Welcoming ■ Complete the duties pertaining to the drilling of blast holes. ■ The environmental effects of blasting are identified and the manner in which blast design minimizes their effects are explained. ■ The drilling of blast holes is stopped in accordance with specified requirements. ■ Specified lock-out procedures are adhered to. ■ Personal protective and safety equipment is dealt with in accordance with specified requirements. ■ Tools and equipment are dealt with in accordance with specified requirements. ■ Good housekeeping practices are maintained in accordance with specified requirements. ■ Preparation for maintenance is in accordance with specified requirements. ■ Specified lock-out procedures are adhered to. ■ Reporting and recording are conducted in accordance with specified requirements. ■ Feedback is provided to the in-coming shift with regard to machine condition, environmental hazards and sub-standard conditions in terms of specified requirements.

NB: PLEASE MAKE SURE YOU BRING THE FOLLOWING DOCUMENTATION FOR MQA REGISTRATION:

CERTIFIED COPY OF YOUR ID

Looking forward to joining you on this journey of learning!

