MINE PLANNING

UNDERGROUND COAL

COURSE CONTENT

Introduction
Health & safety, world coal mining, open pit verse underground, and resource base.

Asset Evaluation
Allocation of assets, evaluation process, and margin ranking.

Geology & Exploration
Coal types, properties, exploration, modelling, design considerations, and reporting.

Mining Systems
Selection drivers, technical considerations, equipment required for each system.

Geotechnical Assessment
Assessment parameters, support design, and influence on design/operation / profitability.

Ventilation & Gas Management
Gas reservoirs, economics, uncertainty in testing, drainage systems, and equipment & structures.

Mine Design Parameters
Access, panel orientation, resource coverage, width, flexibility, risk assessments, and selection.

Equipment Selection
Equipment & services required, maintenance process, non-productive time, capital estimation.

Coal Clearance
System parameters, interface, bins, standardisation v specialisation, and operational considerations.

Mine Infrastructure
Drift/shaft, electrical, water, hydraulic fluid, compressed air, dewatering, and consumables.

Mine Planning
Systematic approach and options evaluation.

Economic Evaluation
Range analysis, cost estimation, revenue calculations, resource valuation, and NPV v IRR.

Overview

The aim of this course is to provide participants with a comprehensive understanding of the factors that influence the design of a longwall mine. As a result of attending this course, participants will have a greater understanding of how the major design decisions for a longwall mine are made, be able to optimise the mine layout, and make better decisions in the analysis of a mine design.

Learning Outcomes

- Learn how to apply margin ranking techniques.
- Learn how to optimise the key parameters of longwall mine design (panel orientation, resource coverage, and longwall width).
- Understand geological factors affecting mine design.
- Know how to conduct an assessment of the geotechnical environment for a longwall design.
- Understand how to analyse the ventilation and gas situation for the mine.
- Know how to assess the economics of the design.

Who is the Course for?

- Mine Planning Engineers
- Planning Managers / Superintendents
- Senior Operational Personnel
- Equipment Manufacturers

Delivery Mode

Classroom

Duration

Two Days

Want to Learn More?

Contact **training@rpmglobal.com**

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