



Asia Masters Center

Cement Quarries Operation



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Cement Quarries Operation

➔ Course Overview

This course has been developed to quarry operation.

quarry operation is part of the operation of the cement factory. The term “Quarry operation” is here taken to include:

1. Prospecting and evaluation of the deposit with regards to extension, depth, composition and total yield.
2. Planning of operation, i.e. determination of quarry sections orientation of fronts and depths of benches.
3. Evaluation of quarry machinery, transport equipment and internal transport lines.
4. The daily operation.
5. Familiarize the trainees with principals of crushing, the types of crushers, Crushing Operation, Design Limitation, Liner Consideration and Effect on Production technology and procedures necessary to operate Crushers with troubleshooting.

The purpose of the course is to upgrade the skills and knowledge of process engineers and operators in Quarries operation.cement industry.

➔ Course Objective

After completing this course participants will have:

- The General basics of Geology (Elements, Minerals, types of rocks & Rocks for the cement industry).
- The nature of cement raw material.
- Prospecting and evaluation of the deposit.
- In-depth understanding of the Planning of operation.
- Quarries machinery and Evaluation of quarry machinery.
- The skills in daily quarry operation will be improved.



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- Familiarize the trainees with principals of crushing, the types of crushers and Crushing Operation.



Target Audience

- This course will have a particular focus for people working in the Cement Quarries operation
- Process control Engineers,
- Quarries supervisors,
- Quarries technicians,
- Cement Quality control and
- Laboratory engineers.



Course Outline

Module General Geology.

- Elements, Minerals, types of rocks & Rocks for the cement industry.
- Genesis of the deposits.
- Internal structure of a deposit.
 - Stratification (faults, folds, etc).
- Geological map and Use instructions.

Module Geological Investigation.

- Role of Geomining in the Cement Industry.
- Reserves definition.
- Geological survey.
- Geological Exploration.
- Geological Investigation.



Module Quarry Permitting/ Authorisation

- Why have permits / Authorizations.
- Typical route to authorization.
- Examples.
- Other permits.
- Your situation.

Module Mine Planning. Why undertake Mine Planning

- Prior to Mine Planning – what is required?
- Long-term Mine Planning.
- Short-term Mine Planning.
- Tools for planning and quality control.
- Practical Mine Planning exercise.

Module Block Modeling Concepts and Uses

- Basic Block Model concepts.
- What Data is required and how it is collected.
- Building a Block Model.
- Using a Block Model.

Module Mining in the quarres.

- Mining Methods.
 - Surface mining.
 - Underground mining
- Loading & Hauling.
- Main Operations in quarrying (Drilling, Blasting, Sampling, Loading, Hauling, Ripping and other mechanical mining methods, Conveying and Crushing).
- Equipment Selection.
- Performance & Costs.
- Supervision in a Quarry.
- Waste Dump Design - Water Control.
- Quarries Safety.



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Module Crushing Raw materials.

- The Principles of crushing.
- Reduction Ratio.
- Types of crushers.
 - Jaw crusher.
 - Cone crusher and Gyratory Crushers.
 - Impact crushers (Hammer Crushers - Horizontal shaft Impactors and Compound Impact Crusher).
 - Roll Crushers, twin roll crusher and Slugger roll crushers.
 - Vertical Shaft Impactors.
- Materials Breaking Characteristics.
- Crusher selection.
- Hammer Crusher.(or the customer crusher type).
 - The design and different parts.
 - Hammer wearing.
 - Crusher efficiency.
 - Operation parameters to control the crusher and crushing.
 - Crusher operation screens

➤ **The Feature Of Asia Master Training And Development Center**

- we pick up the customer from the airport to the hotel.
- we give the participant training bag includes all the necessary tools for the course.
- Working within groups to achieve the best results.
- All our courses are confirmed and we do not postpone or cancel the courses regardless of the number of participants in the course.
- We can assist you in booking hotels at discounted prices if you wish to book through us.
- We offer the certificate from Asia Masters Center for Training and Administrative Development.

➔ **The Cost Of The Training Program Includes The Following:**

- 1) Scientific article on flash memory.
- 2) Training Room.
- 3) Training.
- 4) Coffee break.
- 5) The training bag includes all the tools for the course.



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Price (USD)

Communicate with the training department
to know the participation fees

➤ **There are offers and discounts for groups**

The details of the bank account

Bank name: CIMB Bank Berhad

Account name: Asia Masters Center SDN. BHD

Bank account number: 80-0733590-5

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IBAN: Null