



REGIONAL TRAINING CENTRE - NORTH

"Operation & Maintenance of Crushers, Stackers & Reclaimers (DS 87) "

Period: December 15 - 17, 2011 (09:00 AM – 05:15 PM)

Course Designer	Target Group
<ul style="list-style-type: none"> F L Smidth A/S, Denmark Tata Interactive Systems, Mumbai 	Supervisors / Technicians / Operators responsible for Crusher, Stacker and Reclaimers in a modern cement / metallurgical plants. The program will also be useful for Attendants and Charge-hands having relevant work experience in the Crushing Plant.

Course Objectives :

The objective of the course is to provide sufficient knowledge and skill to the participants about operation and maintenance procedures of crushers as well as stackers and reclaimers in order to achieve homogenization of crushed lime stone / raw material and also to reduce breakdowns for maximizing availability of equipment.

After the course participants are expected to have acquired following:

Skill :

- Able to perform daily inspection and maintain checklist of the crusher, stacker and reclaimers.
- Able to recognize operational alarms and identify causes/ problems indicated by those alarms.
- Able to monitor uniform blending quality of limestone / coal being feed to respective grinding mill by effective use of stacking and reclaiming system.
- Able to perform preventive maintenance for crushers, stacker and reclaimer.

Knowledge:

- Operation and maintenance procedure for crusher, stackers and reclaimers.
- Various types of crushers and their design characteristics.
- Able to describe preventive maintenance procedures, repairs and overhaul of equipments.
- Basic principles involved in stacking and reclaiming, bed-blending system leading to homogeneity of crushed limestone / coal or any other material used in metallurgical plants.
- Different types of stacking, its merits and demerits.
- Different types of stacking and reclaiming equipment, its features including circular stacker and scrapper type of reclaimers.
- Basic knowledge of automation system applied to stacker and reclaimers.

Attitude:

- Appreciation of importance of pre-homogenization with effective use of stacker & reclaimer system its contribution in cement manufacturing process.
- Safety hazards and various precautions to be followed.

Rationale :

For producing one unit of finished product more than it the raw material to be crushed. Apart from computerized mine planning for uniform quality of raw material crushing and pre-homogenization by using stackers and reclaimers has its importance in manufacture of high quality finished product. Planned and systematic maintenance practices will help in reducing the cost of production through reduced consumption of spares and downtime of equipments.

Course Content :

A: Crushers:	B: Stackers & Reclaimers:
<ul style="list-style-type: none"> • Various types of crushers its components and operational aspects. • Maintenance Procedures for crushers and auxiliaries. • Trouble shooting and repairs. 	<ul style="list-style-type: none"> • Types of Stackers & Reclaimers. • Principle of operations of stackers. • Blending ratio. • Automation systems in stacker and reclaimers. • Maintenance of Stackers / Reclaimers. • Safety aspect. • Case study.

Methodology :

- Lectures and Group Discussion.
- CBT and Plant Visit

Course Evaluation: Pre and Post course test during training session.

Contribution for Participation:

1. Rupees 3,800/- per participants NON RESIDENTIAL covering working lunch, tea with snacks and course material. Please add service tax @10.30% to the delegate fee.
2. In addition to above Rs. 400/- per participants per day will be charged extra towards Boarding & Lodging expenses during program.

The contribution may be made by an Account Payee DD / Cheque drawn in favour of "J.K. Cement WORKS (RTC)" payable at Nimbahera.
