## CENTRE FOR CONTINUING EDUCATION SERVICES NCB-BALLABGARH

CCE-03/Cem/B/2019(3)

Training Programme: Advanced Pyroprocessing Techniques for Improved Productivity and

Clinker Quality.

**Period** : 22-24 May 2019 **Venue** : NCB-Ballabgarh

## Summary of Feedback from the participants in the above Training Course :

- 1. The Training Programme, course content, faculty and Interaction with Participants is very good. Assuring NCB's support afterwards if required is appriciable.
- 2. The Session on Raw mix mineralogy, Microscopy and XRD were very helpful for fine tunning of Raw Mix and clinker to optimise productivity and quality.
- 3. Participants are so impressed upon the XRD & Mineralogy course that they are going to request their management for procuring the equiment for better performance.
- 4. The session on XRD and Optical Microscopy dealt with the effective use of XRD and Optical Microscopy will improve the clinker quality.
- 5. More ideas acquired on the optimized Raw Mixes and new alternative materials or fuels in cement plant..
- 6. The course deals with enhancement and impact of TSR%., which created awareness about the process optimization in burner and calciner.
- 7. Now there is a challenge for every plant to maximise TSR by using AFR. Solutions are given in the training course.
- 8. The course is beneficial to meet the target (maximise the AFR with out any impact on clinker quality).
- 9. Course content is very much essential for Pyro-processing in today's challenging situation, to reduce heat consumption and power consumption by implementing the tips given in the
- 10. Regarding Refractory, failures and solutions were interacted in the session is good.
- 11. After this training use of AFR in plant will increase to 6-8% from the present level of 3-4% with out compromising clinker qulaity.
- 12. Total Quality Management Session was very interesting. Emphasis is given to maintain quality with productivity.
- 13. Knowledge on TQM, Quality Circle, Quality Culture and Employee Invovement delivered by DG-NCB was highly appreciated.
- 14. Participants appreciated highly regarding the course content and a fruitful training programme helping the cement industry in enhancing their performance.
- 1. Topics to be added (suggestions)
  - a. Raw Mix Design Calculations
  - b. Use of AFR Quality uniformely & effects and control of NOx and Sox./ Testing of AFR./ Impact of AFR.
  - c CFD
  - d. Raw Mix and Kiln Operation
  - e. Specific electrical energy reduction and advanced instrumentation.
  - f. Kiln heat mass balance