

KEY WORD: READY MIXED CONCRETE / QUALITY CONTROL SYSTEM

JARUNEE LUANGPETCHGAM : STUDY OF QUALITY CONTROL SYSTEM FOR MULTI PLANT READY MIXED CONCRETE INDUSTRY. THESIS ADVISER : ASSOCIATE PROFESSOR DAMRONG THAVEESAENGSAKUTHAI, PROFESSOR DR. THAKSIN THEPCHATRI, 214 PP. ISBN 974-582-399-6

The objective of this research is to search for factors affecting the quality of concrete, and to analyze the quality control system that is appropriate for the model factory (multi plant ready mixed concrete). From the study, the model factory could not control the quality of ready mixed concrete at different plants ; the quality of the ready mixed concrete was not constant between plants. The reasons are that they lack the followings ;

1. Effective system for controlling the quality of ready mixed concrete,
2. Quality control standard,
3. Clear organization structure,
4. Record or data analysis of the concrete quality,
5. System for reporting the condition of sub-standard concrete.

This research presents the system for controlling the concrete quality in the model factory by means of :

1. Designing the structure of the quality-control organization,
2. Designing the system for quality control of concrete,
3. Determining the standard of the concrete by testing the quality of raw materials, controlling the mixing process and controlling the concrete quality during delivery.

Each step makes use of quality control techniques involving check sheets, cause and effect diagrams, statistical method and control charts. These instruments are used to evaluate, analyze the quality of the concrete and design a quality report system for each process in order to determine and to eliminate in time, the problems or defects that occur before they affect the quality of ready mixed concrete.

Furthermore, in the management of quality control, the administrative team should constantly organize training and education in quality control of concrete so that the trained staff will be able to solve problems of quality and this is a service that should be given to the customers.