



International Conference on Architecture and Civil Engineering 2018

ISBN	978-81-933584-5-0
Website	www.coreconferences.com
Received	08 – January – 2018
Article ID	CoreConferences017

VOL	01
eMail	mail@coreconferences.com
Accepted	12 - February – 2018
eAID	CoreConferences.2018.017

Suggestion of Management Method of Ready-Mixed Concrete (RMC) Pouring Centred on Construction Site

Yije Kim¹

Abstract: In construction sites, ready-mixed concrete (RMC) is one of the most important materials that should be unloaded and placed on the site within the standard time (60 ~ 90 minutes) immediately after shipment from RMC plants due to the characteristics of the material. In addition, longer waiting time and pouring time during concrete pouring process affects the quality of RMC significantly. Therefore, the time-based delivery management for fluent supply and demands is the most important issue in RMC placement plan. For this reason, optimization research has been carried out on the RMC vehicle tracking and RMC delivery management algorithms. However, they were more of RMC companies centered truck dispatching and pouring management, and there were few studies on construction site centered RMC installation planning and management. Moreover, the information from RMC truck invoices and the time information of RCM truck, such as plant departure time, on-site arrival time, and turnover time, are limitedly considered in RMC placement planning and quality control. Therefore, the purpose of this study is to derive the necessary parameters for field-oriented RMC management process using information from the invoice and RMC management process used at the construction site. Especially, the necessity of the management of pouring time using the pouring location, pouring volume, and RMC material property retrieved from planning and ordering stage is suggested and proved through on-site verification. Through this, it is anticipated that it will be possible to secure the RMC quality by enabling RMC pouring planning centered on the construction site.



International Conference on Architecture and Civil Engineering 2018

ISBN	978-81-933584-5-0
Website	www.coreconferences.com
Received	20 – January – 2018
Article ID	CoreConferences018

VOL	01
eMail	mail@coreconferences.com
Accepted	05 - February – 2018
eAID	CoreConferences.2018.018

Research on the Development Level Evaluation of Regional Construction Industrialization: A Case Study in Jiangsu, China

Ping Liu¹

¹Department of Construction and Real Estate, Southeast University, Nanjing 210096, China

Abstract: In recent years, there have been concerns raised about construction industrialization in China, which have initiated a wave of policy change in both governmental and industrial organizations in order to change the mode of conventional construction. However, the current development level of regional construction industrialization (RCI) in China has not been well-characterized. This study screened preliminary index systems in five dimensions: technical, economic, sustainable, enterprise development and development environment. Based on the data gathered from the questionnaire surveys and subsequently analyzed, twenty-two critical evaluation indicators were identified. Analytic Hierarchy Process (AHP) was then employed to determine the weighting of each indicator. The evaluation method of the development level was formulated on the basis of the evaluation criteria. Jiangsu Province was used as an example in this study, with the development level of this province being comprehensively examined using a combination of the index system and evaluation method. The results show that Jiangsu has a relatively high RCI development level. The data from analysis scores of five dimensions and twenty-two indicators show that the index system is feasible, with evaluation results being consistent with actual practice. These findings provide a good practical reference for making decisions about how best to guide the development of RCI.

This paper is prepared exclusively for CoreConferences 2018 which is published by ASDF International, Registered in London, United Kingdom under the directions of the Editor-in-Chief Dr A Senthilkumar and Editors Dr. Daniel James. Permission to make digital or hard copies of part or all of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage, and that copies bear this notice and the full citation on the first page. Copyrights for third-party components of this work must be honoured. For all other uses, contact the owner/author(s). Copyright Holder can be reached at copy@asdf.international for distribution.