

## Roller Compacting Concrete “RCC” in Dams

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**Abstract :** Rehabilitation of dam components such as foundations, buttresses, spillways and overtopping protection require a wide range of construction and design methodologies. Geotechnical Engineering considerations play an important role in the design and construction of foundations of new dams. Much investigation is required to assess and evaluate the existing dams. The application of roller compacting concrete (RCC) has been accepted as a new method for constructing new dams or rehabilitating old ones. In the past 40 years there have been so many changes in the usage of RCC and now it is one of most satisfactory solutions of water and hydropower resource throughout the world. The considerations of rehabilitation and construction of dams might differ due to upstream reservoir and its influence on penetrating and dewatering of downstream, operations requirements and plant layout. One of the advantages of RCC is its rapid placement which allows the dam to be operated quickly. Unlike ordinary concrete it is a drier mix, and stiffs enough for compacting by vibratory rollers. This paper evaluates some different aspects of RCC and focuses on its preparation progress.

**Keywords :** spillway, vibrating consistency, fly ash, water tightness, foundation

**Conference Title :** ICCSEE 2015 : International Conference on Civil, Structural and Environmental Engineering

**Conference Location :** Zurich, Switzerland

**Conference Dates :** January 13-14, 2015