Job Report

RCC Batch Plant for Yeywa Hydropower Project, Myanmar.







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Situation

The largest hydro-electric power project (HPP) in Myanmar to date is the Yewya Hydropower Project. The main features of this Project are the construction of a 440 ft high roller compacted concrete (RCC) dam and a 790 MW hydro scheme. Total concrete volume is near to 4 million cyd. The RCC dam alone takes 3.4 million cyd of RCC, making it the third largest in the world.

? Task

Concrete production started in February 2006 and reached a peak production of about 13,000 cyd/day. The RCC dam was finished end of 2007 well ahead of schedule. The concrete mix at Yeywa HPP specified a high-paste RCC mix concept with a high proportion of natural pozzolan. With just 125 lbs/cyd this is the lowest cement content ever used in a high-paste RCC dam.

Another challenge was to supply concrete with a temperature of 65°F (ambient temperature of up to 115°F), which required pre-cooling of aggregates and addition of large quantities of flake ice into the mixer.

Solution

In order to master this difficult task a special Liebherr RCC plant was installed with an inline arrangement of 4 x 4yd3 Liebherr twin-shaft mixers. The combined output of the twin-shaft mixers was confirmed at 650 cyd/h during the final capacity and uniformity tests. Only twin-shaft mixers can produce such an extraordinary economical mix within a mixing time of 45 sec. and meeting the high quality standard essential for such a project.

Cooling plant for RCC production



Inline arrangement of Twin Shaft Mixers



Technical Data

RCC Plant: 4 x Betomix 3.0A-R/DW
Output: 500 m³/h or 650 cyd/h

Mixer: 4 x DW3.0

Batch Size: 3 m³ or 4 cyd Mixer Motor: 75kW / 100 HP

Aggregates: max: 40 mm or 1½ inch
Temperature: 18°C or 65°F at dam site
38°C or 100°F ambient

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