

## **Analysis and Comparison of Pumping Concrete Plug in Tunnel no. 10 and no. 12 in Longkou Power Station**

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### **Abstract:**

The concrete of the first phase of water resources of Longkaikou hydropower station is used as the research object. The pipe diameter selection of the pump pipe, the design scheme of the mixture ratio and the prevention of plugging pipe of the pump are summarized. In this paper, different research and comparison are conducted on the proportioning design of the super-long pumping distance of the pump distance less than 800m and the length of the tunnel with no. 12 tunnel, which is longer than 800m. The matching ratio of the super-long distance pump concrete obtained by the 12 tunnel is of great reference value for similar pumping construction in the future.

**Keywords:** Concrete pumping, mix design, construction technology, plug pipe, solution