



Bai Xi Reservoir Spillway Rehabilitation



2025

ABOUT THIS PROJECT:

Market Segment:
Water Holding Structure

Location:
Zhejiang Province,
Ningbo (Ninghai
County), China

Products Used:
Xypex Concentrate
Xypex Megamix II

The Bai Xi Reservoir spillway had experienced progressive surface deterioration, cracking, and water infiltration due to long-term exposure to flowing water, weathering, and operational stress. Visible cracking—ranging from fine surface cracks to wider structural cracks exceeding 0.2 mm, raised concerns regarding durability, watertightness, and long-term serviceability of the spillway structure.

Smaller cracks were treated through crystalline penetration, while larger cracks and surface defects were repaired using Xypex Megamix II, providing structural restoration and compatibility with the existing concrete substrate. Following repairs, Xypex Concentrate was applied to the spillway surface to form a permanent, integral waterproofing system capable of resisting ongoing water exposure.



The combined use of Xypex Concentrate and Xypex Megamix II ensured not only effective crack treatment and surface rehabilitation, but also enhanced the concrete’s resistance to water penetration, chemical attack, and future deterioration. As demonstrated by post-repair conditions, the rehabilitated spillway achieved improved watertightness, restored surface integrity, and extended service life, delivering a durable, low-maintenance solution for this critical water infrastructure asset.



To address these challenges, a comprehensive rehabilitation strategy was implemented using Xypex crystalline waterproofing and repair systems. Prior to repair, the concrete surface was thoroughly prepared, and existing cracks were evaluated and treated based on size and severity.