

CASE HISTORY

BBZ 2 COMPONENT RESIN INJECTION SYSTEM

The Belleville Locks and Dam project is Phase I of a three phase project awarded to Jean's Waterproofing, Inc. (JW) by the U.S. Army Corps of Engineers (ACOE).

ACOE inspectors discovered approximately 1,100 linear feet of cracks in crossovers and riser spaces at the Belleville site. The site consists of two (2) locks on the Ohio side of the Ohio River. The main lock is 1,200 feet long with a width of 100 feet and is complimented by a 700 feet by 100 feet auxiliary lock.

The riser and crossovers provide access to various water, air and hydraulic lines that are used in operating four sets of gates. Inspectors marked control joints and random cracks in crossovers and risers that needed to be sealed. The majority of leaks appeared to originate in the riser control joints. These control joints would prove to be the most challenging leaks to inject and seal.

The risers are 8 feet by 6 feet and 60 feet in depth and adjacent to the gate hinges. They are connected at the bottom by a 100 foot long 8 foot by 6 foot crossover tunnel. Starting from the top of the risers, cracks were chased with 4" grinding wheels and any prior foam was removed from all wall surfaces. A fast set cement was applied to the cracks and 2" holes were drilled every 6 to 8 inches apart. Packers were installed and the injection was done with BBZ Duroseal Inject 2000 using a 2 component pump.

At the end of six weeks, all marked footage had been injected. After careful scrutiny by ACOE inspectors, Phase I was declared a success.

**Project: Belleville Locks and Dam
Reedsville, Ohio**

Owner: U.S. Army Corps of Engineers

**Injection
System: BBZ Duroseal Inject 2000**

Completed: November 1998



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