

# CASE STUDY

## Cement Manufacturing

### The Challenge

A large cement manufacturing plant in Lasalle, Canada was experiencing numerous difficulties at resolving water hammering pressure shocks within their water supply lines throughout the plant. Water was being supplied from the local municipality and was being distributed throughout the plant with long vertical runs, in which demand for water was continuous but intermittent as trucks passed through a refill point.

The negative effects described were loud banging noises, pipelines that shook, and water gushing out of one of the installed valves. Yearly maintenance costs were consistently budgeted to replace and repair various equipment in the piping system.

### The Solution

The DFT® model WLC® check valve soon resolved the problem upon installation. It was determined that a 4" wafer-style check valve was the best option to provide maximum protection to the preceding pump and valves.

Due to the rapid closure spring-mechanism, the negative effects of water hammering were significantly reduced, which added protection to the piping system and reduced the maintenance costs involved.



**DFT® WLC® Check Valve**

The WLC® Check Valve is a non-slam, wafer style model known for its versatility and reliability in different applications. This valve can accommodate varying pressures, temperatures, and types of fluids while providing leak-free operation.

This lightweight, axial flow, nozzle style valve is available in diverse body materials. Standard materials are A216 Grade WCB carbon steel and A351 CF8M stainless steel. Optional materials include Alloy 20, titanium, duplex stainless steel, Inconel® 625, and Hastelloy®.

*DFT® Inc., is a manufacturer of the broadest product offerings of in-line, axial-flow, silent check valves for liquid, gas or steam.*

*With over 75 years of check valve expertise, DFT® check valves are recognized globally as the valve to install to prevent water hammering or reverse flow.*

### Facility

CRH Canada – Lasalle

### Application Problem

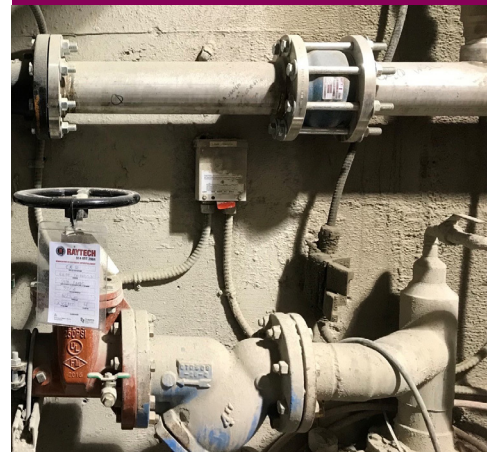
Water Hammering  
Feed Water  
Vertical Runs

### Solution

DFT® Model WLC® Check Valve

### Success Since

2021



Images and Case Study provided by:

