

# **APPLICATION STORIES**

## **APPLICATION: WASTE WATER**

Japan Machinery Company, a manufacturer of water treatment equipment, uses air-operated chemical feed pumps to inject various chemicals and additives at very high pressures.

## PROBLEM:

The reciprocating action of the pumps produced excessive pulsation and vibration in the discharge pipes of the system, which caused broken pipes, failed gaskets, damaged valves, and pulled pipe supports from their foundations.

### **SOLUTION:**

A BLACOH high pressure SENTRY I model H2620A dome top 370 cubic inch pulsation dampener was installed at the discharge of the pumps. The BLACOH dampener has an Aflas bladder for chemical compatibility. By alternately compressing and expanding the compressed air charge within the dampener as the pump strokes, a shock absorber effect is created. This reduces the surge in the system created by the pumping action.

#### **RESULT:**

Since the SENTRY I pulsation dampener has been installed, the surge in the system has been dramatically reduced. Valve, pipe joint, and pipe support failure have been virtually eliminated. Installation of BLACOH high pressure pulsation dampeners is now standard on most new systems.

### **SUBMITTED BY:**

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