



APPLICATION STORIES

APPLICATION: **SEWAGE TREATMENT 2**

The City of Colorado Springs WWTP uses Abel mechanical double diaphragm pumps to transfer sludge throughout their facility. The pump is ideal for their application due to the solids handling capability, and the fact that the pump is a positive displacement pump which allows the flow to be metered.

PROBLEM:

The reciprocating action of the pump causes excessive pulsation in the discharge piping. The constant pulsation has caused broken pipes, failed gaskets, damaged valves, and has pulled pipe supports from foundations.

SOLUTION:

A BLACOH SENTRY I CT2620NF dome top 370 cu. in. pulsation dampener was installed at the discharge of the pump. The BLACOH dampener has a Neoprene bladder that separates the sludge from the compressed air charge. The pulsation dampener acts as a shock absorber on the system by alternately compressing and expanding its gas charge as the pump strokes. 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 has been eliminated. Installation of BLACOH pulsation dampeners is now a standard practice for the City of Colorado Springs WWTP whenever an Abel pump is installed in their plant.

SUBMITTED BY:

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