

# **APPLICATION STORIES**

## APPLICATION: FILTER PRESS/BRINE

The Franklin Brine Treatment Plant uses a Wilden diaphragm pump to charge a filter press with Brine Water oil/sludge.

### PROBLEM:

When first charging the filter press with the diaphragm pump, the filter screens are clean and product flow is exceptionally fast. Because of the reciprocating design of the pump, product flow is pulsating. The pulsating flow produces pressure spikes which cause damage to the filter screens. The piping is CPVC plastic because the brine water is corrosive. The pulsating flow also causes vibration which resulted in leaky pipe joints.

#### SOLUTION:

A BLACOH pulsation dampener was installed in the system right at the pump discharge outlet. The dampener uses a compressed air charge contained by an elastomeric bladder to create a shock absorber effect that minimizes pulsation and produces a more laminar flow of brine water into the filter pump.

#### **RESULT:**

After installing the BLACOH dampener, the filter screens on the press have shown no signs of damage on the inlet side of the press. Since product flow is now pulsation free, there have been no more leaks in the CPVC pipe joints.

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