

## **Application Data Sheet**

# Hospital Saves Money and Improves Pond Pump Efficiency

### Duck Pond Settlement Shortened Life of Old Expansion Joint

#### **Application:**

A recirculating water system for an ornamental duck pond at a leading university medical center on the west coast.





#### **Problem:**

During scheduled maintenance, an inspection determined a leaking expansion joint between an 8" pipe and the suction side of a pump with a 6" connection. The original joint wasn't designed for pump settlement, and it was too short for the face to face dimension. Therefore, over time, the expansion joint stretched beyond its capabilities causing a leak.

The expansion joint was leaking at a pressure of three to five PSI. Even though the leak was

minimal at first, it created an extremely low efficiency level in the system. In due course, the leak would have caused the pump to work harder and wear out faster.

#### Solution:

Since vacuum was a key factor on the suction side of the pump, the expansion joint needed a full vacuum rating of 30" HG. Additionally, the piping had settled over time, creating a misalignment. Holz designed and manufactured a custom sized tapered eccentric expansion joint to fit the "settled" piping. It was designed with thick flanges to ensure a leak proof seal. By correcting the leak early, the hospital improved the efficiency of the pump equipment and saved money by not having to replace the pump.