

Rotary pumps replace diaphragm pumps on NaOCl service

Water for the 2.4 million customers in the San Francisco Bay Area source is stored in the Hetch Hetchy reservoir on the Tuolumne River in Yosemite National Park.

The East Bay Field Facilities, operated by the San Francisco Public Utilities Commission (SFPUC), uses 12.5% sodium hypochlorite (NaOCl) solution for water disinfection. At their Tesla Portal Disinfection Station, pumps meter NaOCl into water that flows into the Hetch-Hetchy Aqueduct at a rate of up to 288 million gallons per day on its way downstream to San Francisco Bay Area customers.

The starting situation

Though safer for personnel, surrounding population and the environment than chlorine gas (Cl) disinfection, NaOCl is highly corrosive which presents problems for pumps and metering equipment. Originally, Tesla Portal used diaphragm pumps. But, Steve Shaw, Chief Stationary Engineer at the East Bay Field Facilities, reported that the facility had to spend \$450 per pump to outfit each with check valves plus vibration and pulsation dampeners.

Additionally, they had to devote extra personnel to take care of problems associated with the diaphragms, including frequently blowing the accumulated air and gases out of the pumps. "It took intense supervision to keep them going," Shaw noted.

The solution

When Misco Pacific Water, a water and wastewater treatment equipment representative in Pleasanton, California, recommended seepex BN range progressive cavity pumps, Shaw said he was convinced even before the pumps were in place. "seepex provided referrals who were only too happy to tell us why they loved their seepex pumps." Furthermore, he said Misco and seepex provided Tesla with a customized trial pump to use as long as they wished.

The benefit

Both Shaw and Jeff Van Trump, the Senior Stationary Engineer of these facilities, said the pumps are so responsive they can count on them to meter consistently without instrumentation or analyzers. The pumps don't need extra accessories to prevent vapor lock.

Furthermore, they rarely require repairs. The simplicity of the pumps means minimum time and manpower when a part must be replaced, significantly reducing the expense associated with downtime.

The reliability of these pumps at the Tesla Portal Disinfection Station convinced Van Trump and Shaw to order 24 new seepex pumps for the Sunol Valley Chloramination Facility, a part of a long-term SFPUC capital improvements program. The 24 pumps will be sufficient to treat water flowing through all three pipelines simultaneously during heavy water usage periods.

Please visit www.seepex.com for further information and contacts.



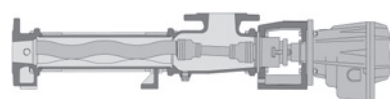
seepex BN range pump with HALAR® coated casing parts

Key Facts

- No pulsation
- Maximized performance
- Less repair- and downtime

Significant Cost Savings

- Low operating costs
- No extra accessories needed
- Less personnel required



Installed Pump Type

- Range BN