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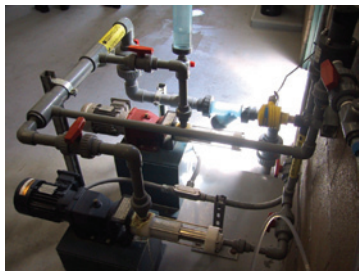
Progressive Cavity Pumps handle NaOCl Metering Challenges

The Zone 7 Water Resources Agency in Alameda County, CA, has been using progressive cavity pumps for several years to handle aqueous ammonia and sodium hypochlorite solutions. They recently added additional pumps when they began using on-site sodium hypochlorite generation to handle increased demand during months of high water use.



seepex *pumps for NaOCl feeding into the discharge line of a vertical turbine pump*

Typical seepex *pump design for NaOCl feeding*

The starting situation

They began the switch to progressive cavity pumps after experiencing repeated maintenance problems with the reciprocating pumps being used before, according to Dave Parola, Water Facilities Supervisor. "Reciprocating pumps are prone to vapor lock, which can shut down a pump for hours. They are also very complicated, and repairs are labor intensive," he said.

Misco Pacific Water Treatment, a local represantative of water and wastewater treatment equipment in Pleasanton, CA, recommended several models of progressive cavity pumps manufactured by seepex.

After successfully switching to progressive cavity pumps for sodium hypochlorite pumping, Parola explored the possibility of using the pumps for metering a chloramine solution used at Zone 7´s wells. Chloramination enhances water quality by reducing trihalomethanes and by stabilizing the NaOCl so its effect lasts longer. As ammonia can be a problem for metering equipment, Parola asked Misco if seepex could help.

The solution

Misco recommended seepex MD range pumps similar to the NaOCl pumps, designed with stainless steel internals and EPDM elastomers. Parola prefers the progressive cavity metering pumps because they can pump against high pressure without pulsation, a constant problem with reciprocating pumps. Additionally, "The inline power train is so simple," he said.

An added plus is the simplicity and the ease of replacing parts when they are needed. "These pumps are very easy to work on," said Steve Yonkman, a member of Zone 7´s maintenance staff.

The benefit

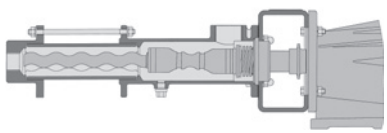
After three years in operation , the progressive cavity pumps used for NaOCl and NH3 metering have been virtually trouble-free. Zone 7 purchased additional seepex metering pumps to dose on-site generated 0.8% NaOCl solution. In all, the district now has 19 seepex metering pumps on location. In the near future further pumps are planned.

Key Facts

- Reliable, economical and effective
- Less repair- and downtime
- Low pulsation

Significant Cost Savings

- Low operating costs
- Less personnel required



Installed Pump Type

- Range MD

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