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FOR SANITARY, STORM AND WATER SYSTEM MAINTENANCE

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Wastewater operators
Jared Keenan (left)
and Norman Hart
Indianola, Iowa

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ON THE COVER: Wastewater operators Jared Keenan (left) and Norman Hart are part of the team that has helped the Indianola (Iowa) Water Pollution Control department make significant strides in reducing inflow and infiltration.



COMING IN OCTOBER 2021

Flow Control & Monitoring

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By Craig Mandli

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Product Spotlight

Device combines pressure monitoring with acoustic leak detection

By Craig Mandli

In the world of municipal water and sewer maintenance, leaks are money. Not only does that mean money down the drain, but technically right out the drain as well. Those additional treatment and conveyance costs mean not only decreased revenue, but also increased costs in leak detection and pipeline repair.

To combat the issue, Syrinix has launched the PIPEMINDER-ONE Acoustic, a device that combines the power of transient pressure monitoring with acoustic leak detection. Combined with RADAR, Syrinix's cloud analysis platform, PIPEMINDER-ONE Acoustic locates leaks on a broad range of pipeline material and sizes. Like the rest of the PIPEMINDER-ONE family, the Acoustic version triangulates pressure events and sends intelligent alarms so utility users can identify and fix potential problems on their network. Because units are widely spaced along the distribution network, fewer PIPEMINDER-ONE Acoustic units than traditional leak detectors are needed to obtain high-resolution data.

"Water and wastewater utilities need cost effective and resilient monitoring systems," says Mark Hendy, vice president of business development EMEA at Syrinix. "The PIPEMINDER-ONE Acoustic can be installed permanently or on a semi-permanent survey basis for use detecting both leaks and the damaging pressure events that can lead to leaks and bursts."

According to Hendy, the benefits of PIPEMINDER-ONE Acoustic



translate to significant cost savings. "Preventing asset deterioration is often the best way to maintain a viable utility," he says. "With the early detection of leaks and problematic pressure sources, utilities can proactively make operational adjustments to prevent wear and tear on the network instead of reacting to asset failures."

PEPEMINDER-ONE Acoustic records pressure at 128 samples per second, generating both transient and summary data, which can be used for triangulation, clustering, classification and export via an API. The addition of acoustic data from an improved hydrophone is used in combination with pressure monitoring to identify a leak position. With speedy and precise detection, utilities can now respond quickly to operational and network failures before customers notice any problems and, with the same unit, identify and mitigate the pressure events contributing to those leaks and bursts.

"Modern utilities must monitor for developing leaks while performing real-time analysis of pressure transient events," says Ben Smither, vice president of engineering at Syrinix. "Combining leak notifications with high resolution pressure monitoring and zone alarms empowers operators with the data to save time, save money and improve performance." www.syrinix.com

SPECIAL REPORT

DeZURIK APCO ASU Combination Air Valves



APCO Single Body Combination Air Valves from DeZURIK can be used for clean or dirty fluids. The venting design provides varied and predictable air flow over a wide range of air release and air/vacuum conditions with low pressure sealing down to 2 psi. The compact design of the ASU combination air valve allows for installation in piping systems with limited space and in vaults with low ceiling heights. A large-diameter air/vacuum disc provides high-volume air flow for rapid venting during pipeline filling and for high volumes of air to enter the pipeline during draining. During

normal pipeline flow conditions, the dual-range air release design prevents air buildup and resultant flow restrictions under changing conditions and through the full flow range. The design of the valve keeps it operating on fluids containing grit, solids and grease longer than standard air valves. The valves are suitable for corrosive conditions with a 316 stainless steel body and float and have been certified to meet the NSF/ANSI 61 standard for components used in drinking water systems. **320-259-2000;** www.dezurik.com