WINT – Water Intelligence Develops Leak Detection And Prevention Solution For HVAC Chilled Water Systems And Pipes

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WINT - Water Intelligence, a globally renowned company in cutting-edge water management and leak prevention solutions for construction, commercial and industrial applications, has developed a solution that detects and prevents leaks and other issues in chilled water systems and pipes.

Leak prevention solution
The solution prevents water damage by detecting issues, automatically shutting off water flows and isolating impacted areas. WINT has developed a solution specifically designed to detect leaks and other issues in chilled water HVAC systems.

Damage from water leaks in buildings is one of the biggest sources of damage to facilities. Large buildings use chilled water systems to cool the facility and ensure that occupants are comfortable. These systems consist of lengthy piping networks filled with massive amounts of water that flow throughout the building.

Water is pumped at many thousands of gallons per hour so when a pipe breaks water accumulates quickly, causing massive damage within a very short timeframe.

**Advanced AI and machine learning technologies**

WINT uses advanced artificial intelligence, machine learning and signal processing technologies to deliver extremely high detection accuracy. The solution detects drip-level leaks in chilled water pipes, allowing maintenance staff to perform corrective action before the issue becomes significant. And if pipes burst and reach damage-potential levels, the system shuts water off and isolates the impacted area.

"Ongoing waste and leaks are a major source of damage and cost in most facilities," said Yochanan Mor, Head of Logistics at The Phoenix Insurance Company, adding "It’s a day-to-day battle for facilities teams and insurance companies. We use WINT’s suite of solutions across Phoenix’s facilities to protect everything from domestic water to chilled water systems.”
He adds, “Also, WINT’s AI-powered technology ensures our facilities are protected against the massive damage of a water leak while cutting our ongoing water bills.”

**Edge devices**

WINT’s edge devices are installed on the chilled pipes in key locations throughout the facility. They use AI technology designed specifically for chiller systems combined with cloud-based computing and a user-friendly mobile app that alerts staff and enables remote control and valve shut-off.

Each WINT edge device includes a high-accuracy flow meter, a processor that analyzes water flow in real time, a communication device and an optional automatic shut-off valve. Water Intelligence devices learn a building's typical water flow pattern using machine learning technology so they can detect small leaks and anomalies before they become problems.

"A leak or burst chiller pipe is the stuff of nightmares for facility and operations managers," said Yaron Dycian, WINT’s Chief Product and Strategy Officer, adding "Water gushes out at very fast rates and accumulates rapidly. It then flows down the building and causes massive damage in its path. Physical damages can easily reach millions of dollars, let alone the business disruption and the time to bring the facility back to order."
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