Avoid damages before they occur

The amount of time before a leak is located is critical for the prevention of potential damage, especially the undermining of buildings. That’s why leaks not only result in a loss of drinking water that has been purified at high cost, but may also lead to substantial economic losses. The most important objective is to locate and repair the damage as quickly as possible to avoid consequential damage. But control systems do not usually provide accurate information about the location of an incident. Conventional localization methods are complicated, expensive, and time-consuming. And most distribution networks are not included in control systems, so it is impossible to predict pipeline breaks.

Siemens Industry Suite – smart apps for the water and waste water industry

Applications and digital services from the Siemens Industry Suite for the water and waste water industry ensure greater transparency, and thus identify potential for greater efficiency and savings and ensure a high level of supply security. With the Siemens Water (SIWA) applications developed especially for the water and waste water industry, operators can optimize energy efficiency, avoid water losses, prevent flooding, and take preventive maintenance measures, among other things.
The solution: Locate burst pipes with SIWA Burst

SIWA Burst is an application from the Siemens Industry Suite for the water and waste water industry. SIWA Burst uses intelligent algorithms to analyze high-frequency recorded pressure fluctuations. Detected pressure anomalies are classified in order to identify pipe breaks in real time. Damaged areas can be detected and located with an accuracy of 20 to 50 meters.

The ongoing recording of events and continuous analysis make it possible to adjust operation to reduce pressure spikes, prevent water hammering and stresses in the pipelines, and thus avoid a damaging event.

The benefits of SIWA Burst

SIWA Burst supports the operators of water transport systems and water distribution networks through:

- Real-time damage detection and precise localization of pipeline breaks
- Secure event classification and messages via SMS alarm
- Support for the detection and prevention of faulty operating conditions to prevent the failure of pipeline elements
- Operation with fewer working hours and reduced on-site presence