THE CONSTRUCTION AND INFRASTRUCTURE INDUSTRY IS ONE OF THE MOST CRITICAL PIECES OF THE WORLD'S ECONOMY.

possibly catch events such as theft and fires, which can be caught on infrared lenses as they occur to mitigate loss and possibly prevent a future incident.

» Three-Dimensional On-Site Walkthroughs. To track construction progress, a three-dimensional on-site walkthrough can be beneficial in adhering the project to specifications, as well as monitoring payroll progress and identifying safety issues. It can also be used to document the site at critical points such as just before wall close-up, and after substantial completion to document and defend construction defect cases. When combined with risk engineering and testing, such as mold testing, a powerful record of quality can be established to refute future allegations of improper construction.

» Fixed Point Crane Cameras. When construction companies combine crane cameras with crane usage, it can become a powerful on-site tool to identifying risk and investigating loss. By incorporating this technology, construction companies can also achieve greater project management and better expense oversight, going beyond the risk management to affect the overall job. In addition, on-site job supervisors can catch accidents and track inefficient crane usage through crane cameras connected to computers that monitor safety issues and alert on-site personnel to risky activities.

» Fixed Point Cameras with Interval Imagery and Hazard Triggers. In the future, it may be possible to alert contractors to accidents, safety hazards, and other incidents like near misses that might not otherwise be reported by using fixed point cameras with computer monitoring. Today, it is difficult to monitor a constant stream of video, so snapshots every 15 seconds to 15 minutes that are then analyzed by computers or monitored at audits can help

WATER LEAK DETECTION MONITORING

Water leaks inside buildings and on construction sites can cause serious structural and financial damage. Thankfully there's modern technology that can help prevent such catastrophes. For example, there is now technology available that can detect when water is flowing, when it is leaking, and when pipes freeze. These monitors can also detect humidity levels and the amount of water flowing within pipes. Examination of that data enables contractors and builders to respond immediately and cut off the water, if necessary, to limit physical damage.

The technology can send an email or text message within minutes or seconds after water starts flowing when it's not supposed to be. Instead of 400,000 gallons of water flooding a building, it could be just a few gallons before an automatic shutoff valve closes during nighttime hours, or a text message triggers a security guard or supervisor to turn off the water.

Water monitoring technology also allows businesses to find and diagnose an issue quicker. This is beneficial from a contractor perspective because there is less employee time spent looking for and monitoring leaks.

Some insurance carriers are also using water monitoring technology to track losses from water leaks and damage to analyze how the company performs when it comes to mitigating such losses. From a builder's risk perspective, to have a water leak when a building is 90% complete is the worst time and causes the most damage. With water monitoring technology, instead of being a major loss, it's now minor.

Using pipe and flow monitoring devices in addition to pods or hockey pucks that can detect water from leaking windows, or reservoir and tanks that don't pull water through the water meter, are the best combination. They are especially powerful at monitoring moisture, temperature, and other environmental data points.

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On-site imagery, wearables, and water monitoring technology can even help owners, developers, and contractors mitigate business interruption, lower energy bills, and reduce losses and out-of-pocket expenses. With such technology in place, construction projects become a more insurable risk as employees and jobsites are made safer.

Innovation is key in this arena, especially when it comes to incorporating Internet of Things technology to improve workplace safety and help prevent or reduce property damage for its customers.