



Application Case Study

Industrial Waste Water

The Application

Many industrial sites have their own waste water facilities. This is due to lack of municipal facilities, environmental restrictions, or disposal cost control. Each of these facilities must collect and treat the waste water from the site. A critical part of this process is to monitor the level of waste water tanks. Monitoring must be done to prevent spills which are an environmental hazard and to ensure economical operation of the facility.

Level indication of industrial waste water can be far more difficult than it may seem. In many cases, there are solids and/or corrosive chemicals present in the water. Any contact-type level sensor must be able to deal with these situations. This requirement can cause them to be high cost, high maintenance, or both. Non-contact level sensors must be able to deal with fog and condensation as many waste water tanks are outdoors and open to the elements.

One large automotive manufacturing facility has its own waste water treatment plant. At this site, the waste water includes paints, lacquers, oil, grease, and even human waste. A spill of this waste water would have serious environmental consequences. Consistent, reliable level monitoring is a must.



The Solution

The builders of this waste water treatment facility took a careful look at all level transmitter options available. They judged them based on capability, long-term reliability, maintenance needs and cost. The owners of the facility insisted on safety, reliability, and cost control. After extensive research, the builders decided echOsonix was the best solution to these criteria.

The key factors for this decision were non-contact technology, product flexibility and cost. As a non-contact device, the echOsonix does not have many of the compatibility and maintenance issues that contact devices do. With its high power, low frequency and adaptive gain to handle tough applications it has the flexibility that was required. These features combined with a very competitive initial cost met the necessary long-term investment needs.

The Results

The echOsonix units have been installed and operational for over three years without a spill and without need for periodic maintenance. Some initial fine-tuning for each specific application and installation was required, but this is common for level transmitters in difficult applications. Since that time the echOsonix units have met all of the customers requirements for operational costs and performance.

Ordering Information

Electronics Model **U73-FL7J-ZZ-30**
Remote 110VAC/24VDC Line-powered transmitter
4 x SPDT Relays adjustable over entire range
NEMA 4X Agency-listed electronics housing

Sensor Model **RDP-3A-ZZ-50**
30kHz Transducer for remote unit
3" NPT threaded connection
Division 2 Explosion-proof, Agency-listed transducer