

Sewage pump station level application

ABB's LLT100 laser level transmitter



The LLT100 is used more and more in wet wells around the world.

Measurement made easy

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01 LLT100 installed in a water treatment plant

02 LLT100 installed in deep waste water wet well / sewers

The application

The most common level application in the water and waste water industry is the infamous wet well. Our bigger customers must sometimes visit over 300 wet wells in a large area, which equates to hundreds and even thousands of dollars spent on labor, travel and all related expenses (e.g., gear cleaning, health and safety equipment, etc.).



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The problems

- Wet wells need to be accessed frequently (monthly, and sometimes even weekly) for maintenance of level measurement devices. This is time- and personnel-consuming (since most visits require a two-person team).
- Traffic management on site can sometimes equate to thousands of dollars a year.
- Overcrowded wet wells
- On certain sites, unique process conditions in wells make it very difficult to get a level measuring device to operate correctly.
- The bottom +/- 15% of the well level could never be measured confidently.

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01 LLT100 installed
in one of the biggest
sewage pump station

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02 LLT100 in a sewage
pump station

Our solution

ABB's LLT100 laser level transmitter offers a technology that allows engineers to think outside the box when it comes to level applications. It offers:

- A line-of-sight measurement: the instrument measures what it sees.
- A rugged sensor unit that is unlikely to be damaged and requires minimal maintenance.
- Autonomous measurement that eliminates several health and safety concerns like working at heights or in constrained spaces.
- No requirements for on-site calibration.
- Ease of setup and narrow laser beam (unaffected by structures) that combine to prevent overcrowded wet wells.
- The possibility to measure mixing tank levels while being unaffected by mixing blades (it even has different default dust application programs to deal with varying dust densities, and even fog).
- Continuous level measurement that prevents overflow events, thus possibly reducing harmful environmental impacts.



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Conclusion

With its line-of-sight measurement technology, rugged sensor, narrow laser beam and virtually non-existent maintenance requirements or on-site calibration, ABB's LLT100 laser level transmitter answers most concerns related to wet well level measurements and makes it easy to calculate what could amount to a substantial return on investment. Savings from overtime alone can sometimes justify such a purchase.



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