

# Water Storage Tanks



Storage of reclaimed water can range from small tanks for drinking water and service water to large, open or closed tanks. Large-capacity storage, the most common is the open-air reservoir, used for offline storage of peak flow, mobile online storage, and long-term storage of alternating seasonal flows.

# Challenges

Level monitoring is essential for both large and small water storage tanks. The control scheme is based on the size and geometry of the mass storage container. Water level controllers in open-air reservoirs must often withstand severe weather conditions.

# **Products**

# • ZTD Displacer Level (Interface) Transmitter

ZTD displacer level (interface) transmitter is an intelligent level measuring instrument with international leading level independently developed by DDTOP after many years of technical research. The simple buoyancy principle is used to detect the change of level, and then the magnetic signal is converted into a stable 4-20mA current signal and output through the torque tube assembly and the hall sensor. The instrument has a variety of configurations and pressure levels, which are suitable for various applications.

Equipped with DLT9010 level controller, output 4~20mA current signal. At the same time, it has HART communication protocol, which can query, configure, calibrate or test level



controller. It can also accept the information of a single measurement loop and transmit the information from site to the control system.

### Features

- 1. SIL2 certification certified by both French Bureau Veritas and Shanghai SITIIAS.
- 2. Verification is not needed, only configuration is needed.
- 3. The product provides 4-20 mA with HART, and can be configured, calibrated and diagnosed on site using the 475 Communicato.r
- 4. Comprehensive fault diagnosis, warning and status history.
- 5. EU PED pressure vessel certification, the applicable pressure can be up to 42Mpa.
- 6. Maximum process temperature which is applicable in non-vapor condition can be up to 500°C.
- 7. Flame-proof and Intrinsic safety certified by CSA, ATEX and IEC.
- 8. Process parameters can be adjusted online.
- 9. The transmitter can be converted arbitrarily in 8 positions without affecting the on-site use.
- 10. It is suitable for interface measurement and density measurement.
- 11. EU EMC directive CE certification.

## • UQK-300 Float Level Controller

The float level controller is based on the principle of buoyancy, and the float moves equidistantly following the liquid level. Because of this, they are commonly used for narrow return level applications.

#### Features

- 1. The product uses 304, 316 high-quality materials, which make product more durable and reliable.
- 2. It is applicable to the working condition of pressure from vacuum ~26MPa, temperature  $-40^{\circ}C \sim +300^{\circ}C$ .
- 3. The product has passed SIL2 functional safety certification and explosion-proof certification, and can be used in a variety of working conditions to effectively avoid the occurrence of accidents.
- 4. The pressure-bearing part and the switch contact part are completely isolated by magnetic coupling, which make the product high reliability and safety.

# • TRG802X Guided Wave Radar Level Transmitter

The latest generation of TRG802X series guided wave radar level transmitter is a twowire 24VDC powered level transmitter, which adopts advanced microprocessor and unique echo processing technology.



TRG802X series guided wave radar level transmitter can be applied to various complex working conditions and applications. Whether it is a light hydrocarbon or water-based solution, it is suitable.

### Features

- 1. Multi-variable 2-wire system and 24VDC loop-powered level transmitter can be used to measure level, interface, volume or flow.
- 2. The level measurement results are not affected by the change of medium properties.
- 3. It is no need to calibrate by adjusting the actual level.
- 4. Select the probe with function of "anti-overflow ", the true level to the process connection seal can be measured directly without special algorithm.
- 5. 4 buttons and graphical LCD display can easily observe the instrument configuration information and signal waveform diagram.
- 6. Use split structure, the electronic device can be replaced without opening the storage tank.

# • TRG804X Radar Level Transmitter 6.3GHz

TRG804X non-contact type radar level transmitter has a wider measurement range, and better diagnostic function. The use of advanced signal processing technology can filter out false targets or other noise signals. Pulse string radar level transmitter transmits short pulse string to the liquid surface. Through antenna, it can transmit extremely short pulses with very low energy. By using ultra-high speed timing circuit to measure the time required for the pulse signal to meet liquid surface and reflect echo.

### Features

- 6.3 GHz operating frequencies provide superior performance in applications of turbulence, foam and heavy vapor.
- 1. Maximum process temperature can be up to 250°C.
- 2. Maximum measuring range can reach 30m.
- 3. Quick connection/disassembly of probe shaft sleeve allows the container to remain sealed.