

## Lubricating Oil Tank



The generator and gas turbine have an integrated lubrication system to prevent damage caused by excessive friction. A part of lubricating oil is usually used in the hydraulic oil system. Lubricating oil is usually stored in integrated stainless steel and carbon steel tanks with level monitoring.

### Challenges

Monitoring the level of the lubricating oil tank can ensure the normal operation of turbines, generators and other equipment with integrated lubrication systems.

### Products

- **TRG802X Guided Wave Radar Level Transmitter**

The latest generation of TRG802X series guided wave radar level transmitter is a two-wire 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.

### ● UHC Magnetic Level Gauge

HC magnetic level gauge provides a safer, more reliable and more visible option than conventional glass level gauge. The float moves up and down with the change of level, and the float transmits the level signal through the coupling magnetic field, which divides into the local indication type and the remote transmission output type.

Chamber and float have a variety of materials and pressure-grade options and are suitable for complex process applications of current major operating devices.

### Features

1. The float adopts 304,316 L, TA2 and TC4 material. It has good temperature resistance and can reach to 450°C.
2. The welding process meets the requirements of PED welding process. The chamber is made of 304,316 L. The maximum pressure can reach to 26 MPa.
3. Local indicator type and remote output type with level alarm are optional.
4. According to customer requirements, through a variety of production types, the products can be applied to a variety of working conditions.
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### ● 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

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transmit the information from site to the control system.

#### **Features**

1. SIL2 certification certified by both French Bureau Veritas and Shanghai SITIIS.
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 Communicator.
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.

#### ● **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.

#### ● **UQK-400 Float Level Controller**

UQK400 float level controller is composed of float, connecting rod, magnetic sensor and magnetic switch and signal conversion mechanism. The change of the medium level in the container causes the relative displacement of the float, which drives the connecting rod and the iron core to move up and down to change the relative position of the

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magnetic sensor. Through the magnetic coupling, the micro switch or the reed switch is operated to achieve level control and alarm.

### **Features**

1. The float is made of 304, 316, TA2 material. A heat insulation mechanism is designed between the wetted part and the output part, which can be used for a long time under 450 °C working conditions.
2. The wetted part is completely isolated from the magnetic coupling system. CoMPared with other mechanical seal types, the product has higher safety and durability.
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 product has bi-stable memory function and it can continue to maintain the alarm signal when the liquid level is ultra-high or ultra-low.

### ● **UQK(S)-100 Float Level Controller**

The UQK(S)-100 float level controller is connected to the storage tank or container through threads or flanges. When the liquid level changes, the float move with it, so that the magnetic steel at the other end of the rod swings up and down. The structure can be divided into normal (UQK) and self-checking (UQKS) type. The self-checking float level controller can monitor the movement of the inner float through the external handle, which brings great convenience to adjustment and maintenance.

### **Features**

1. The float is made of 304, 316, TA2 material, and a heat insulation mechanism is designed between the wetted part and the output part, which can be used for a long time under 450 °C working conditions.
2. The pressure-bearing part is completely isolated from the electronic components through a magnetic coupling system, which make the product higher safety and durability than other mechanical seal types.
3. The product has passed SIL2 function safety certification and explosion proof certification. It can be used in a variety of working conditions and can effectively avoid the occurrence of accidents.