

Distillation Columns



After desalting, the crude oil enters the distillation column, which separates the hydrocarbons into different distillation sections, segments or fractions, to make the distillation column Achieve optimal operation.

Challenges

Level control must cope with foaming, bubbling and medium to high temperatures.

Products

• 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.

• UHC Magnetic Level Gauge

UHC 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.

• 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 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℃.
- 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.

• UQD Ball Float Level Transmitter

UQD ball float level transmitter consists of measuring part and signal controller part. According to structural features, the measuring part can be divided into 90 type with small angle, 91 type with large angle, 92 type with external float. Its signal controller part is divided into analog type and intelligent type. The product can be widely used for the measurement of various medium level, and it is an ideal instrument for petroleum, chemical, metallurgy, electric power industries.

Features

- 1. Use integral flange connection to reduce leakage points and reduce the possibility of leakage, so the reliability is extremely high and the amount of maintenance is minimal.
- 2. Structure is simple and commissioning is convenient. The level transmitter can be adjusted without any special tools.
- 3. It is suitable for level measurement of medium such as high temperature and high pressure, viscous or containing impurities conditions.

• LGXS WEDGE FLOW METER

LGXS wedge flow meter is a new type of flow element which has been widely used in recent years. Wedge flow meter is very suitable for low Reynolds number fluid flow measurement, especially when measuring the high viscosity fluid, solid particle fluid and slurry fluid.



Features

- 1. Wide viscosity range, the flow rate and differential pressure can maintain a root relationship in the range of Reynolds number from 500 to millions.
- 2. High accuracy, the basic error of the calibrated wedge flow meter is within $\pm 0.5\%$.
- 3. Self-cleaning ability, no stagnant area.
- 4. Good wear resistance.
- 5. Permanent pressure loss is smaller than orifice plate.
- 6. Good repeatability and high reliability.
- 7. Long life, low cost, easy installation and maintenance.
- 8. Bidirectional flow measurement. Minimum straight pipe section requirements: upstream 5 times of pipe diameter, downstream 2 times of pipe diameter.
- 9. Repeatability : ±0.2%.