

## Natural Gas Separator



Natural gas separators can remove solid particles and liquids from a continuous gas stream, as well as dust, dirt, sand and pipeline scale, as well as water, natural gas liquids, and light hydrocarbons. In a typical system, the intake separator allows particles and liquid to settle and the gas to rise. The gas collected at the top of the separator is discharged through a gas compressor. The collected particles and liquid are then poured into a water tank.

### Challenges

Level control can accurately adjust the amount of water extracted to ensure that the water level does not rise too high and enter the compressor inlet.

### Products

- **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

TD 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 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.

### ● UTK Displacer Level Controller

UTK Displacer level controller takes float or displacer as measuring element. The measuring element is connected to the magnetic sensor. The magnetic control switch is sucked through the magnetic induction magnetic coupling to realize the control and

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alarm of the liquid level. UTK displacer level controller is highly stable, anti-vibration, and suitable for extreme temperature and pressure.

### Features

1. Stable output signal is not affected by surface fluctuation.
2. Process temperature range is from  $-40^{\circ}$  to  $300^{\circ}\text{C}$ .
3. The product uses 304, 316 high-quality materials which make it more durable and reliable.
4. This product is suitable for the working condition of pressure vacuum  $\sim 26\text{MPa}$ , temperature  $-40^{\circ}\text{C}\sim +300^{\circ}\text{C}$ .
5. 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.
6. The pressed part and the switch contact part are completely isolated by magnetic coupling, which has high reliability and safety.