

# **Gas Dehydration**



Natural gas needs to be dehydrated to remove hydrates to prevent these hydrates from crystallizing and blocking pipelines and obstructing the flow of gaseous hydrocarbon streams. Dehydration can also reduce corrosion, eliminate foam, and prevent problems downstream of the catalyst. Natural gas is dehydrated according to the customer's maximum allowable water content specification.

## Challenges

The most common dehydration method is to use liquid desiccant triethylene glycol (TEG) to absorb water vapor. Through the level control, the bottom of the absorber is forced to discharge the water-rich glycol. High and low level shutdown can also be used for reboilers, buffer tanks and flash separators.

## 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.

### • 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 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.