**DDTOP UQK-100 Float Level Controller**

**Petrochemical Tank Level Control Switch**

**RESULTS**

* In view of the low flash point and volatile nature of petroleum storage tank materials, it can safely and effectively protect dangerous medium that are prone to flash fires;
* Better ensure that the device can operate stably.

**APPLICATION**

**Equipment**：Petrochemical Storage Tank

**Medium**：Gasoline, Liquefied Gas

**Medium Characteristics**：High Temperature, High Pressure, Toxic, Flammable

**CUSTOMER**

China Petroleum & Chemical Corporation Guangzhou Branch.

**CHALLENGE**

Storage tanks are important facilities in petrochemical enterprises .Storage tanks store of liquid and gaseous of raw materials, products and intermediate product. According to the structure, the storage tank can be divided into fixed top storage tanks, floating roof storage tanks, spherical storage tanks, etc. Spherical storage tanks generally store liquefied petroleum gas products, the working pressure is relatively high, generally below 3 MPa. The main risk is explosion and fire due to material leakage. Floating roof storage tanks generally store dangerous materials of Class A and Class B. The flash point of the material is low and volatile, which is prone to accidents such as flash explosion and fire. Because most of the petrochemical products are classified as dangerous goods of Class A and Class B, They are characterized by flammability, explosiveness and volatility. Therefore, floating roof storage tanks are the most commonly used structural form. The floating roof in the tank is a floating roof that floats on the surface of the reservoir and floats up and down with the input and output of the reservoir. Due to the importance of petrochemical tanks, the tank operation must be suspended if the tank exceeds the critical point of the process parameters during operation. It is strictly forbidden to operate the tank in ultra-high, ultra-low, over-pressure and over-temperature, so the reliability of the float switch is very important. Petrochemical storage tanks have many high temperature process medium.

**SOLUTIONS**

DDTOP's UQK-100 float level controller has the following targeted solutions based on the characteristics of the oil tank:

* Through the international industry standard SIL2 functional safety certification, the product becomes a reliable guarantee for the stable and safe operation of the device.
* Working condition for high temperature medium: The high temperature type float switch is designed. The thermal insulation mechanism transmitted by magnetic force completely blocks the influence of high temperature medium on the meter head. The maximum use temperature of the float switch can reach 450 °C.
* The pressure-bearing part of the float level controller and the electronic components are completely isolated by the magnetic coupling system, which has higher safety and durability than other mechanical seal types. Better suitable for spherical tank medium with high pressure and volatile characteristics.
* According to the structural characteristics of the floating roof tank, a special floating ball switch for the floating roof tank is designed. Full consideration is given to the requirements of the size of the float ball, the insertion depth and the swing angle of the float ball to ensure that the float ball cannot be penetrated into the tank and affect the operation of the floating roof. And the float can swing freely inside the guide tube.

**Dandong Top Electronics Instrument (Group) Co. Ltd.**

**Reliable Process Instrumentation and Automation Solution Provider**

**Sales and Service Contact**

**HQ Address: No. 10 Huanghai Street, Zhenxing District, Dandong, Liaoning,**

**China, 118000**

**Tel：+86-0415-6226466**

**Fax：+86-0415-6227341**

**Website: www.ddtop.com/en**

**Email: itrade@ddtoptrade.com**