**DDTOP UTK Displacer Level Controller**

**Reliable Hydrogenation Unit Level Control Switch**

**RESULTS**

* Perfectly solve the problem of high temperature and high pressure and medium corrosion in hydrocracking unit；
* Better ensure that the device can operate stably.

**APPLICATION**

**Equipment**：Hydrocracking Unit

**Medium**：Feedstock Oil, Hydrogen

**Medium Characteristics**：High Temperature, High Pressure, Corrosive

**CUSTOMER**

Dongying Yatong Petrochemical Co. Ltd.

**CHALLENGE**

Hydrocracking is a process in the petrochemical industry .At higher pressures and temperatures, hydrogen acts to hydrogenate, crack and isomerize the heavy oil through the action of the catalyst, which is converted into light oil. This is the process of petroleum refining. Hydrocracking differs from catalytic cracking that in the catalytic cracking reaction, hydrocracking is accompanied by hydrocarbon hydrogenation reaction. The process medium in the hydrocracking unit is feedstock oil, hydrogen, and soft water is injected into the reaction process to dissolve NH3, H2S, etc. The pressure is usually 16 MPa, the temperature in the front stage is about 200 ° C, and the temperature after cooling is 30 to 40 ° C. High temperature and high pressure bring great challenges to the reliability of instrument use, and a large amount of H2S are corrosive to the instrument.

**SOLUTION**

DDTOP's UTK displacer level controller takes targeted solutions for the characteristics of the hydrocracking unit:

* Due to the high pressure of the hydrogenation unit, the pressure-bearing structure of the displacer control switch is designed in accordance with PED certification standards;
* The medium contains a large amount of H2S, so the wetted material of the meter needs to comply with the NACE MR0103 standard;
* For displacer control switch with temperatures above 200 °C, heat sinks are mounted on the meter to eliminate the adverse effects of high temperature medium on the electronic components in the meter;
* Since the medium contains hydrogen, the hydrogen has strong corrosiveness to the magnetic steel. Therefore, when designing the structure, the original magnetic rod structure is changed to the core structure of the non-magnetic steel.

**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**