

Control and monitoring of the production sequence in a refinery

In the refinery crude oil is cracked by distillation to give petroleum, kerosene and diesel oil. In the fractional distillation column the crude oil is heated with superheated steam. The vapors and liquids released collect in the various stages of this column. To control and block the flow of gases and liquids the spindle drives of the numerous flow control valves are fitted with long-stroke sensors. An aluminum tube is used here as the measurement object which is moved concentrically over the sensor coil rod without making physical contact. A displacement signal in the range 4 to 20 mA is provided for the aluminum tube position or for the valve position.

Reasons for the system selection

- Accurate and reliable.
- Non-contacting and therefore wear-free.
- Stainless steel housing, IP66 protection.
- Rugged construction, easy operation.

Technical details

- Measuring range: 160 mm (630 mm)
- Accuracy: $\pm 2\text{ mm}$
- Resolution: 1 mm
- Bandwidth: 1 kHz (- 3 dB)
- Integral electronic unit with 4-20 mA output signal

Ambient conditions

- Temperature: (-10 °C) 0-
- Medium: ε
- Interference fields: none

Measurement system set-up

EDS 160 - G - CA - I

EDS 630 - F - SRB - I

