

# BENKE Vapor Pressure Process Analyzer RVP-4

Credible Solutions for the Oil and Gas Industry



# **Analyzer RVP-4**

To remain competitive, today's refiners must employ all optimization and product control techniques available. The use of online physical property analyzers is one of the key features to reach those objectives because they measure important quality properties in the process directly. The vapor pressure is an indication of a liquid evaporation rate

and relates to the tendency of volatile components to escape from the liquid. To assure safe storage and transportation of petroleum products, minimize environmental pollution and assure proper functioning of combustion engines it is important to measure the vapor pressure.

- ASTM compliant cylinder piston design with 4:1 expansion
- Suitable for high pressure applications (LPG)
- Suitable for high viscous samples (Crude Oil) without flushing cycles
- No maintenance approach
- Integral temperature control unit
- Network and fieldbus communication

## **Application**

The BENKE Vapor Pressure Process Analyzer RVP-4 measures the vapor pressure of various petroleum products. Due to its design it can be used for gasoline applications as well as for high pressure applications on natural gas liquids. It is also the best choice for applications for viscous

samples such as crude oil without the necessity of implementing additional wash cycles. It is also possible to measure the vapor pressure at different temperatures e.g. True Vapor Pressure (TVP) for storage tank application.



# **Special Features**

Rugged design of measuring cell

High precision (typ. r = 1.5 mbar / 0.02 psi for gasoline) and maximized performance due to optimized assembly of measuring cell

Minimized maintenance requirements due to temperature control and insulating system without oil bath/pumps

Applicable for highly viscous and volatile samples (e.g. crude or LPG)

Alternative layouts for analyzer possible on request

Using product for cooling possible

Available communication interfaces:

- Modbus /RTU, Modbus/TCP (bidirectional)
- Remote access via Ethernet (VDSL or FOC is)

Integrated failure diagnosis and self-monitoring

Primary verification possible on request

Validation report for quality assurance

Freely programmable digital and analog inputs

#### Norms and Standards

Compliant with:

- ASTM D5191
- DIN EN ISO 13016-1

Correlates with:

- ASTM D4953 (DVP)
- ASTM D323 (RVP)
- ASTM D5482 (Mini Method Atmospheric)
- ASTM D6377 (VPCR)
- ASTM D1267 (LP Gas)
- ASTM D6897 (LPG Expansion)

#### Make your decision for a strong partner! Choose BARTEC also for:

- Fast Loop Systems
- Sample Conditioning Systems
- Validation Systems
- Recovery Systems
- Chillers
- Air Conditioning Systems/HVAC
- Pre Commissioned Analyzer Shelters/Turn-Key Solutions

#### BARTEC BENKE GmbH

Borsigstr. 10 21465 Reinbek/Hamburg Germany

Tel.: +49 40 72703 0 sales-reinbek@bartec.com

## bartec.com