

# BENKE Distillation Process Analyzer DPA-4

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Credible Solutions for the Oil and Gas Industry



## Analyzer DPA-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. Distillation is a physical method of separating the component substances from a liquid mixture by selective vaporization and re-condensation. Distillation is based on differences in volatilities of the components of the liquid mixture. The distillation curve is one of the most common quality parameters of liquid hydrocarbons such like naphtha, gasoline, kerosene, diesel and gas oil.

- The only ASTM D86 compliant design with flask condenser receiver
- Capability to reduce cycle time by Rapid Analysis Mode (RAM)
- Complete boiling curve can be measured from IBP to FBP
- Suitable for operation at pressure below atmospheric pressure
- De-coking feature
- Network and fieldbus communication

### Application

The BENKE Distillation Process Analyzer DPA-4 is the only distillation analyzer that is compliant with the master norm ASTM D86. Apart from measurement cycles fully compliant with the norm, the DPA-4 can be operated in the so called Rapid Analyzer Mode (RAM) in which the cycle time can be reduced to approx. 60%. It therefore serves to enhance automatic control of blending processes. The DPA-4 offers to run the distillation process below atmospheric pressure which prevents samples that are sensitive to temperature (e.g. palm oils) from degradation. It also allows extending the measurement range to higher boiling points.



#### **Special Features**

The complete boiling curve is measured in every cycle (SAM)

Measuring points of interest freely definable by software

Cycle time reduction is possible: faster determination of distillation points (RAM)

Enhances automatic control of blending processes

#### De-coking

Available communication interfaces:

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

Integrated failure diagnosis and self monitoring

Validation report for quality assurance

Freely programmable digital and analog inputs

#### Norms and Standards

Correlating with:

- ASTM D86
- DIN EN ISO 3405
- IP 123

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

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