



**HYGROPHIL® HCDT** Measurement of the Natural Gas Quality

# HYGROPHIL<sup>®</sup> HCDT

Control the quality of natural gas with two measurements

- **Water dew point**
- **Hydrocarbon dew point**

to protect natural gas plants and pipeline networks and to maintain failure-free operation.

YOUR strong partner for measurement technology



The specialists at BARTEC BENKE have many years of experience in the field of measurement technology. They create solutions you can rely on: economical, reliable and applicable over decades.

Why do these measurements monitor the quality of natural gas?

### Water dew point

Water vapour in natural gas not only reduces the caloric value but also causes corrosion within the pipeline. In cold climates water can condense within the pipeline and freeze to ice during winter time. The results are damages of the plant and safety risks like pipe blockages, cracking and leakages.

### Hydrocarbon dewpoint (HCDT = Hydro Carbon Dewpoint Temperature)

The higher the HCDT value, the higher the quantity of heavy hydrocarbons, the lower the quality of the natural gas. Like water, hydrocarbons can condense in high pressured pipes at low temperatures and can cause plant damages.

### Quality provides safety

Moisture (water dew point) and hydrocarbon dew point are not only the indicators for the quality of natural gas but also the potential risk factors for every natural gas plant.

In natural gas high-pressured pipes a high moisture content in combination with hydrocarbons can cause hydrate formation. This methane hydrate blocks the valves or the complete pipeline, causes pressure drops and reduces the flowrate.

For the protection of natural gas plants and for safeguarding a failure-free operation, more and more gas companies are asking for continuous monitoring of these values.

BARTEC BENKE has developed an innovative measurement system to monitor the quality of natural gas and at the same time to protect the plant.

With the new HYGROPHIL<sup>®</sup> HCDT from BARTEC BENKE you can measure the moisture and the hydrocarbon dew point.

- accurate
- long-term stability
- reproducible



### Measurement system HYGROPHIL<sup>®</sup> HCDT

BARTEC BENKE sets new standards for the measurement of hydrocarbon dew points with the measurement system HYGROPHIL<sup>®</sup> HCDT.

Therefore BARTEC BENKE can make a decisive contribution to quality assurance of natural gas and equipment protection.

### System components

- **Display unit HYGROPHIL<sup>®</sup> F-5673**
- **Sensor HCDT**  
Hydrocarbon dew point measurement  
Method: chilled mirror
- **Moisture sensor L1660**  
Moisture measurement  
Method: fiber optic
- **Sample System**  
for gas conditioning



### Features

- accurate
- long-term stability
- drift-free
- reproducible

**BARTEC BENKE**

protects people and

the environment

by the safety

of components,

systems and plants.

