Optical Steam Trap Monitoring

VK 14 / VK 16

- Optical possibility for permanent monitoring of steam traps for banking-up and loss of live steam
- Installation in horizontal or vertical pipework, upstream of the trap to be monitored
- Both the VK 14 and 16 models are fitted with a deflector that shows you the current state of the steam trap at any time (see sketch)
- No moving parts in the sightglass, i.e. no risk of wear and tear. Depending on the condensate quality, the sightglasses may require cleaning occasionally
- Subject to the nominal pressure and pH value of the water, units for PN 16 or PN 40 are available with and without additional mica discs

Universal steam trap monitoring for live steam losses and banking-up of condensate – optical

Vaposcope VK 14/16

Any steam trap, e.g. GESTRA BK 45, MK 45, UNA 14/16, UNA 23-26, or other manufacturers

Mobile Steam Trap Testing

VKP 10 / VKP 40

- Mobile test sets VKP 10 and VKP 40 for temporary monitoring of steam traps
- As a low-cost solution, the VKP 10 offers a measuring transducer for detecting the sound signals emitted by steam traps. These can then be evaluated easily by observing the deflection of the level meter
- VKP 40 is available both as a normal unit and, as the VKP 40Ex, in an ATEX-compliant version for explosion-risk areas
  - Excellently suited for repetitive measurements on a large number of steam traps
  - Preparation of the steam trap measurement at a PC
  - Followed by fully automatic testing of the steam traps with an easy-to-use handheld unit, without any need for individual assessment of the recorded signals
  - Subsequent evaluation at the PC simplifies daily organization of the work, thanks to diverse job schedules und a financial analysis
  - Import and export of the trap databases in Excel format

VKP 10

VKP 40 / 40Ex

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Further information on GESTRA steam trap monitoring is available for download free of charge at: www.gestra.de

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With Energy into the Future

GESTRA

Steam Trap Monitoring

The comprehensive programme for testing and monitoring

Experience In Motion

Monitoring System
for Steam Traps by GESTRA

Through banking-up of condensate or loss of live steam, defective steam traps cause many problems and lead to increased costs:

- They hinder the normal production process, and may even jeopardize product quality
- They reduce the overall availability of the plant
- They exert an unfavourable influence on the condensate recovery system
- They lead to high live-steam losses
- Loss of live steam increases the quantity of boiler feedwater that is required
- Loss of live steam also increases the costs for feedwater additives
- Fuel consumption and hence the level of CO_2 exhaust gas produced by the burner also rise, posing an unnecessary burden on the environment

On the following pages, you will find many hints and tips to help you select the most suitable system for your plant.

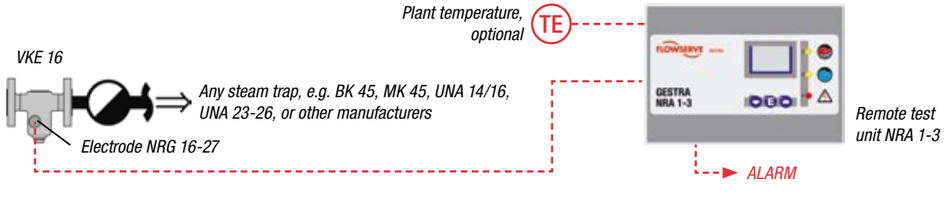
Permanent Trap Monitoring

Configuration example 1

Conductive monitoring for live steam losses and banking-up of condensate – electrical

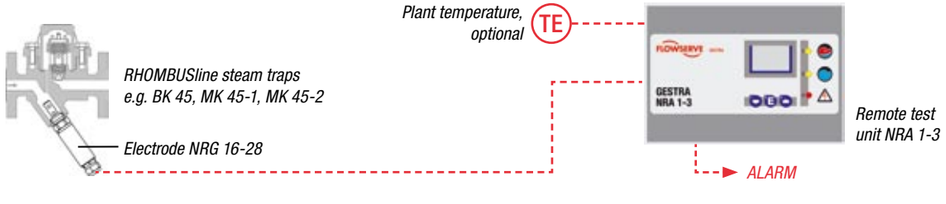
Configuration example 2*

Universal monitoring for live steam losses and banking-up of condensate – electrical



Configuration example 3*

RHOMBUS*line* – integrated monitoring for live steam losses and banking-up of condensate – electrical



** Combinations possible*

System Benefits at a Glance

- Permanent monitoring of up to 16 steam traps per test unit for banking-up of condensate and loss of live steam
- Wall or panel mounting permits installation wherever most suitable
- High sensitivity of 1 µS/cm
- Steam losses can already be registered from approx. 2 kg/h
- Extremely simple installation of the electrodes, also as retrofits, in conjunction with the GESTRA RHOMBUS*line*
- Steam traps of all makes can be tested via the VKE test chamber
- Instantaneous monitoring for banking-up is possible through the use of conductive probes
- Robust and precise measurement, thanks to proven GESTRA technology and the use of Pt1000 elements for the electrodes
- Automatic adaptation of the limits is possible through an additional Pt100 element for measuring the plant temperature
- Indication of the trap maintenance intervals secures the high quality of the test results