MEASUREMENT TASK

The chemical industry presents a wide range of demanding flow applications and therefore many opportunities for the installation and implementation of the Katronic clamp-on flowmeters. Owing to the continuous production processes operating in the chemical industry installation of invasive device can only be carried out during routine shutdown periods which do not necessarily coincide with the specific moment when maintainance is actually required.
Additionally, the potentially hazardous or toxic nature of the fluids within the pipelines make fitting any kind of in-line instrumentation complicated, time-consuming and expensive. In contrast, the Katronic flowmeters can be easily retrofitted to most applications regardless of liquid pipe material or ATEX restrictions.

SOLUTION

An example of the benefits and versatility of the KATflow meters can be seen through the work completed by Katronic's partner in BeNeLux U-F-M (Ultrasonic Flow Management). They were contacted by an international chemical company AKZO Nobel to conduct measurements on some applications where they wanted to consider whether a clamp-on flowmeter could be a benefit. The locations chosen were on pipelines where the customer knew that the process could not be interrupted and also where there would have been potential complications in using invasive technology.
One particularly trying system was a large fiberglass pipe where the water flowing through it was contaminated with solid content. AKZO had attempted to measure previously there without success which gave U-F-M the opportunity to prove the performance of the KATflow 230 flowmeter. In spite of the difficult conditions the flowmeter showed a level of accuracy and repeatability that both surprised and impressed the customer.

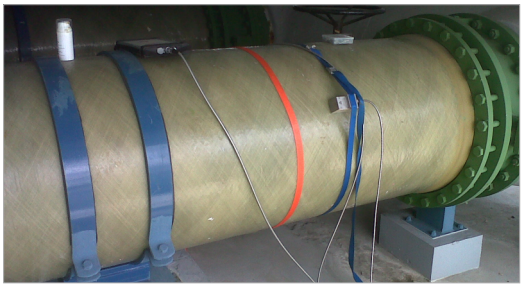
ADVANTAGES

- Easy, quick and cost-effective installation on existing pipelines
- ATEX certified flowmeters for use in Zone 1 hazardous areas
- Measurement independent of pressure
- Large temperature range (up to 400 °C)
- Measurement of condensate and other non-conductive liquids
- Maintenance free, very low MTBR (mean time between repairs)

SPECIFICATIONS

Installation type	Portable
Medium	Water
Pipe materials	Fiberglass
Pipe diameters	950 mm
Temperature	Ambient
Special requirements	Liquid contaminated with solid particles and customer had suffered previous measurement failures

APPLICATION



KATflow 230 and K0 transducers installed on large fiberglass pipe

INSTRUMENT SOLUTION

Clamp-on ultrasonic flowmeter KATflow 230 with transport case

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