

Contactless flow measurement for the Petrochemical Industry. The clamp-on mounting technique allows the flow of oil and hydrocarbons to be measured safely and accurately without the need to open pipes.

## Specifications

- **Installation:** Permanent
- **Medium:** Oil, Hydrocarbons
- **Pipe Materials:** All common metals, plastics and more
- **Pipe Diameters:** 10 to 3,000 mm
- **Flow Velocities:** 0.01 to 25 m/s
- **Accuracy:** Up to  $\pm 0.5\%$  for volume flow and flow velocity

## Application



Refineries as the heart of the Petrochemical Industry have many requirements for contactless flow measurement.

## Instrument Solution



Katronic offers an ATEX certified version of the ultrasonic clamp-on flowmeter KATflow 150 for the Petrochemical Industry.

## Measurement Task

Refineries are the centres of the Petrochemical Industry. Liquid flow processes are typical for refineries making monitoring of pipelines crucial to ensure a smooth and safe process management. In addition to that, the applied metering equipment has to meet the strict ATEX directives for the use in hazardous areas.

Although inline meters have been installed on crucial lines when the refinery was constructed, plant extensions and new production procedures often require new flow meters on pipes which were not considered at that time. As a result, instruments which can be installed without the need to open pipes and thus without the need to stop production are required to fill the gaps in the monitoring network.

Taking the above mentioned requirements into account, Katronic's ultrasonic clamp-on flowmeters are the perfect solution for various applications of the Petrochemical Industry. As the sensors are clamped onto the pipe surface, refinery operators do not have to face large costs caused by lost production and intensive engineering work as it is normally the case during the installation of inline flowmeters.

Katronic can supply fully ATEX certified metering solutions and within an hour the operator could have fitted a flowmeter without any interruption of the production process.

Katronic's instrument of choice for the Petrochemical Industry is the ATEX certified version of the fixed installed KATflow 150. As it can be adjusted to the user's requirements, the KATflow 150 can be employed on various applications – from simple flow metering to concentration measurements. Due to its various process output options, it can be easily integrated into existing or future control systems.

## Advantages

- Easy, quick and cost-effective installation on existing pipelines
- ATEX certified flowmeters for use in Zone 1 hazardous areas
- Applicable on pipes of various materials (incl. duplex stainless steel) and diameters from 10 mm to 3,000 mm
- Various power supply options (AC, DC, battery, solar powered)
- Easy integration into existing or future control systems possible
- Maintenance free, very low MTBR (mean time between repairs)

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