

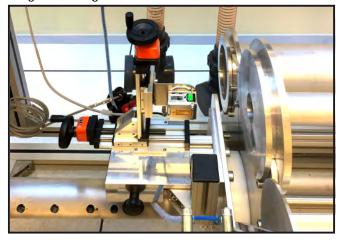
Calibration of Rotary Piston Meters via Laser Detection



Calibration of Rotary Piston Gas Meters via Laser Detection

The inotech laser detection system (LDS) has been developed to reduce the time for calibration of a rotary piston meter by counting the rotations of a piston. A laser-sensor, mounted on an adjustable holding fixture and a self-learning software module allows to use the equipment for nearly all rotary piston meters, independent from design, size, dimensions and manufacturer. The inotech LDS can be adopted to all inotech test rigs for industrial gas meters.

For the operation the inotech LDS, you simply position it in front of the rotary piston meter. Depending on the test rig, it can be at the inlet or at the outlet side. The laser beam must be focused on one of the pistons within the preset adjusting-distance range, height and angle.

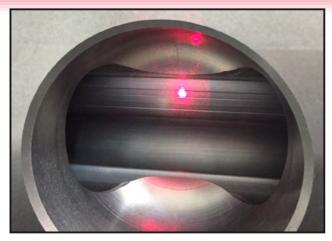


When the piston rotates, each single revolution of the piston will be counted.

The pulse valence is measured by correlating the LF-pulses of the meter at a constant flow rate. Later on, the calibration of the meter at low flow rates could be performed with the LDS only.

The use of the inotech laser detection system (LDS) can reduce the calibration time for low flow rates from hours to some minutes.





Technical Data

Type of the test facility

Equipment for gas meter test rig Laser Detection System (LDS) for Rotary Piston Meters

Type of Meters • All sizes of rotary piston meters, manufacturer independent

Device/s

- under Test
- 1 pc.

· Size G16 - G1000, others on request

Pulse Detection Laser beam

Flow Range

0,1 - 1600 m³/h, others on request

Test Medium

Air at atmospheric pressure

Mode of Operation

- Positioning of the LDS in front of the rotary piston meter
- Adjusting of the laser beam
- · Measurement of the pulse value by correlation with the LF pulse generator of the meter
- Calibration of the rotary piston meter

Process Control Integral component of the inotech test rig

- · Low pressure test rigs for domestic and industrial gas meters
- High pressure test rigs for gas meters designed as closed-loop or as bypass
- Mobile gas meter test rigs
- Modernization of test rigs
- Test rigs for gas pressure regulators
- · Test rigs for water meters and heat meters
- Purging units
- Leakage test units

- Remote support and service support
- Spare parts
- Maintenance contracts
- Preventive maintenance
- Update service
- System availability service
- System extension
- · Software support with customized adaptations
- Standard and tailor-made trainings



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