



High Pressure Calibration for Gas Meters

High Pressure Calibration of industrial Gas Meters

The inotech test rigs for the calibration of gas meters under high pressure conditions are designed to meet the highest accuracy together with the shortest calibration time. The preferred HPCL-design (high pressure closed-loop) can be realized with the media natural gas, compressed air or inert gases.

inotech has the experience from several realized and successful working projects.

Especially the short adjustment time to reach stable measurement conditions, the fully automatic control in combination with the exceptional design of the blower with both, the fan as well as the electric motor inside the housing, are the core features of our technology.

The designs of our facilities are flexible and modular, customized to your specific requirements, and of course following national and international regulations and are approved by the PTB, Germany.

The systems can be designed for different pressures and flow rate-requirements. Nearly every configuration of the reference meters, the length of the meter under test section, the number of blowers and the connected heat exchangers with the associated cold-water system is possible. For this type of test facilities, a measurement uncertainty of $<0,25\%$ is achievable.

The modular inotech control system with a user interface allows a fully automatic operation, which includes processes as there are e.g. filling, leak detection, measurement and flushing.

By using an efficient high-pressure gas storage system, the inotech HPCL can be realized independent from direct connection to a gas pipeline.

inotech provides for high pressure gas meter test facilities all services from the engineering to the commissioning. inotech offers to be your partner already in an early stage of a project to optimize the layout, the design and processes e.g. optimizing the civil work with respect to a secure operation and an ergonomic working environment.





Technical Data

Type of the test facility	High pressure test rig for gas meters, designed as closed-loop or as bypass
Pressure	Up to 75 barg
Flow Rate	Up to 36,000 m ³ /h (higher flow rates on request)
Test Media	Natural Gas, compressed air or inert gases (special gases on request)
Type of Meter under Test (MuT)	<ul style="list-style-type: none">• Turbine gas meters• Ultrasonic gas meters• Rotary piston gas meters
Size of MuT	1" - 24" (other sizes on request)
Test Lines	1 or 2 lines with up to 3 meters under test
Accuracy	≤0.25% at the entire range of the flow rates
Standards	Sets of calibrated gas meters, equipped according the required test points
Features	<ul style="list-style-type: none">• Fully automatic process• Freely definable process sequences• Visualizing of the state variables• Certified calculation of errors including the compensation of the state variables• Output of measuring results to SQL data base, to screen or to printer, data backup

- 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

