

## PRODUCT RANGE

- Low pressure test rigs for domestic and industrial gas meters
- Closed-loop test systems for thermal gas meters
- Manufacturer test systems for metering stations
- High pressure test rigs for gas meters designed as closed-loop or as bypass
- Testing rigs for domestic and large water meters testing rigs
- Testing rigs for heat meters
- Testing rigs for electricity meters
- Mobile gas and water and electricity meter testing rigs
- Testing equipment for gas pressure regulators
- Flushing equipment
- Leakage testing equipment
- Testing equipment modernization
- Measurement data evaluation systems (InoCloud)

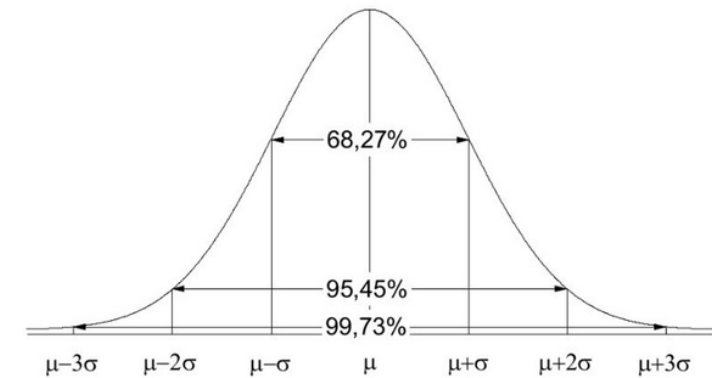
## SERVICE PROGRAM

- Calibration services according to DIN EN ISO/IEC 17025:2018
- Remote support and on-site service
- Maintenance contracts
- Preventive maintenance
- Update service
- Spare parts deliveries
- System expansion
- Software support with customized adaptations
- Customer related trainings

You can find more information here:

We are happy to answer your questions on site or you can contact us online at

[www.inotech.eu/en](http://www.inotech.eu/en)



$$U_k(y) = k \cdot \sqrt{\sum_{i=1}^n (c_i \cdot (G_i \cdot u_{(X_i)}))^2}$$



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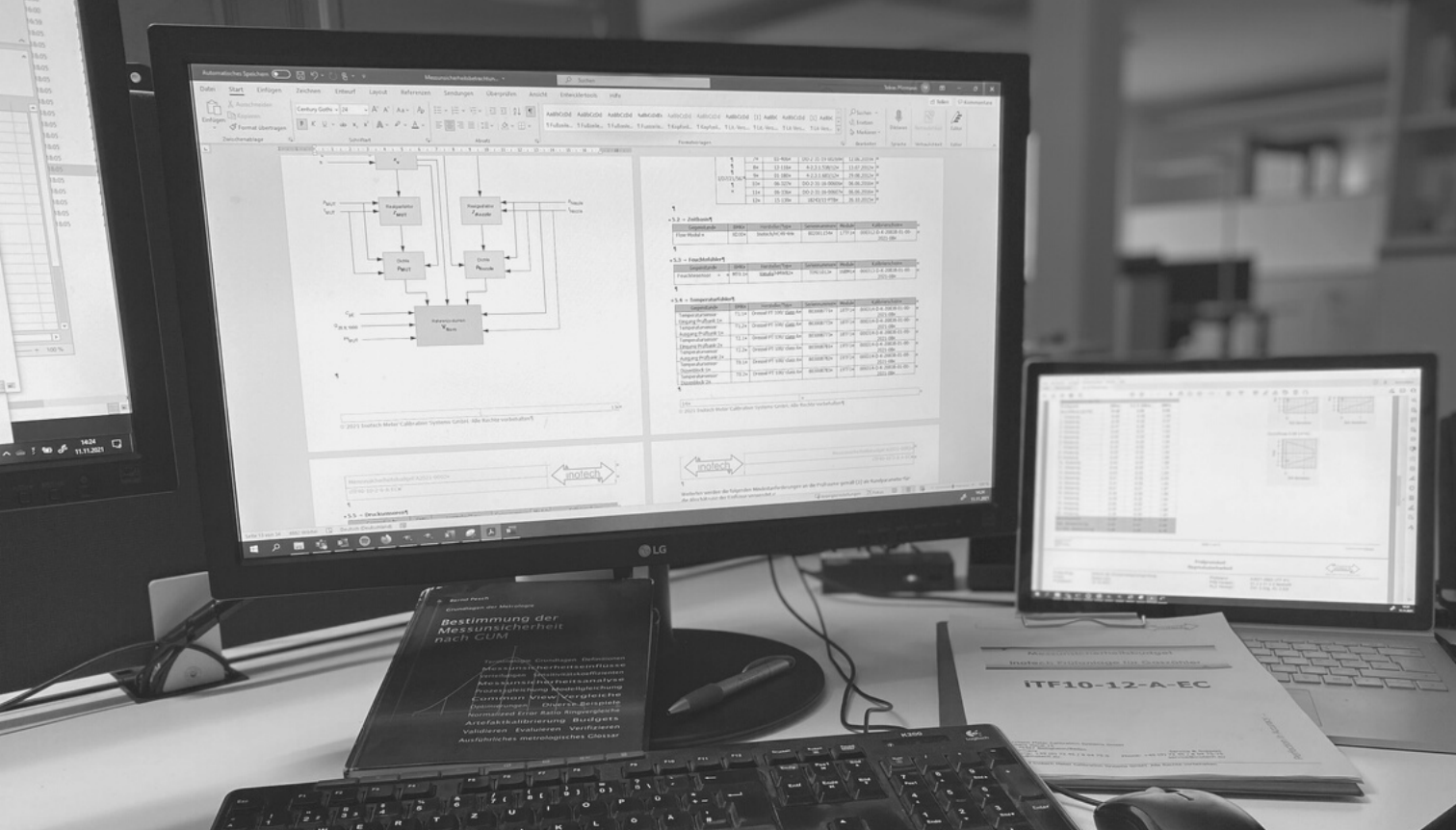
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**Measurement  
Uncertainty  
Budget**



## PROGRAM SEQUENCE

Start Calculation  
measurement  
uncertainty



1. Definition of measurement task
2. Determination of measurement task
3. Determination of process equation



4. Measured value recording
5. Import of measurement uncertainty influences from calibration certificates



6. Implementation of the measurement uncertainty analysis - Recording and discussion of the influencing variables



7. Set up the model equation
8. Determine measurement uncertainty
9. Create measurement uncertainty budget

**Measurement  
uncertainty budget**

## DESCRIPTION

We offer as a service the preparation of a specific measurement uncertainty budget. This can be provided by the specially trained personnel for each test rig, regardless of the manufacturer of the test rig and regardless of the components installed.

### At a glance:

- All necessary steps from the inventory to the description of the test rig and the preparation of the detailed documentation
- Calculation of the measurement uncertainty budget according to GUM\*
- Intensive review and consideration of possible influencing factors

## DYNAMIC MEASUREMENT UNCERTAINTY

- Latest generation of the inotech Meter Software PS8 has the module Measurement Uncertainty Budget
- The measurement uncertainty is calculated for each meter under test and measuring point
- Module can be installed on any inotech test rig as long as it is equipped with the PS 8 test rig software
- The Model equation gives the relevant input variables for the measurement uncertainty budget
- The determination of the standard deviation for the input variables is done by measurements or using the available data in test rig documentation e.g. calibration reports, verification certificates

\* GUM = „Guide to the Expression of Uncertainty in Measurement“