

Identification

- Deliverer / Manufacturer vemm tec Messtechnik GmbH
- Product Atmospheric test stand for the certification of gas flows

Application

Legal calibration of gas meters (gas turbine meters, PD-meters, vortex meters), factory calibrations (also of other meter types).

Design and Construction

Measuring principle

Measuring and calculation of relative deviation of the meter under test which is in series with a master meter by conversion from displayed volume to standard volume.

Input

Flow, actual volume, temperature and pressure

Range: Flow at ambient conditions: 4 - 4000 m³/h

Output

Output signals: - N/A –

Characteristic Values

Measurement accuracy

Extended uncertainty u : < 0,3 % (Extension factor $k = 2$)

Repeatability

Repeatable accuracy s_r : < 0,04 %

Working conditions

Legal and factory calibration of gas meters.

Installation conditions

- N/A –

Environment conditions

see [3]

Environment temperature: 15 to 25 °C

Protection: - N/A -

Electro-magnetic compatibility: - N/A –

Process condition

- N/A –

Construction

The test stand consists of a piping system with 4 measuring lines including 4 master meters. There are pressure and temperature taps on the meter under test and each master meter. There is also an computer based flow control. Acquisition, processing, visualisation and evaluation of the measurements is also computer based.

Display and MMI

- N/A –

Certificates and approvals

Approval as "Staatlich anerkannte Prüfstelle für Meßgeräte für Gas - GN 5 at vemm tec Messtechnik GmbH" (approved test stand by law)

Order information

Atmospheric test stand for the certification of gas flows are available at vemm tec in compliance with customer requirements. Contact: Mr. Groebel, phone +49 331 7096 247.