



Visit us at the Motek 2018 trade fair in Stuttgart (08-11.10.2018, hall 3, stand 3320)  
Free entrance tickets: +49 2103 2471-75 or sales@cetatest.com



Dear readers,

This year, we will not only be present at the Control and Motek trade fairs but will attend various others as well. For the first time, we will exhibit jointly with the company Gaedigk at FMB 2018 and Compamed 2018 (see below).

Wishing you a pleasant reading,

Yours sincerely,  
Günter Groß – Managing Director

#### Inhalt

- Announcement: On-site DAkkS Calibration for the Measurand Pressure
- Statement on a Personal Matter: Dishonest / Dubious Advertising by Trunchi in China
- CETA Test Devices Well-Positioned with a Great Variety of Industrial Interfaces for Industrie 4.0
- CETA and Gaedigk to Exhibit Jointly at the FMB 2018 and Compamed 2018 Trade Fairs
- CETA Practical Tip: Difficulty of Asserting Leak-Tightness by Means of Temporal Pressure Decay

## Announcement: On-site DAkkS Calibration for the Measurand Pressure



The calibration laboratory of CETA Testsysteme GmbH was accredited in 2004 by the German Calibration Service DKD and in 2014 by the German Accreditation Body DAkkS, successor of DKD, for the measurand pressure (D-K-19566). DAkkS calibration is performed in accordance with the norm DIN EN ISO/IEC 17025 and meets the requirements of the standard IATF 16949 valid in the automotive industry. CETA Testsysteme GmbH is the first German manufacturer of leak testers whose devices have been supplied since 2004 with DKD or DAkkS calibration certificate, which is

internationally recognized on the strength of the ILAC Mutual Recognition Agreement. The last reaccreditation of the calibration laboratory was in September 2018. The audit was performed with regard to the application for extension of the accreditation scope to include DAkkS calibration on site. Provided the required reworking has been successfully completed at the assessment date, CETA will be able, after delivery of the accreditation certificate, to perform **DAkkS calibrations** in the permanent laboratory (as before) and **at the customer's site** as well.

## Statement on a Personal Matter: Dishonest / Dubious Advertising by Trunchi in China

Concerned customers have brought to our attention that the company Suzhou Trunchi Precision Machine Co., Ltd in China is advertising with sales and servicing of CETA products. This is happening in spite of our explicit request to stop. We are therefore compelled to make an official statement for the protection of our customers.

CETA does not have any business relationship with the company Trunchi. Trunchi does not receive any supplies from CETA and is **not authorized** to perform servicing and

maintenance works on CETA test devices.

CETA's sole authorized cooperation partner in China is the company Dantsin Technologies Co.,Ltd.. Dantsin is an authorized distributor of CETA products, receives training and support from CETA and is entitled to perform servicing and calibration for CETA products.

A list of our current cooperation partners is available on our website: <https://www.cetatest.com/contact/representations/?L=1>

## CETA Test Devices Well-Positioned with a Great Variety of Industrial Interfaces for Industry 4.0

All over the world, thousands of CETA leak and flow testers are currently used in the production lines of renowned customers. CETA's test devices are equipped with a large number of **industrial interfaces** for integration in plant automation. Digital I/O, RS-232 and USB-Host are part of the standard configuration. The most important industrial interfaces such as **Profibus, Profinet, Ethernet and**

**EtherCAT** are optionally available. The interfaces are bidirectional, which allows flexible parameterization of the test devices. CETA also supports the user by providing a function library for easy connection per RS-232, USB and Ethernet as well as the appropriate technical documentation. The application software CETA Soft 2G, available free of charge, allows recording of test results, test series and



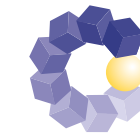
measurement curves in real time as well as application support. By means of a remote desktop software, remote access to a computer using CETA Soft 2G is also possible.

A Bluetooth module allows wireless operation of the test devices with the application software CETA Soft 2G. A great variety of accessories is also available, including an interface converter from Ethernet to RS-232, and a RS-232 protocol converter allowing replacement of the former series CETA-TEST x10 by the current device series CETATEST x15. The protocol converter can also be adapted to allow replacement of devices from other manufacturers. Connection to the production network offers numerous possibilities for **process monitoring**, for example transfer of data to the product card, worldwide access to test devices, measurement results and transmission of the test results to the blockchain data structure. All this provides the basis for integration of CETA test devices in an Industry 4.0 environment.

### CETA and Gaedigk to Exhibit Jointly at the FMB 2018 and Compamed 2018 Trade Fairs



For over 10 years now, CETA Testsysteme GmbH has been collaborating with Gaedigk Feinmechanik & Systemtechnik GmbH, manufacturer of special purpose machines. A large number of projects in the fields of leak and flow testing have been completed to the customer's full satisfaction. The customer benefits from the strengths of both companies: Gaedigk as a specialist for assembly and test stands, CETA as a solutions partner and manufacturer of leak and flow testers.



Under the banner „Competence in machine construction and testing technology“, Gaedigk and CETA are planning to attend together the following trade fairs in 2018: **FMB**, 07.-09.11.2018, Bad Salzungen **Compamed**, 12.-15.11.2018, Düsseldorf

(Compamed and Medica are held together) We are glad to invite you for a technical consultation regarding your projects and look forward to some interesting discussions.

### CETA Practical Tip: Difficulty of Asserting Leak-Tightness by Means of Temporal Pressure Decay

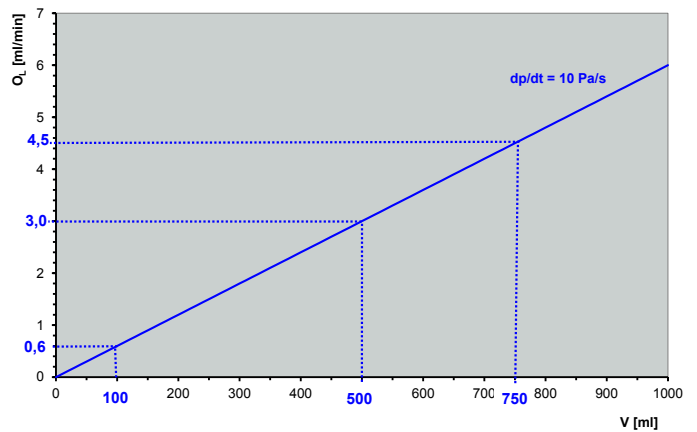
In practice we are occasionally faced with applications and test specifications where the required leak-tightness is defined by means of the maximum permissible temporal pressure decay, valid for all test part volumes.

Under stable measuring conditions, the so-called **leak rate formula** defines the relation between the leak rate  $Q_L$ , the effective test volume  $V_{eff}$  and the temporal pressure decay  $dp/dt$ :

$$\frac{dp}{dt} \left[ \frac{Pa}{s} \right] = \frac{Q_L [ml/min] \cdot 100.000 Pa}{V_{eff} [ml] \cdot 60 s/min}$$

The temporal pressure decay is in this case inversely proportional to the volume. However, if the value of the temporal pressure decay is defined independently of the volume, the permissible leak rate is necessarily different for the different test part volumes.

A pressure decay of 100 Pa in 10 s, or 10 Pa/s, corresponds to a leak rate of 0,6 ml/min with a volume of 100 ml, but of 4,5 ml/min with a volume of 750 ml. The smaller volume is leak-tight, but not the product with the larger volume.



Leak-tightness of a product should be defined by the **leak rate**.

The usual units for the leak rate are „mbar\*s“ or „ml/min“ or „ccm“.

**Conversion:** 1 mbar\*s = 60 ml/min = 60 ccm