



Dear readers,

Here is our newsletter no. 24, issued on the occasion of the MOTEK 2014 trade fair. At our newly designed MOTEK exhibition stand, which you will find this time in hall 1, stand 1124, we will present our test

devices and show a few practical applications. In addition, we will introduce a new compact test stand and demonstrate leak testing of encapsulated test parts. We are looking forward to meeting you.

Wishing you a pleasant reading of our new newsletter!

Yours

Günter Groß
Managing Director

On this occasion, the accredited pressure range was extended to -1 to 60 bar, and we are now in a position to perform DAkkS calibrations within this range. All new devices of the current series 515 and 815 with 500 Pa pressure sensor are delivered without extra charge with DAkkS calibration certificate instead of the regular factory calibration certificate.

DAkkS calibration is carried out in accordance with the norm DIN EN ISO 17025 and meets herewith the requirements of the norm ISO / TS 16949 in force in the automotive industry. Furthermore, the DAkkS calibration certificate is accepted in many countries on the basis of international agreements (ILAC MRA).

CETA Testsysteme GmbH is the first German manufacturer of leak testers whose devices have been supplied for 10 years already with DKD and now DAkkS calibration certificate.

Contents

- DAkkS Accreditation of CETA Calibration Laboratory (D-K-19566-01-00)
- CETA awarded „Science Friendly Company“ Certificate
- Flexible Test Stand Solutions for Leak and Flow Testing
- CETA practical tip: Process Reliability through Still-Alive-Check (SAC)

DAkkS Accreditation of CETA Calibration Laboratory (D-K-19566-01-00)

The calibration laboratory of CETA Testsysteme GmbH has been DKD-accredited for pressure since July 2004 (DKD-K-36001). After the changeover from DKD (German Calibration Service) to DAkkS (German Accreditation Body) and after expiry of the DKD accreditation period, CETA's calibration lab was accredited by the DAkkS (D-K-19566-01-00).



CETA awarded „Science Friendly Company“ Certificate

CETA has been awarded the „Science Friendly Company“ certificate by the Technical University of Lodz, Poland, for participation in an international research project. More than 1500 companies from 22 different countries of the European Union took part in this scientific research project. This project consisted in studying the influences on corporate development of small and medium-sized companies under various perspectives.



Flexible Test Stand Solutions for industrial Leak and Flow Testing

CETA Testsysteme GmbH is a manufacturer of leak and flow testers with more than 25 years of experience in industrial testing applications. Customers increasingly require a complete solution in form of a test stand with test part fixture and integrated testing technology. This was accomplished in collaboration with a local company, CKO Maschinen- und Systemtechnik GmbH. As „item pluspartner“, CKO is able to implement any number of solutions with the help of system mod-

+++ CETA newsletter no. 24 of 02.10.2014 +++



ules. For this purpose, standard test cells are used. Fixture and adaption for the test part are customized and defined in detail with the customer. The test stands are available in two versions: the stand-alone solution for semi-automatic testing with integrated IPC is characterized by a sophisticated ergonomic user concept and is readily extendable to additional testing procedures (i.e. electrical function test, image processing) or further installations. The test device is built in laterally and easily accessible. The compact desk solution is typically suited for manual workstations. These two models satisfy various requirements, from small batch production to serial production. In the course of project planning, the technical feasibility of the testing procedure is evaluated and a reliable solution elaborated. The modular structure of the test stand with integration of diverse types of test devices (leak test, flow test, mass flow test) yields a variety of industrial solutions for manifold testing procedures and test parts. These test stands are suitable for customers without internal or external plant installation. CETA also counsels plant manufacturers and customers' in-house construction departments regarding the use of test devices and gives recommendations for construction of the



requirements, from small batch production to serial production. In the course of project planning, the technical feasibility of the testing procedure is evaluated and a reliable solution elaborated. The modular structure of the test stand with integration of diverse types of test devices (leak test, flow test, mass flow test) yields a variety of industrial solutions for manifold testing procedures and test parts. These test stands are suitable for customers without internal or external plant installation. CETA also counsels plant manufacturers and customers' in-house construction departments regarding the use of test devices and gives recommendations for construction of the

requirements, from small batch production to serial production. In the course of project planning, the technical feasibility of the testing procedure is evaluated and a reliable solution elaborated. The modular structure of the test stand with integration of diverse types of test devices (leak test, flow test, mass flow test) yields a variety of industrial solutions for manifold testing procedures and test parts. These test stands are suitable for customers without internal or external plant installation. CETA also counsels plant manufacturers and customers' in-house construction departments regarding the use of test devices and gives recommendations for construction of the



CETA practical tip: Process Reliability through Still-Alive-Check

This feature is integrated by default in the device firmware of the differential pressure leak tester series CETATEST 810, 510, 515 and 815. It is used for control of the differential pressure sensor, the valve system and the AD-converter. This feature monitors important internal functions of the test device in order to make sure that no de-

fective part should pass the test as good part due to malfunction of the device. For this purpose, the internal signal chain is analyzed during the dumping phase (which has to be parameterized anyway). At the end of the SAC, a message appears on the display. In order to start another test cycle, the device must be turned off and on again. This ensures that the safety instruction is really consciously taken in.

As with all filters, it can occur in some rare cases that the SAC reacts due to an untimely combination of internal trigger messages, although there are no problems in the system. This can happen for example if the test pressure is very low and the test output is open (no test part is connected). The differential pressure sensor does not register any deflection, since there is no pressure in the system during the measuring phase. This suggests an error. In this case, the SAC has reacted correctly, since the test device was not connected properly.

The following procedure is used to check if the SAC of the test device has reacted correctly:

- Make sure that the parameters set in the test program are suited for the application.
- Perform a test with master tight part (check of the inherent leak-tightness of the adaption).
- Then, perform a test with master tight part and test leak (suited for the application) connected in parallel.
- Compare the results with the values obtained during an inspection (for ex. start-up, acceptance test, inspection at shift change).
- If these values are plausible, the operation of the test device can be continued without problems.
- If there is a serious difference, especially if it concerns the measurement values with connected test leak, then the SAC has reacted correctly. The test device has an internal malfunction (for example due to a defective differential pressure sensor) and its operation must be stopped.
- It is recommended to sort out the last 5 products which have been tested and if possible, to check them again with another device.
- Please contact our service department to discuss any further steps.
Phone +49(0)2103/2471-72,
E-mail: service@cetatest.com.

+++ CETA newsletter no. 24 of 02.10.2014 +++