CETA[®] Newsletter



Dear readers,

The CONTROL 2006 exhibition is coming soon, and we would like to seize this opportunity to draw your attention to some innovations with our CETA newsletter no.4.

Wishing you a pleasant reading,

Yours sincerely

Günter Groß **Managing Director**

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Return of used electrical equipment



The company CETA Testsysteme GmbH has been registered and authorized by the register of used electrical equipment (EAR, Elektro-Altgeräte-Register) for the business to business sector (WEEE-reg-no. DE

61168724). Consequently, all electronic test devices delivered by CETA after 24 March 2006 will be identified according to the legal requirements of the new law on electrical and electronic appliances (ElektroG).

As manufacturers of the delivered leak detectors, we will assume the disposal of your CETA test device after the end of utilization, free of charge for you and according to the legal rules and regulations. For this purpose, you just have to send us at your own cost the device to be disposed of.

CONTROL 2006 (09-12.05.2006 in Sinsheim)



Control The CONTROL 2006 exhibition is coming soon. This year too, CETA will be represented at the exhibition. You can find us in hall 1, stand 1104. If you are interested in a free ticket, please let us

know - see below for contact details.



Documentation of RS 232 interface

The various series of CETA test devices differ in their firmware, which influences the telegrams and data transmitted through the RS 232 interface.

To help you with programming the RS 232, CETA has elaborated an extensive documentation in English, in which you can find explanations on communication structure, telegram types, parameter transmission, hardware handshake and CRC calculation. Besides, the documentation contains a source code (in C) for CRC calculation, as well as many helpful examples for communication and data transmission.

The interface documentations are regularly completed and revised. For this reason, you should always use the latest version of the documentation for programming.

To get the current version of the documentation on the RS 232 interface, please contact our sales department, either per telephone at +49(0)2103/2471-75, or send an e-mail to sales@cetatest.com.

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CETATEST 710 with inherent tightness function

The leak detector with overpressure sensor CETATEST 710 has been equipped with a function which allows checking of the inherent tightness of the device without having to separate it from the fixture.



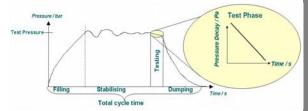
This self-test function is carried out by a separate test program, using a special internal valve position. This makes the time-consuming procedure of separating the pneumatic lines of the device from the fixture unnecessary. In this way, the inherent tightness check is considerably simplified and supports the systematic diagnosis of the test devices.

CETATEST 810 with Hungarian firmware

From now on, the leak detectors of the CETA-TEST 810 series are also available in Hungarian language. With this, CETA wants to keep up with the increasing need of international orientation, for a large number of our customers are having production sites in Hungary. In addition to the Hungarian data sheets, which have been available for quite some time now, and to the Hungarian version of the firmware of the devices, we also have an operating manual in Hungarian language. Versions in other languages are in preparation.

CETA practical tip: Practical determination of leak rate -Use of test leak

If there are no specifications for the leak rate from customer's side, it is possible to determine it by practical experiments. For this, it is necessary to have test parts from serial production. The test parts must have been classified as good parts and marginally defective parts, for example by submerging under water. To quantify the leak rate, a definite good part should be connected to the leak detector. A stable phase is reached when the pressure loss measured in the test phase is proportional to time. For this purpose, the display unit of the CETA leak detectors can be set to dp/dt. By setting suitable times for the filling, stabilization, test and dump phases, it is possible to approach the ideal metrological conditions in a practical way. After that, other good parts are measured and the measurement distribution recorded. Then, the marginally defective parts are measured with unchanged phase times and their distribution is recorded. If the measurement distributions of the good and defective parts are sufficiently apart (i.e. if there is a sufficient gap between the largest pressure



loss value of the good part and the smallest pressure loss value of the defective part), then it is possible to solve the test task. But it is not possible on the basis of this rough evaluation alone to find out if the requirements for measurement tool capability are fulfilled (the determination of the C_{α} value will be treated in our CETA newsletter no.5). Afterwards, various test leaks are connected in succession parallely to the good part. The test leaks are characterized by the fact that they have a defined air flow for the given test pressure. The leak rate of the test leak which produces a pressure loss corresponding as much as possible to the pressure loss of the defective part, indicates approximately the marginal leak rate. CETA supports customers for the practical determination of the leak rate by using a series of standard leaks. The determined leak rate can be considered as a recommendation. The relationship between air leak rate and pressure loss has been treated in our CETA newsletter no.1 (leak rate formula).