



Dear readers,
Here is our CETA newsletter no. 9, just in time for the MOTEK 2007. The MOTEK exhibition having been relocated from Sinsheim to Stuttgart, we seized this opportunity to completely overhaul and extend our presentation.

You will find more information on our new exhibition stand and our new product developments in this newsletter. In our "practical tip", we deal this time with the test showing if a test part has been successfully adapted and filled.

Yours sincerely,

Günther Groß
Managing Director

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New presentation at the MOTEK 2007

Together with CONTROL, MOTEK is one of the two leading fair trades where CETA has been exhibiting for many years. This year for the first time, the MOTEK will take place from 24.09 to 27.09.2007 on the new exhibition ground in Stuttgart. We have completely overhauled our presentation and will show our products on a larger stand area (now 21 m²). In addition to qualified project discussions, we will be glad to perform a demonstration of our test devices. For this purpose, we have assembled smaller applications to demonstrate the diversity of testing tasks. Come and meet us in **hall 5, stand 5013**. We are looking forward to you.



New type of valve – the seat valve

At the moment, the CETA test devices are equipped with a multi-function valve (type: slide valve) used to perform a variety of test modes. However, for some applications, particularly those characterized by a higher filling performance, a seat valve would often be better suited. This has been confirmed by a substantial testing campaign. In the future, this type of valve can be installed as an alternative in the CETATEST 810 series. This allows to select the optimally suited type of valve for each testing task. The seat valve is characterized by a much simpler assembly and easy maintainability. The following chart compares the basic characteristics of both types of valve:

Characteristics	Seat valve	Slide valve
Design	In-house design	In-house design
Easy assembly	+++	+
Maintainability	+++	+
Suitable for higher test pressures	+++	+++
Suitable for negative pressures	yes	yes
Test mode „sealed component“	no	yes
Nominal width	6 mm	4 mm
Filling performance	+++	++
Multi-function *)	externally implemented	integrated
Drive	pneumatic	pneumatic
Switching performance	+	+++
Switching cycles	+++	+
Number of wear parts	low	average

*) test air connection, stabilization, dumping

Leak tests at pressure up to 300 bar

Leak tests at pressures above 100 bar are increasingly needed in the industry (e.g. for high-pressure injection valves). CETA has developed its own solution to this problem (up to 300 bar test pressure). With it, the range of test pressure – up till then maximum 30 bar with a CETATEST 810 - has been extended by the factor 10. This is an indirect test (pressure rise test). Test pressures of this magnitude require the observance of special safety regulations when designing the test device and assembling the peripheral equipment. In the course of preliminary studies, a leak rate of 0,5 ml/min at a pressure of 200 bar was reliably detected. A standard device will be presented at the end of 2007.

++++ CETA newsletter no. 9 of 17.09.2007 +++++



CETA test devices at the Czech exhibition MSV 2007 in Brunn

In the course of the mechanical engineering fair MSV 2007, our Czech cooperation partner Cressto s.r.o. will be exhibiting CETA leak detectors next to his own products for pressure measurement (C-I,119, pavilion C, 1st floor, stand 119).

The fair, featuring over 2000 exhibitors from over 30 countries, will take place from 01.10 to 05.10.2007 on the exhibition ground in Brunn,



Výstaviště 1, 647 00 Brno, Czech Republic. With over 100.000 expected visitors, it represents the most important industrial fair in the Czech Republic. You will find more information on the website of the MSV fair (www.bvv.cz/msv-de).

Ethernet – RS232 adapter

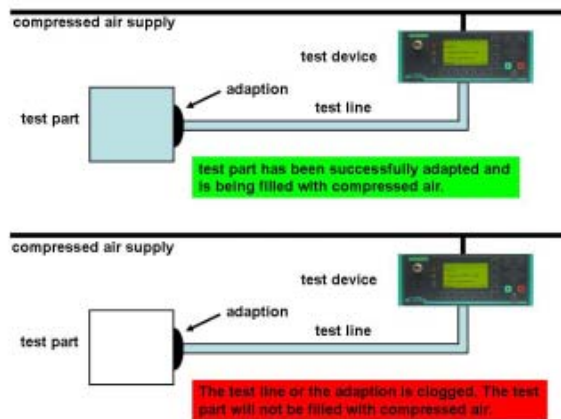
We have expanded our accessories program by one new product. The Ethernet – RS232 adapter allows the integration of serially addressable devices (e.g. leak detector CETATEST 810) in a local network or via internet. This allows, among other things, the central control of devices operated more than 15 meters away (limited by the RS232 standard). By means of the provided software, virtual COM-ports are installed in a PC integrated in the network. This makes it possible to control the devices as with a standard RS232 connection. CETA provides the Ethernet RS232 converter in a one-port and a four-port design. The adapter configuration can be made via a web interface, the provided software or, in case



of the four-port design, directly on the adapter itself. It can be operated under Windows 95/98/ME/NT/2000/XP as well as Linux and Unix.

CETA practical tip: checking the successful adaption of the test part

Successful filling of the test part is the indispensable condition for leak testing. Typical sources of error are a leaky adaption or a closed line. If the adaption does not close properly, the pressure escapes and no test pressure can build up in the test part. The test cycle aborts with an error message. The cause of error can be narrowed down by carrying out, as a precaution, an inherent tightness test of the test device and by using leak detection spray on the pneumatic line and the adaption during the filling process prolonged for diagnostic purposes. However, if the line is closed, the test part is not filled and the test device only measures the tightness of the



closed line. A closed line can be diagnosed by testing, prior to the leak test, the quantity of the filled volume. For this purpose, a reservoir volume integrated in the test device is filled at a pressure p_1 and separated from the pressure regulator. Then, the check valve of the internal reservoir volume is opened and air floods through the line into the test part. Since the air of the reservoir volume is distributed in a larger volume, we obtain a lower pressure p_2 . The ratio p_2/p_1 indicates the filled volume. This pressure ratio is used for the detection of closed circuits. After testing the passability of the line, the leak test of the test part can be carried out. The whole testing procedure can be performed with the help of the optional function „sealed component“. This option can be integrated in the CETA leak detectors.