Visit us at the Motek 2021 in Stuttgart, 05. - 08.10.2021, Hall 1 / Booth 1821
Free tickets at +49 2103 2471-75 or sales@cetatest.com

Dear readers,

we are pleased the trade fairs are taking place again after a 2-year break due to corona, and that we will be live at the **Motek 2021.** From 05. - 08.10.2021 we will exhibit at the Motek 2021 in Stuttgart. We are looking forward to the direct exchange with you in **hall 1, booth 1821.** We will be happy to send you the code for a free exhibition ticket, which you can request directly on our homepage.

Yours sincerely,
Günter Groß - Managing Director

Content

New CETA cooperation partner in India: Aditya Engineering Company

Since the beginning of 2021, CETA has been cooperating with the Indian company Aditya Engineering Company (Pune, India). The company was founded in 1984 and has established itself as a specialist in dimensional measurement technology and quality control through a wide range of products and services. The product and service range is completed by cooperations with internationally active manufacturers.
In addition, Aditya Engineering operates a calibration laboratory accredited by the National Accreditation Board for Testing and Calibration Laboratories (NABL) in accordance with DIN EN ISO / IEC 17025 for dimensional measurands (certificate no. CC-2433).

Aditya Engineering Company
67, Hadapsar Industrial Estate, Hadapsar
Pune - 411 013 (M.H.), India
Contact: Mr. Vikas Gorde - M: +91 95 61 00 71 51
T: +91 20 66 06 95 85 - businesshead@adityaengg.com
www.adityaengg.com

CETA Digital 2021 - Review Control Virtual und CETA Online-Seminars

A lot has been happening within our CETA Digital program. Since the Control 2021 trade fair was also cancelled due to corona, it was held as Control Virtual.
In order to keep the contact to interested parties and customers, CETA held a total of 6 online seminars on various topics of leak and flow testing from 18 - 20.05.2021. Due to the good response and positive feedback, this program will be relaunched. If you are interested, we would be happy to add you to the email distribution list and send you the participation information.

CETA Digital 2021 - Online seminars for special machine builders

When integrating a leak test or flow test into a test bench or into the industrial production process, there are a number of things to consider, such as the selection of materials, the type of adaptation, the consideration of transverse influences, etc. Many design and mechanical implementations are very good. But from the point of view of leak testing or flow testing, these are sometimes unsuitable. In order to support special machine builders, a special online seminar program is being planned. This will be held in November 2021.

CETA Digital 2021 - For online seminars please register at: +49 2103 2471-75 | sales@cetatest.com

CETA again with very good credit rating - Even in times of Corona

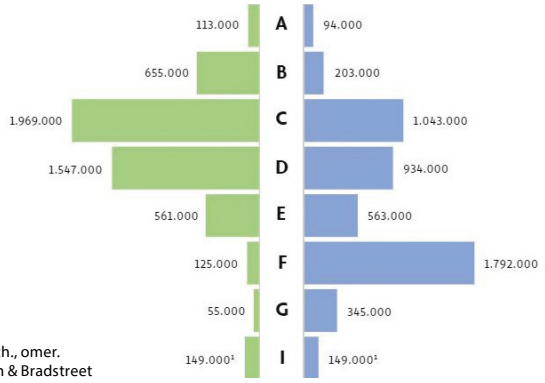
The Corona pandemic has had a serious impact on the industry and the economic stability of companies.

In a study by the credit agency Dun & Bradstreet, the probability of a company being unable to meet its payment obligations was estimated.
For this purpose, 5.2 million German companies were assessed in the Dun & Bradstreet database before and during the Corona pandemic. For numerous companies, the credit rating deteriorated, in some cases significantly.

We are all the more pleased that, contrary to the current trend, CETA's credit rating has remained stable at A (credit rating index 1.7) for many years - even in times of the Corona pandemic.

Failure Score: Creditworthiness of 5.2 million German companies in all sectors according to classic creditworthiness criteria, from A (top score) to I (insolvent)

Overall Business Impact: Creditworthiness of the same companies including the impact of the Corona pandemic



Graphic: joth., omer.
Source: Dun & Bradstreet

CETA practical tip: Industrial leak testing methods - Selection criteria and areas of application

By the use of compressed air as test medium in leak testing the leakage-induced pressure change is measured. With a stable measurement condition, the pressure gradient can be calculated using the so-called leak rate formula (test part environment at atmospheric pressure):

$$\frac{\Delta p}{\Delta t}\left(\frac{Pa}{s}\right) = \frac{Q_L\ [cm^3/min]}{V_{eff}\ [cm^3]} * \frac{100.000\ Pa}{60\ s/min}$$

Δp/dt	Pressure gradient
Q_L	Leak rate
V_{eff}	Effective test volume (sum of test part volume, measuring line, adaptation, test device-internal measuring circuit)

The pressure gradient can be used as a criterion for selecting leak test methods.

Q_L \ V_{eff}		0.1 cm³	1 cm³	10 cm³	100 cm³	1,000 cm³	10,000 cm³
0.00001	0.0006	10	1	0.1	0.01	0.001	0.0001
0.0001	0.006	100	10	1	0.1	0.01	0.001
0.001	0.06	1,000	100	10	1	0.1	0.01
0.01	0.6	10,000	1,000	100	10	1	0.1
0.1	6	100,000	10,000	1,000	100	10	1
1	60	1,000,000	100,000	10,000	1,000	100	10
[mbar*l/s]	[cm³/min]	Δp/Δt [Pa/s]					

	Test method	Test medium	Typical application range
	Tracer gas method Concentration measurement Gas sensor, Mass spectrometer	Hydrogen Helium	10^{-9} mbar*l/s < Q_L < 10^{-3} mbar*l/s
	Mass flow measurement Calorimetric mass flow sensor	Compressed air	0.3 N cm³/min < Q_L < 600 N cm³/min
	Measurement of pressure change Differential pressure sensor	Compressed air	1 Pa/s < Δp/dt < 20 Pa/s
	Measurement of pressure change Gauge pressure sensor	Compressed air	20 Pa/s < Δp/dt < 1,000 Pa/s
	Measurement of volume flow Pressure drop in laminar flow Use of laminar flow elements	Compressed air	5 ml/min < Q < 200 l/min

CETA Testsysteme GmbH
Marie-Curie-Str. 35-37 | 40721 Hilden - Germany | Tel. +49 2103 2471 - 75 | Fax +49 2103 2471 - 76 | sales@cetatest.com | www.cetatest.com
District Court Düsseldorf HRB 45728 | Managing Director Günter Groß | VAT Reg No DE 120957381