





Company anniversary – 20 years SincoTec	page 2
Inauguration of the new manufactory and design center	page 3
DVM fatigue strength conference on 12th / 13th October in Clausthal	page 3
Multiaxial resonance	page 4
Testpilot – it cannot fly, yet	page 5
500 km/h high speed train instead of excursion train	page 5
Emma & Else go to the pastures	page 6



20 years SincoTec

Company anniversary of a "hidden champion"

One day it began at the family 's dining table with a vision and without capital and within 20 years it developed to a worldwide operating company group. A screw clamp, a metal rule, a magnet and a rebuilt electronic system of a centrifuge were the components of the globally first computer-controlled resonance test machine.

It did not take much time and the experts of the Volkswagen AG have been convinced to apply this turbo-technology for the dynamic test on their numerous test systems. This was the hour of birth of SincoTec in February 1991. Due to the development of the POWER SWING series, the new technology from Clausthal began its triumphal procession all over the world.

The unrivaled symbiosis of test machine construction, test services and the intensive cooperation with top-class customers were the basis for innovative products developed from ideas and experiences. The managing director of SincoTec, Dr.-Ing. Joachim Hug, summarized the proceeding at the internal anniversary

celebration with the words of Confucius as follows: "By three methods we may learn wisdom:

First by reflection
- which is noblest
second by imitation
- which is easiest
and third by experience

- which is the bitterest"

All three ways SincoTec walked for more than 20 years. During this time the company developed from a one-manshow to a company group with more than 70 employees. Having a high export share

SincoTec contributes actively to support Germany becoming export champion once again.

The president of the national association of the German family-run concerns, Ulrich Herfurth, commended SincoTec as one of the "hidden champions" of the German middle class.

Dr. Jung, head of the fatigue strength department at Volkswagen, declared that SincoTec is an essential partner of Volkswagen all over the world.



Celebratory inauguration of the SincoTec manufactory with (from right) joint community mayor Walter Lampe, co-founder Prof. Harald Zenner, chief financial officer Regina Hug, co-partner and managing director Sven Henze, head of fatigue strength department at Volkswagen Dr. Lothar Jung, managing director of SincoTec Test Systems Helge Zorrmann and Dr. Joachim Hug



The midwives of SincoTec (from right) Prof. Harald Zenner, Renate Zenner, Dr.-Ing. Joachim Hug and Regina Hug

Inauguration of the new manufactory and design center

Foundation for a new growth



SincoTec spent the last years to develop new innovative test systems and to prepare itself optimally for the future by erecting the new test system manufactory and the design center.

Sven Henze and Helge Zorrmann are the new managing directors of SincoTec Test Systems. The name manufactory is not chosen incidentally. In future

"noble racehorses of the dynamic test technology will be born and trained" with a high-quality manual work and specialized engineer skills using a mounting area of 1.100 m². The designer will sit in some of the 80 offices of the neighbouring building and will create the latest test system fashion. Three crane systems with all about 25 tons load capacity, a noise protection chamber, which absorbs up to

Corporate Head Offic & TestCenter

100 decibel and a flexibly applicable mounting area for customized test systems are counted among the equipment details of the manufactory.

The inauguration of the manufactory was celebrated with friends, suppliers and the local politics.

Consequent light weight construction and strengthening - there is no conflict

SincoTec being the host for the DVM fatigue strength conference on 12th/13th October

In October Clausthal transforms into an important center for the fatigue strength. 300 experts from the Germanspeaking region are expected to come to the Harz Mountains to hold a meeting about the new challenges of the modern light weight construction and the fatigue durable design.

During the last years this topclass two-day conference has been realized by companies like Volkswagen, BMW, Daimler, Bosch and MAN, In cooperation with the Technical University of Clausthal, SincoTec performs as host and sponsor regarding this year's event.

With the organization, the arrangement of the conference dinner, two papers and guided tours through the ìholy hallsî SincoTec will contribute importantly to the success of the conference.

A supporting program highlighting the world cultural heritage "Oberharzer Wasserregal" will be offered for accompanying persons.

On 12th October, the day of arrival, the SincoTec workshop takes place on the occasion of the 20 year company anniversary of SincoTec.



SincoTec Test Systems GmbH which operates under the name of SincoTec Holding GmbH and effects administrative tasks of the complete group. SincoTec Test Systems GmbH is responsible for the development, the Albrecht-von-Groddeck-Straße Freiberger Straße **Restructuring of** the SincoTec group SincoTec has become daughters In order to meet the requirements of the customers even more, the SincoTec group has been established at the turn of the

year: It consists of the former SincoTec Bauteil-Prüftechnik,

carries out all test services in the accredited test laboratory. TestCenter Altenbraker Ring Training & Conference Center Measurement

SincoTec Test & Engineering GmbH

of all test technological products. SincoTec Test & Engineering GmbH develops new test procedures and

production and construction

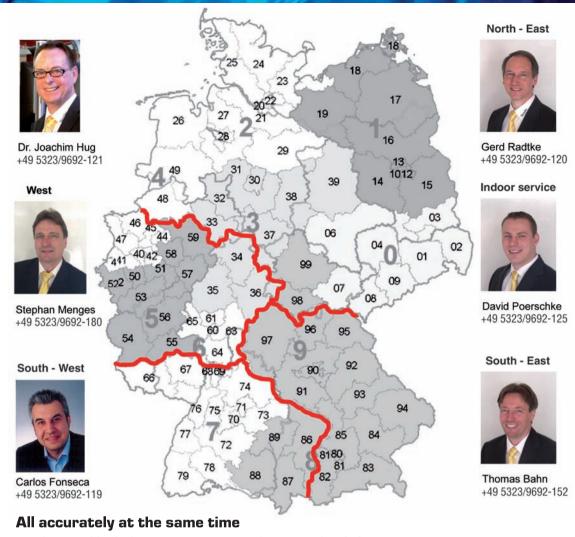
Moving closer to the customers

With regard to the planned restructuring at the turn of the year 2010/2011 SincoTec already prepared its sales activities during last spring. Due to the enlargement of the sales team with David Poerschke (indoor service) and Thomas Bahn (head of sales department) the allocation of the sales areas has been restructured.

Therefore the sales areas could get downsized, which makes it possible that every sales man has got the opportunity to offer more time to each of his customers. Now we are able to respond to the wishes of our customers in a more detailed way. In individual and technical counselling meetings we would like to respond to your requirements and to support you regarding the development of your products.

The picture shows the exact allocation of your contact persons. We love to test for you. **Please test us as well!**





Synchronized high dynamic tests on anti-friction and slide bearings

There are many standardized test procedures to test antifriction and slide bearings, which are often based on a static load application. But due to the fact, that there are bearing failures during the operation with high dynamic loads using the classic dimensioning, the present methods do not seem to be efficient enough. Therefore

innovative test systems are necessary, which stresses the bearings not only with static loads but also with dynamic loads. The dynamic radial load can be raised quickly, easily and energy-efficiently with modern resonance test systems like e. g. the POWER SWING family. A completely new developed software makes it possible to

synchronize the radial load with the revolution of the antifriction bearing. This kind of test makes sure that the load can be raised exactly in the same position or at predefined positions using phase transformation.

For this reason it is possible to readjust failure modes from real operation in a short time.

Two-axial crank-shaft test on resonance test systems

Reduction of testing time and costs using multiaxial resonance

Usually crank-shaft segments are loaded on uniaxial resonance test systems and on biaxial hydraulic test systems.

Therefore SincoTec developed an innovative test system, which enables to load crankshaft segments on a biaxial, high-frequency and costefficient resonance test system.

The phasing and the load amplitude between the

superposed bending and torsion load can be adjusted user-defined.

Beside uniaxial quality tests, this authoring tool offers the opportunity to verify the responsivity of newly developed crank-shafts in contrast to multiaxial loads very costefficiently and quickly. Forthwith the biaxial resonance test system is at your disposal as a product or for test services in our laboratory.

top left: uniaxial resonance test systems below: biaxial hydraulic test system right: biaxial resonance test system





We have incorporated our know-how of many years and our experience being a test system producer as well as a test service provider into the third generation of our controller. It is specially characterized by the following features:

- Intuitive operability
- Compliance of all testrelevant requirements
- Up to 4 axes with one device
- Compact stand-alone controller with an innovative design
- Intelligent control algorithm, even for non-linear control paths

- -Simultaneous and combined operation of servo-hydraulic, servo-pneumatic or electric actuated elements possible
- Customer-friendly user interface
- Front panel with USB and free-available analogue signal outputs
- High sample and control rate of 10 kHz per channel
- 16 potential free digital inputs and outputs

All this results in a competitive and flexible control system, which we like to present at the Testing Expo.

Be sure

SincoTec calibration service

When have our test systems been calibrated the last time? Where are the correspondent original calibration protocols? Every quality audit brings up these questions again and again and just during this time other important projects make demand on your time. The SincoTec calibration service can support you at this point. We keep the calibration intervals of your systems in mind and fix a date with you for the calibration in due time before the next audit starts. Our service comprises, depending

on your order, the calibration with traceability to DKDstandards of the force and displacement transducers in your dynamic test machine, the inspection of the operational reliability, the maintenance of the machine and software updates referring to the recent program versions. We gladly provide advice for you regarding the different possibilities. Our head of service department, Mr. Thomas Hellmann, looks forward to vour call.

Phone: +49 (5323) 9692-529

POWER FLOW calibration



500 km/h high speed train instead of excursion train - train technology of the future

Wheelset axle test system for analyzing the crack growth (EWALD)

Modern wheelset axles, especially with respect to the ICE high speed train with tilt technology, are subject to extreme loads. Not only increasing train weights but also increasing speeds up to 500 km/h make high demands on the strength. Complex ultrasonic tests and shorter maintenance intervals result from the well-known accidents like e. g. in the main station of Cologne.

The fact, that you have to except cracks, is already known from the aircraft construction. But these cracks and their growth have to be controlled and to be detected early enough to avoid a

complete failure. For this reason SincoTec has developed a test system, which offers the opportunity to load a constant 4-point-bending on the endangered cross section of the test shaft. Amongst others, crack growth tests can be accomplished using

ultrasonic tests. Beside an innovative bearing concept, the spindle actuators are the highlight of the test system. They can raise operating loads up to 800 kN in terms of collectives, whereas the test component pivots up to 3.000 rpm simultaneously. You can

test different shaft geometries, because you can adjust the distances of the bearings. Therewith SincoTec contributes to the safety of the rail traffic involving the safety of transportation of passengers and cargo considerably.

With immediate effect this test

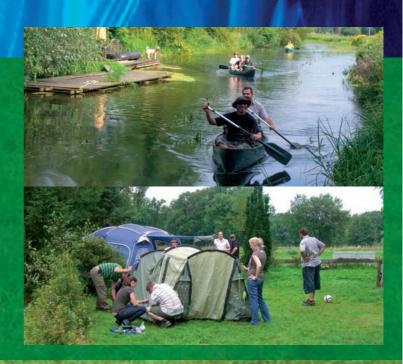


Annual works outing 2010 We are all in the same boat

Our annual works outing in summer 2010 took place according to the principle "business before pleasure". In order to cope with this principle, the construction department planned a little canoe trip on the river named Aller. After having paddled intensely for five hours, we realized that the overall length of the trip was about 20 km.

In the evening a big barbecue outweighed the hard work on the river and the impressions of the day were discussed lively far into the night sitting next to a wonderful campfire. The next morning all participants returned home after a short night, all satisfied but extremely exhausted.

We look forward to the next works outing afresh planned by a SincoTec department.



"Emma & Else are going to the pastures"

New SincoTec pets - are cows

The cooperation with the Robert-Koch-Gymnasium is rewarding. On the occasion of the inauguration of the manufactory two life-sized cows, painted in corporate art, are confided to the SincoTec team. The connection between company and location as well as the worldwide contacts of SincoTec were the approach

of the young artists to create the appearance of Emma and Else, the new SincoTec pets. In future they will adorn the entrance areas during winter time. Moreover there will be a cattle drive in spring and autumn to take them to the alpine pastures and to bring them back to the stable. This way two new festivities are

born, which can become a tradition, not only because of bear and steaks.

Transfer of Emma, the metallic machine cow and Else, the international, global cow by the highschool graduates with their teacher of arts, Mrs. Funke

Successful examination

No sweet without sweat

Once again two of our trainees from the software and electronic department realized that a surpassing effort during the time of apprenticeship is worth it.

After successful examination with consistently good results, they will continue as regular employees.





We look forward to an ongoing successful cooperation.





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