



RoodMicrotec Newsletter

Number 6, December 2013 • RoodMicrotec

The outsourcing of activities to RoodMicrotec,

with the takeover of a complete testcell, from a Siemens AG, Drive Technologies Division company in Germany is progressing well.

The necessary production facilities have already been moved to RoodMicrotec and employees are currently being trained. We are getting a very positive response from many

quarters, also for the 'Atlas' project as a whole, which is generating new discussions on outsourcing opportunities. This development might well turn out to be a key driver of

further sales growth and an improvement of our results. We are confident we will secure new contracts shortly.

RoodMicrotec expands ESD service provision

In October, RoodMicrotec took over all equipment for materials testing in relation of ESD-issues, ESD evaluation of machines & working areas and ESD training /seminar from EIB (Elektrostatisches Institut Berlin).

'This represents an interesting expansion of our service provision and certification possibilities', said Uwe Thiemann, Dipl. Ing.

- Failure & Technology Analysis and Production ESD Evaluation - at RoodMicrotec.

'For example, we can now perform electrostatic tests and high ohmic surface resistivity measurements in a climate chamber under very stable conditions (12% humidity at 23° C). Electrostatic issues often cause undefined 'real life' conditions, making the actual situation unclear. To be effective, a program designed to protect electrostatic sensitive components (ESDS = ElectroStatic Discharge Sensitive devices and components) must take account of all relevant areas - from the development, production, testing and packaging of components to their shipment and processing in equipment manufacture. All of these we can offer.

The detailed analysis we provide will pinpoint the areas where protective measures are necessary. Like RoodMicrotec, EIB had many years' experience, ensuring an evaluation which is safe and focuses on what is necessary to enable customers to safely

process ESDS components, yet avoiding unnecessary costs in providing ESD protection. It is not a major takeover, but technically it does constitute a very interesting expansion of our services.'



Climatic chamber for high ohmic measurements



Materials testing laboratory

The seminar 'defect recognition – failure prevention'

that RoodMicrotec organised on 17 October 2013 was a great success. A few weeks before 17 October the seminar was already fully booked.

In this newsletter we publish testimonials from two of the visitors.

In failure analysis, always take the entire system into account

Elisabeth Krapp from Tesat-Spacecom GmbH & Co. KG in Germany was very impressed by the seminar 'defect recognition - failure prevention' that RoodMicrotec organised on 17 October.

'It was interesting to hear about the kind of failures other companies are confronted with. I particularly liked the lecture by Peter Jacob from Empa in Dübendorf. He gave a good idea of the potential problems and how they can be solved. He emphasized that it is essential to take the entire system into account, and not just focus on one aspect. That is absolutely essential. I work for the department "Parts Agent" at Tesat. We procure Hi-Rel EEE parts both for our own factory and for external customers. Performing failure analyses on failed devices is one of our responsibilities. Analysis of the failed device itself in most cases doesn't lead to success. We have to ask a lot of questions to the people from our own

factory or to our customer respectively, to find out the conditions that have led to the failure.'

Profile Tesat-Spacecom GmbH & Co. KG

With almost 1300 employees, Tesat-Spacecom (Tesat) in Backnang, Germany, develops, assembles, integrates and tests systems and equipment for satellite telecommunication.

Tesat's product range comprises highly reliable equipment such as travelling wave tube amplifiers, multiplexers, waveguide switches and modulators, which along with complete systems are supplied globally to all leading satellite manufacturers. Tesat offers the complete communication technology necessary for example for broadcasting television signals to households through the antenna of a satellite. More than half of all communication satellites in orbit have Tesat equipment on board.

Tesat offers comprehensive testing facilities for high-frequency components and communication systems. Simulations of space

conditions, including temperature, vacuum, and vibration, are carried out with the latest equipment and with qualified processes.

With over 3000 m² of clean room space and more than 50 thermo vacuum chambers we are one of the best equipped high-technology companies in the space industry worldwide.

As Tesat is convinced that in the future global communication will only be viable with the incorporation of space-borne technology, it develops and delivers, as the first organization in the world, equipment for optical broadband communication in space. Using lasers, these terminals can transmit data and images between satellites and from satellites to earth. Advantages of laser communication are, for example, the high transfer rate of 5.5 Gbit per second (equivalent to 200,000 pages of information per second) and stability.

With focus on commercial space programs and the cooperation of military and institutional programs, Tesat realized total sales of 303 million Euro in 2012. To date the company has participated in more than 600 space projects.



Another reaction from one of the visitors was as follows.

'I received some very useful information that I can use for my company, especially the theoretical part about how to do analyses in a structured way. Also the overview of possibilities to make analyses and the information about what measurements I can use to make analyses was very interesting. This was new to me.'



Alexander Scheitza

Data accessibility strongly improved

'In the area of testing, a wealth of different test systems have been developed over the years, multitudes of test programs have been written and diverse standards have been developed, like the well-known ASCII and STDF and others.

This leads to a huge mess of data that is hard to access. RoodMicrotec has already made great progress in processing these data in one standard analytic program. In the interests of our customers, we are now making another major leap

forwards. We expect that before long our customers will be able to access standard or extended analyses through our website. They will be able, on a discrete customer part of the website, to access unambiguous analyses as

well as planning data. This will enhance efficiency by an order of magnitude', says Alexander Scheitza, RoodMicrotec's Test business unit manager.

Agenda 2014



25 - 27 February 2014

embedded world

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Season Greetings

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