Dear reader, this is the first RoodMicrotec newsletter that only comes out in digital form. We have made this choice in order to manage the paper stream responsibly, and also to save costs. In this newsletter, CEO Philip Nijenhuis briefly looks back on a year of integration and comments on the recently completed refinancing. Cees Links of GreenPeak addresses the ongoing advance of wireless technology, while CSO Reinhard Pusch reports on RoodMicrotec’s experiences at the SMT fair in Nuremberg and Andreas Meiritz tells us about his work as engineering manager of RoodMicrotec.

Finally, new supervisory directors Jan Stolker and Vic Tee sing RoodMicrotec’s praises.

A word from our CEO

Refinancing

‘We are happy and relieved that in these difficult times we have succeeded in refinancing part of our debt position (see box). Banks have become extremely cautious, but reports of the external agencies that we engaged to assess our strategy and our future prospects eventually swayed the banks in our favour.

The refinancing has allowed us to convert our short-term debt into long-term debt and has improved our cash position and reduced our financing expenses. The interest rate we pay has fallen from over 10% to 6.7%. The associated financing costs were considerable, but they have been charged to previous financial years and the first half of 2009 and will not affect future results.’

The refinancing totals €1.8 million. The loan has a duration of 5 years. Of the total amount, €0.5 million will be in the form of a current account. The principal of €1.3 million will be repaid in half-yearly instalments between 2010 and 2014. A fixed interest rate of 6.7% has been agreed for the full amount.

Integration

‘Looking back on the past 12 months, we can say that the integration of Rood Technology and Microtec is going according to plan.

Financial years and the first half of 2009 and will not affect future results.’

Although the process has been affected by the recession, we expect to complete the integration at the end of this year.

All the individual business units (qualification, failure & technology analysis, test engineering, test, supply chain management and logistics, as well as human resources management, purchasing, financial control) now have just one manager for all locations; staff has been reduced by 20%-30%.

We are continuing to work on optimising the organisation without losing track of the human side of the process. After all, our employees are the foundation of the entire organisation. It is a difficult process, but generally speaking the employees and works councils have responded positively to our initiatives.’
Andreas Meiritz (42) joined the company in January 2008 as general manager in Dresden and is now also engineering manager, and responsible for test engineering at all sites of RoodMicrotec.

Andreas explains that test engineering involves a complete package of testing solution, developing test programs and test hardware. ‘Test engineering enables the testing business. It is like the hammer you need to sink a nail. And each kind of nail needs a specific hammer.’

He enjoys working for RoodMicrotec because the company brings together all the specific knowledge in the semiconductor industry, enabling it to offer a complete range of services (test engineering, qualification and failure & technology analysis) and even complete supply chain management. This has recently resulted in a brand new consulting service, EMS consulting (see newsletter issue 3 of December 2008).

‘As there are many new products and many new applications, every project is a new challenge. Our markets are in the automotive, medical and communication industries. The project we did in tandem with GreenPeak is an example of the latter.

Wireless communication in control and automotive networks is currently the fastest growing business. It is interesting for us, because it requires special qualification. You may not realize it, but a car has several networks, such as communication, navigation, climate control and safety, with sensor interfaces collecting data from a range of sensors and sending them to a computer or a similar device. For example, data on tire pressure are collected, so that when the pressure is low, the driver is alerted. In case of danger, the ESP system is activated to keep the car on the road.

Another interesting business for us is the aerospace business, where we have to qualify according to ESA’s high standards.’
RoodMicrotec was one of the exhibitors in Hall 6. ‘Although there were fewer exhibitors and visitors than last year, the exhibition was successful for us as a platform to promote optoelectronics and to generate lots of free publicity,’ said Reinhard Pusch, CSO of RoodMicrotec.

‘During the show we announced that all RoodMicrotec labs are now certified according to ISO/IEC 17025. This means that all qualifications, failure analyses and measurements performed in our labs are in accordance with ISO/IEC 17025, the standard set by DAR (German certification body). This is a very important standard for testlabs, so we are very pleased with this certification. We had a press conference with some trade journalists, a well-attended presentation on failure analysis of LEDs and a seminar by Uwe Thiemann on ESD damage (see also our newsletter of June 2008), also attended by a considerable number of people. And above all, it has led to some 30 new contacts. So all in all we look back on a good event.’

The results in short:
- 26,500 sqm exhibition space
- 553 exhibitors
- 38 represented companies
- Approx. 22,000 trade visitors
- 335 conference attendees

The 2009 SMT/Hybrid/Packaging show was held from May 5 to 7 in the Nuremberg trade fair centre, Europe’s no.1 special interest event for system integration in microelectronics. From design and development to PCB production, components, packaging and test systems, SMT/HYBRID/PACKAGING offers comprehensive and compact product presentation. The focus of this year’s show was the manufacturing of electronic components on flexible printed circuit boards.

The EMS focus was highlighted at the VDI/VDE-IT joint booth in Hall 6, demonstrating innovative approaches for PCB development as a basis for complex electronic systems. The rapid developments in communications technology are driving miniaturisation and embedded components leading to more integrated PCBs.
GreenPeak: wireless & green communication technology

GreenPeak is a fabless semiconductor, module and software company offering green ultra-low power wireless communication technology for sense and control applications.

‘As a fabless company we work with a number of different partners. We have a partner in Taiwan that produces chips, one in China for packaging and for testing we work with RoodMicrotec. Over the past year we have worked together to create a test environment capable of testing large volumes of chips in a short time. We have now successfully completed this project,’ says Cees Links, CEO of GreenPeak.

‘After computers and telephones, we are witnessing the arrival of a new wave of wireless technology,’ he continues. ‘The ZigBee standard (see box) that we work with allows various applications to be linked together and operated online. This opens up a range of applications in the home, in building automation, in logistics and the manufacturing industry. For example, you can operate security systems, fire alarms and environmental controls in buildings remotely and wirelessly. In logistics, chips in pallets can gather data on damage and on high and low temperatures during transit. In the home, you can open and close curtains, set the heating level and lock doors wirelessly. All this can be done with one remote control. It will become just a part of life as remotely locking car doors.

The big advantage of this technology is its extremely low power use and a tenfold reduction in battery use.’

The ZigBee Standard

A specification of a set of high level communication protocols using small, low-power digital radios based on the IEEE802.15.4 standard for wireless personal area networks (WPANs), such as wireless headphones connecting with cell phones via short-range radio. The technology defined by the ZigBee specification is intended to be simpler and less expensive than other WPANs, such as Bluetooth. ZigBee is targeted at radio-frequency (RF) applications that require a low data rate, long battery life, and secure networking.

Further information:
www.greenpeak.com

GreenPeak powers wireless greenhouse of the future.
Jan Stolker, who joined the supervisory board of RoodMicrotec on 26 March 2009, is very impressed with RoodMicrotec’s highly specialised technology.

‘It is remarkable to see how the company has transformed itself over the years and cut out a new role for itself by a continuous specialisation on higher valued services. Next to its position as leading chip tester the company carved out positions in areas such as microchip design and failure analysis. In that sense, the merger between Rood and Microtec has also been a positive step.

The two companies are a very good fit in terms of technology, and you see a shared culture emerging: one solid company in the heartland of industrial Germany. The broad basis in Germany, the foremost technology exporter in the world, offers great international potential. It has gained a very strong customer base, not due to big volumes, but by focusing on servicing niche markets. The resulting strong customer loyalty has made RoodMicrotec a major player for its high-tech customers. All the ingredients for success are in place.’

Furthermore, Jan Stolker specialises in governance models, and is program director of the post-doctorate course for supervisory board members at Erasmus University of Rotterdam.

RoodMicrotec and Millennium Microtech offer a ‘one-stop shop’ service

Vic Tee (1943, British) is currently president and CEO of the Millennium Microtech Group with which RoodMicrotec signed a strategic alliance for the supply of integrated solutions for semiconductor testing and back-end services (assembly) in 2007. Millennium Microtech is a high-tech qualified company, certified to the stringent ISO/TS 16949 standard for suppliers to the automotive industry. Vic Tee is also CEO of FlipChip Millennium Shanghai (FCMS.) He has very broad international experience in the semiconductor industry and has previously held senior management positions with companies including The Philips Group of Companies Thailand, Philips Semiconductors Japan, Siliconix and Philips Components (UK).

Vic Tee, who joined RoodMicrotec’s supervisory board on 26 March 2009, hopes to be able to give RoodMicrotec valuable advice with his long experience in the semiconductor industry and his extensive network.

‘RoodMicrotec is very attractive for start-ups and fabless design houses. They don’t have all the resources needed and have difficulties with how to deliver into the market. RoodMicrotec offers a lot of experience, a good network and resources, especially since the merger. They were clearly in need of each other, they are very complementary and together they can create a lot more terms of potential. Thanks to the strategic alliance with the Millennium Microtech Group they also offer a ‘one-stop shop’ service for the entire back-end supply chain. This alliance is a good example of a win-win situation. Millennium Microtech offers volume at low costs. RoodMicrotec represents Millennium Microtech in Europe. I see Millennium Microtech as ‘third arm’ and together we should be a very attractive business partner.’