



Readjusting the Screws

In automation technology, there's a lot in motion. On the one hand, technologies are emerging that promise providers of new business models and users additional options. On the other hand, the sector, as a pillar of the manufacturing industry, faces various challenges. At the center of this change, SIGMA TEK has experienced a generational transition. SPS-MAGAZIN inquired with Chief Executive Alexander Melkus on how this rejuvenation in the upper management has affected the strategy and technology roadmap of the company.

SPS Mr. Melkus, you've been a member of SIGMA TEK's executive management since 2017. At the beginning of the year, a generational transition has now reduced the executive management team from four to two.

Alexander Melkus: Correct. Not only has Theodor Kusejko stepped down from management. My father, Andreas Melkus, has stepped back from his active role as Chief Executive. You can say that I'm following in both of their footsteps. That means I have taken over the entire area of engineering and development from my father. Since the start of the year, purchasing and production were added – the areas for which Theodor Kusejko was responsible. Supporting me as always, Marianne Kusejko is head of finances and HR.

SPS That sounds like an enormous task, Mr. Melkus. Is that at all manageable in a personal union?

A generational transition is always a good time to reflect: Is the company still state-of-the-art or future-oriented? When in doubt, what changes or investments are needed? We have addressed these issues in detail and subsequently adapted or – where necessary – redefined the structures in the company. In production and purchasing, I'm supported by experienced managers. The current

market situation, i.e. the tension between increasing orders and component shortages, gives these two areas particular significance. Our customers and suppliers are working even closer with us.

SPS How does it look in the development at SIGMA TEK? Were there also changes?

Yes, there was significant restructuring here as well. For example, we updated the entire drive development area with modern processes and integrated them throughout the engineering.

SPS For automation providers, modern engineering also increasingly relies on software expertise. Is there also a generational transition for SIGMA TEK on this issue?

Previously, the focus of automation providers was on the hardware. After all, that's how they earned their money. Providing the software free of charge was a unique selling point for SIGMA TEK to stand out from the major providers. That's how the company was shaped by my father, and in a way, I was too. At the company, this strategy has been changing for some time.

” Due to the tension between increasing orders and component shortages, our customers and suppliers working even closer with us.

Alexander Melkus, Sigmatek



Instead of specialists who were solely focused on a technological aspect and the appropriate development step, we now focus on understanding the application. The expertise of our drive developers thereby broadens.

On the one hand, the margin on the hardware side is sinking because production costs are continuously rising. On the other, the functionality of the software is continuously increasing. We are adapting to these market changes and are focusing more on software license solutions for specific functionality and for hardware-independent software, which is steadily growing.



Driven by ongoing digitalization, this trend will continue. Our control software for automated guided vehicle systems, which we recently introduced to the market and our SLAM navigation solution, which is currently at the starting gate, are good examples of this.

performance spectrum. Aside from that, our portfolio is complete and well-

“ We’re giving up neither our in-house software nor our hardware. Our core know-how remains in hand.



Alexander Melkus, Sigmatek

SPS In addition to standard automation products, SIGMA TEK has many customer-specific designs that other automation providers don’t offer. Is that also a strategy for the future?

Normally, we serve customers from our standard product portfolio. SIGMA TEK’s strength is creating a customer-specific version from standard technologies, which is integrated into the tools like a standard product. I see this as a clear unique selling point from SIGMA TEK for the future.

SPS In automation, there are increasingly more partnerships being formed. Would that be something you would consider?

That would certainly be conceivable. But for the moment, only in drive technology in order to cover a broader

rounded. With this approach, we are – relative to our size – meanwhile clearly an exception. Since the technology in the automation and drive sector has become so complex, it no longer pays off for most companies to develop everything themselves. And they regularly come to us with related questions – on safety, drives or handheld operating devices for example. Mostly even considerably larger companies. As a solidly positioned family business, we are not necessarily dependent on particularly strong growth, either in terms of sales or product portfolio.

SPS **So the broad technological depth at SIGMATEK has paid off?**

Absolutely. In view of our core expertise, that will also stay the same – on the hardware as well as the software side. That's why we will give up neither our in-house operating system nor our tools. The same naturally applies to the controls and drives. We keep our core know-how firmly in hand. Even for the I/Os, which is ultimately all about the form factor and not the technological aspects, in-house development has always paid off in our view.

The Linux OS for our new web panels provides the user with this freedom.

SPS **To return to the beginning of our conversation and your role as chief executive: Where do your personal priorities lie for the near future?**

As already explained: Following the general technological trend in automation, I want to orient SIGMATEK more toward software. The hardware of course will further evolve in parallel, the majority of new features however, will be software-based. We see the greatest

We will finally be introducing our modular, highly compact multi-axis servo system MDD 2000 live at the exhibition for the first time. The goal of many machine builders is to bring the power electronics close to the motor and thereby reduce the wiring. The more compact the drives are, the easier it is to decentrally integrate them into the machine. We considered that when designing the MDD 2000 so that this generation has a significantly higher power density. With our system, we also support additional safety functions to provide machine builders with even more Safety free of charge.

Web visualization is increasingly finding its way into production halls. SIGMATEK has therefore expanded its web-panel series and with the HTML5-based HMI tool LASAL VisuDesigner, we were able to make a huge jump in providing more user comfort in the software. New controls such as Data Logger, Interpreter or Views are examples of this. Additionally, we are introducing a manufacturer-independent software solution for intralogistics to the market. The Traffic Control System, TCS in short, is an open AGV fleet management system. It enables the integration of autonomous mobile robots, so-called AMRs, regardless of their brand, into common automated guided vehicle systems as well as their connection to the surrounding IT and automation systems. For communication between the vehicle and master control, the standardized interface VDA 5050 is used. At the SPS we will be presenting the newly developed real-time localization software SlamLoc for the first time. This revolutionizes the way AMRs handle changes in their environment with contour-based navigation.

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Alexander Melkus, SIGMATEK



SPS **What is happening in functional safety?**

Safety functions are meanwhile an integral component of our product portfolio. Combined with the S-DIAS safety control, many motion-relevant safety functions can be implemented. The safety control has done very well on the market as a stand-alone solution. With Safety Hot-Swap, we offer machine builders additional flexibility.

potential for the software in the programming tools to simplify coding and thereby achieve goals faster. Apps that can be integrated into machine applications individually are an essential instrument for this purpose. In addition, our widgets, templates and Add-Ons simplify creating programs enormously. Generally speaking: SIGMATEK will continue to be a trend and technology driver. SIGMATEK has long positioned itself with the promise to keep the applications as lean as possible. And in the future, we will improve upon this unique selling point.

SPS **Let's revisit this generational transition. The industry is talking about open concepts for automation more than ever. How is SIGMATEK positioned on this topic?**

The SIGMATEK system provides standard interfaces such as OPC UA and widely used field bus protocols to communicate with other systems. We will continue to follow the philosophy of providing a self-functioning ecosystem for real-time relevant control tasks. In the non-real-time sector, the trend is moving towards being open for manufacturer-independent apps to use Linux on the control platform, for example.

SPS **The SPS is finally live again. What innovations will SIGMATEK be presenting this year in Nuremberg?**

For our automation solutions, the following applies: Flexible in design. Smart in the application. Fittingly, we have three main topics at SPS 2022: Drive technology, HTML5 visualization and the previously mentioned manufacturer-independent software for AGVs and AMRs.

The interview was conducted by



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