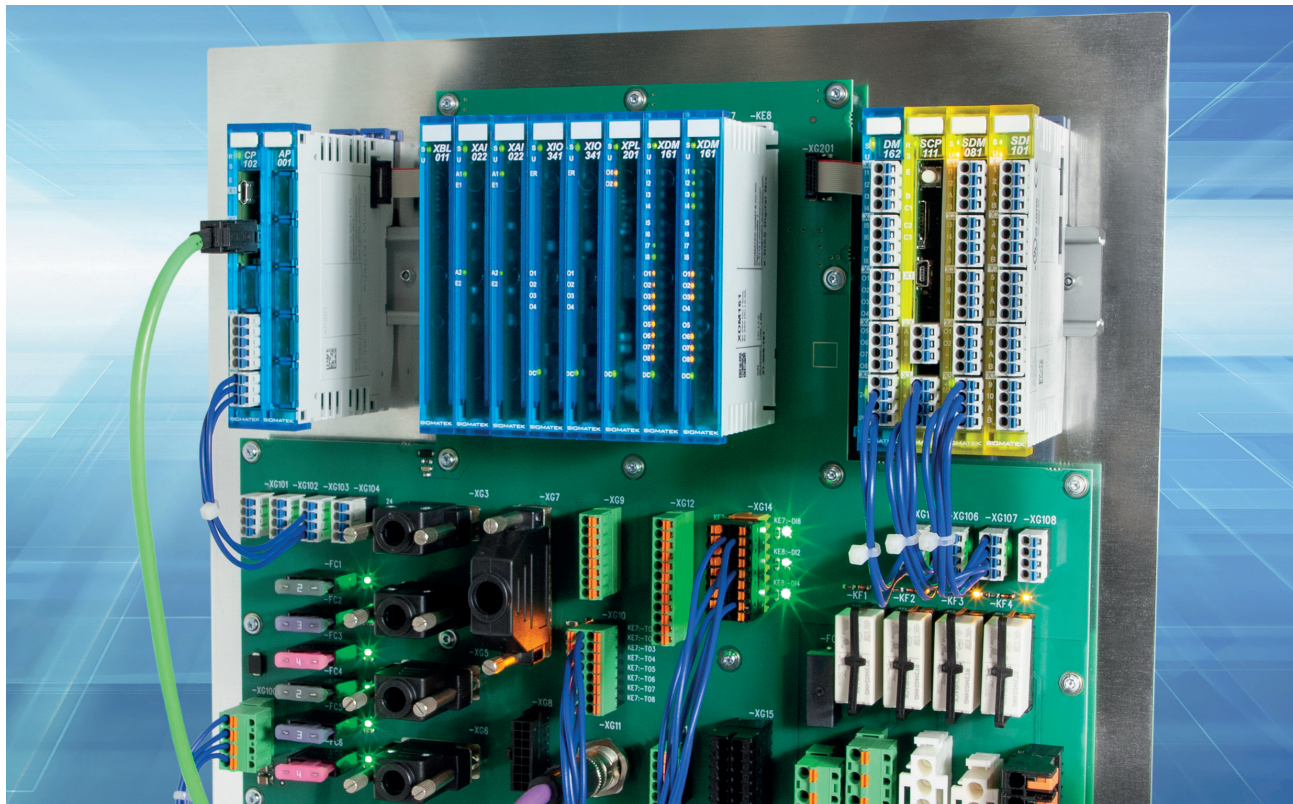




► With the new X-DIAS, SIGMATEK has succeeded in combining standard and customer-specific components in a single product.

Alexander Melkus about the positioning of SIGMATEK as an automation specialist

Standard or Customized? Both!

SIGMATEK has been offering a broad standard portfolio for automation for a long time. "However, the company's beginnings are in customer-specific solutions," says Alexander Melkus. In the interview with SPS-MAGAZIN, the managing Director Alexander Melkus explains why these are still an important part of SIGMATEK's signature today, and how the company has succeeded in combining both approaches – standard and customer-specific – in one product just in time for SPS 2024.

SPS As a medium-sized automation company, SIGMATEK addresses the market with a wide range of CPUs, I/Os, safety and drive technology. How do you differ from other providers, Mr. Melkus?

Alexander Melkus: Simply because of our self-understanding. It says: We are not afraid of any application. Apart from one restriction: It needs to have a

certain level of complexity. Our automation platform cannot utilize to its strengths and full potential in very simple applications without a series character. Within this framework, the user has a wide range of hardware components and modules at their disposal. These are completed by extensive libraries of digital function and technology modules, so that the

user can immediately start developing applications. In short, we make it possible to solve complex applications easily.

SPS How does that work?

Our LASAL development environment offers ready-made modules for sequence and motion control – i.e. virtually ready-to-use application parts – that significantly reduce engineering effort. These include CNC or kinematics modules, for example,



which only need to be configured for the specific application. For visualization an extensive library is also available, making it easy to create a modern user interface.

All in all, the machine builder is able to combine control system development with drive design and machine operation at an early stage in the engineering process.

SPS What about Safety?

In this area we also differ from the typical offerings on the market. Our safety controller can be used standalone or seamlessly integrated into the control system. This approach makes it extremely easy for the user to implement the relevant safety requirements. Especially when it comes to more demanding safety functions.



Most market competitors rely only on their standard portfolio. What the user doesn't find in it, he doesn't get. That's different with us.

**Alexander Melkus,
Sigmatek**



Moreover, we have now also integrated the drive technology directly into our safety solution. Again, using an approach that is atypical for the

market. Because basic functions such as STO or SS1 take place directly in the drive. Monitoring functions are implemented in combination with the safety controller – and the corresponding parameter sets in the drive, which significantly simplifies handling. In all cases, it is also ensured that neither the safety controller nor the standard PLC need to be unnecessarily overloaded.

SPS In general, how fine grained is the automation platform of SIGMATEK?

The range of I/O modules in our standard modular system extends from two to around 20 inputs and outputs. The range on the CPU side is similarly broad. It is important to us that the user can already solve extensive applications with a simple



single-core ARM CPU – including interpolating axes. Our range then increases in line with complexity, from ARM dual-core processors to Intel platforms. In terms of the cost/benefit ratio, we always have a suitable solution. SIGMATEK also thinks very modularly on the drive side. However, if you move away from our standard modular system towards our customer-specific range, there are almost no limits.

SPS What exactly does that mean?

If you consider where the company comes from, then this is one of our greatest strengths. Initially, SIGMATEK focused on perfectly fitting solutions for series machine construction – in other words, on customer-specific developments. Our modular system then developed relatively quickly from this. However, SIGMATEK has retained its expertise in tailoring automation solutions to customer requirements from the very beginning. In a nutshell: customer-specific is still an essential part of our signature. At sps Nuremberg 2024 we will be demonstrating this again.

SPS A finely granular standard portfolio and at the same time maximum flexibility to meet customer requirements: Isn't that a great balancing act for a medium-sized company?

Most market competitors rely only on their standard portfolio. What the user doesn't find in it, he doesn't get. That's different with us – and an important way to set ourselves apart. Even if we have to master a balancing act and get very close to the customer's application. Consequently, SIGMATEK does not have a catalog sales force, but a consulting sales team with technically highly qualified employees. The development team and the support team that assist the sales department are also exceptionally strong.

SPS Does this mean that you set up completely new solutions for your customers?

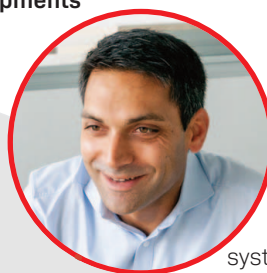
We do that when needed. The

spectrum ranges from modified standard components to completely new developments – whether hardware or software. However, in most cases, customer-specific development is just a part of the solution. In most cases, the package also includes automation technology from our standard modular system.

SPS Do you sense trends for or against customer-specific developments on the market?

SIGMATEK is generally very focused on machine manufacturers that are market leaders in their segment.

Alexander Melkus,
Sigmatek



SPS Speaking of Innovation – what SIGMATEK highlights can be seen at the sps?

In Nuremberg, we have further developments from all areas of our portfolio – on hardware and software side. The highlight on the hardware side is certainly our new X-DIAS system. After the sneak preview last year, the feedback from visitors and clients was so good that we have now made the solution ready for series production. We will also be presenting innovations that round off the portfolio in various areas, e.g. new web panels or servo amplifiers for the compact S-DIAS DIN rail system, which have been supplemented by absolute encoders. On the software side, we will be presenting various enhancements to the LASAL engineering environment as well as new interfaces to external tools, digital twins and higher-level systems. Our visualization software and the solutions for the navigation of AGVs and AMRs have also been further developed.

SPS What is X-DIAS all about? The replacement of S-DIAS?

Absolutely not. It's a complementary system – but one that clearly focuses on our customer-specific orientation. X-DIAS modules can be easily integrated into the OEM design of circuit boards – this saves wiring time and costs. The customer can add the features required for their specific application to the embedded board as they wish. In this sense, with X-DIAS we have ultimately succeeded in combining standard and customer-specific components in a single product.

The interview was held by



Mathis Bayerdörfer,
editor-in-chief

