

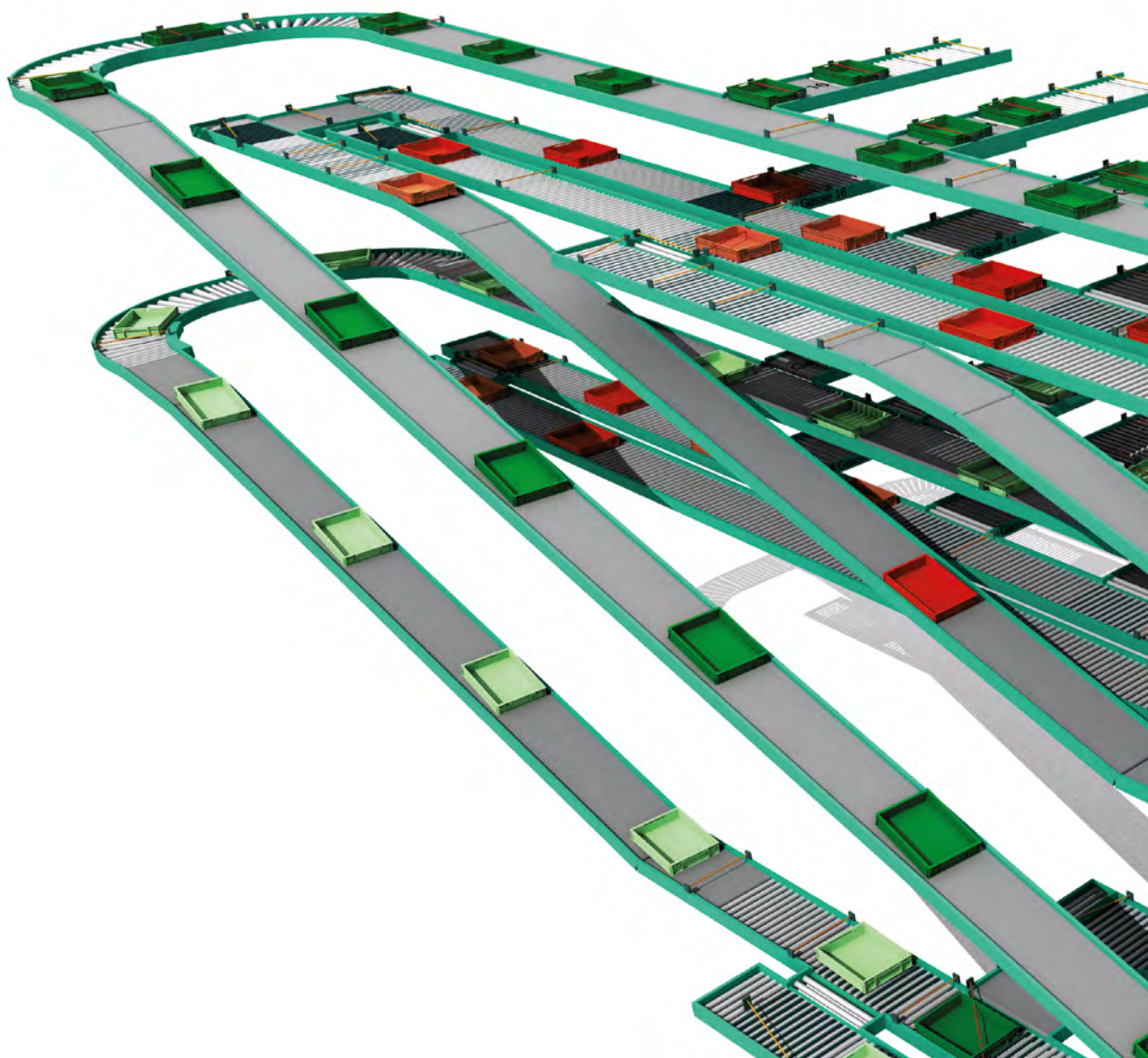


# Making things work



Automation Technology  
Solutions for your Business

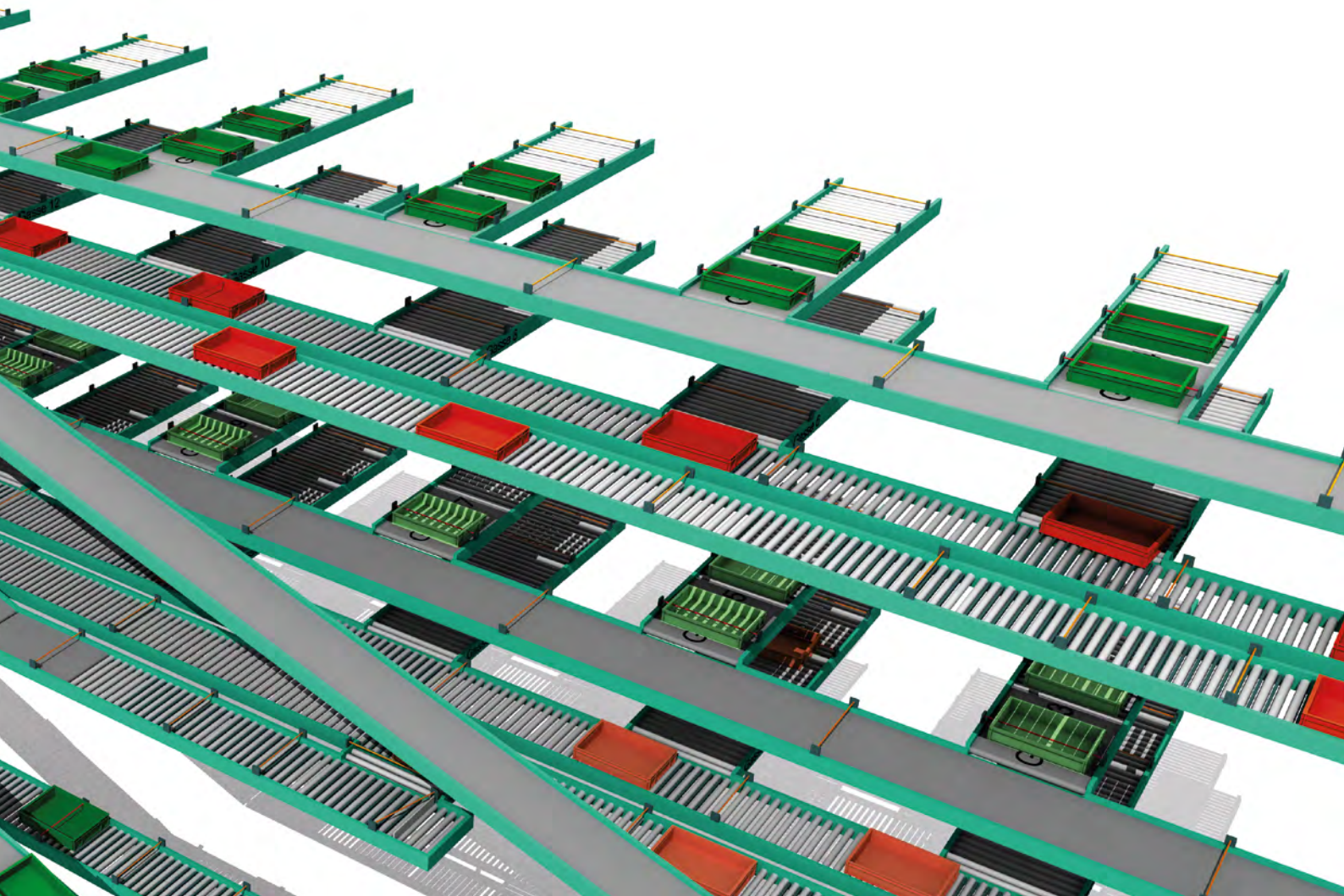
Everything runs  
smoothly with us





Sit SteuerungsTechnik GmbH specialises in the development and installation of control systems for conveying machines. With about 170 employees we implement customised solutions for famous international intralogistics companies.

Our focus is on control systems for baggage handling systems, goods distribution centres and package sorting systems. Our customers benefit from comprehensive solutions – from planning and developing the control system through installation and commissioning up to service and maintenance.



# “We stand for quality at all levels”



Robert Strobel,  
Managing Director  
Sit SteuerungsTechnik  
GmbH



**Mr. Strobel, you offer everything from one place solutions. What does this mean?**

Everything from one place is actually our motto when it comes to control systems for baggage conveying systems, goods distribution centres and package sorting systems. In practice this means that our customers benefit from comprehensive solutions, from the technical and functional design, through the electrical design, control cabinet construction up to software development and commissioning. And obviously, when the system is up and running, we provide seamless, all-round service and regular maintenance.

**Your customers include Amazon, DHL, Nike or large international airports. The requirements must be very different for these companies. How do you deal with them?**

Our solutions are obviously tailored to the specific requirements of the respective customer. Extremely demanding, tricky tasks are no problem for us but a challenge that we are pleased to take up. Because in this way we build up our expertise and further develop our own standards using these solutions. In this way our customers have a double benefit: On the one hand they will have customised solutions and on the other hand these solutions are based on sophisticated, tried and tested standards.

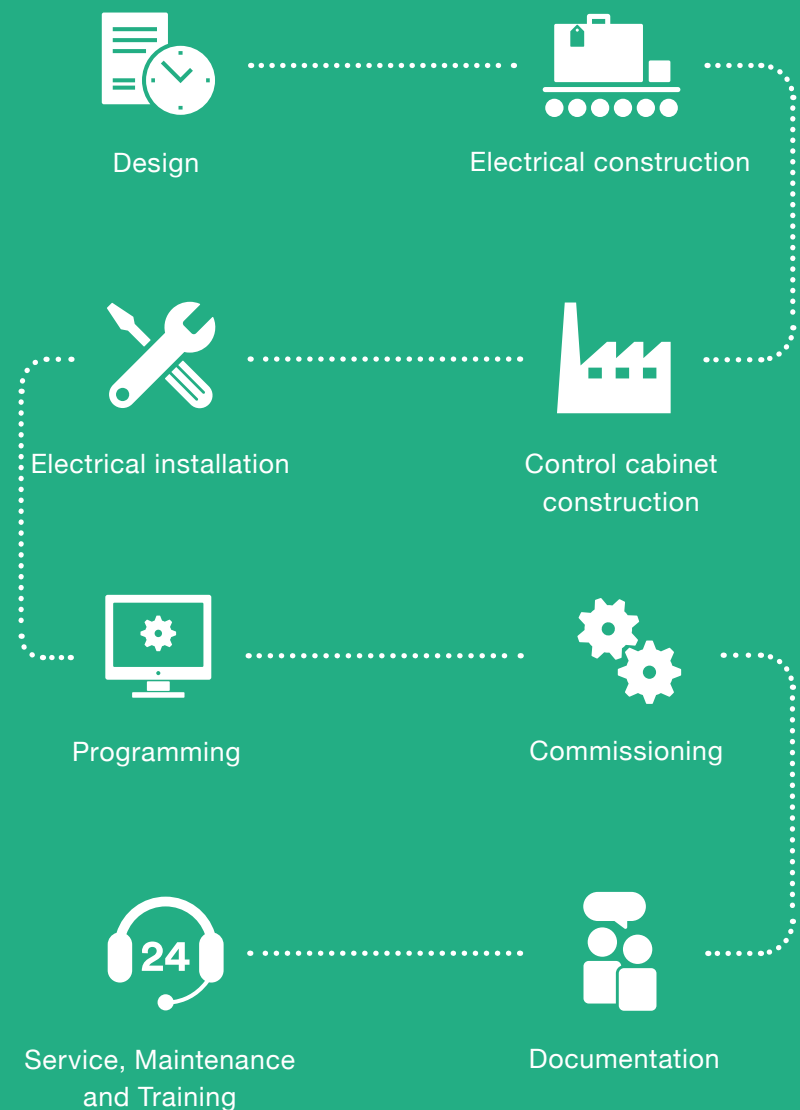
**Going beyond the technical side, is there an overriding corporate philosophy?**

We stand for quality. Not only in our solutions and products but at all levels: in our customer relations, in collaboration with our partners and last but not least, of course, in our corporate culture too. Our company is characterised by flat hierarchies, a great deal of leeway and outstanding development opportunities. We provide our staff with exciting tasks in which they can play a full part and implement their own ideas. At the same time nobody is left alone in our company. In fact a pronounced team spirit prevails here. Because we know that: only with committed, motivated staff can we honour our quality promise.



# Everything from one place

From the design, through the electrical construction, control cabinet construction and software development up to commissioning and service and maintenance. We offer our customers the full range of services when it comes to control systems for baggage conveying systems, goods distribution centres and package sorting systems.



## Milestones – The history of Sit SteuerungsTechnik

**1971** The engineering practice, Gruennagel, Zoller + Partner, founded

**1977** The company changed its name to Sit SteuerungsTechnik GmbH based in Ettlingen near Karlsruhe

**2008** A second site opened in Schönaich in Schwabia

**2011** Sit SteuerungsTechnik GmbH becomes a subsidiary of the Dirks Group



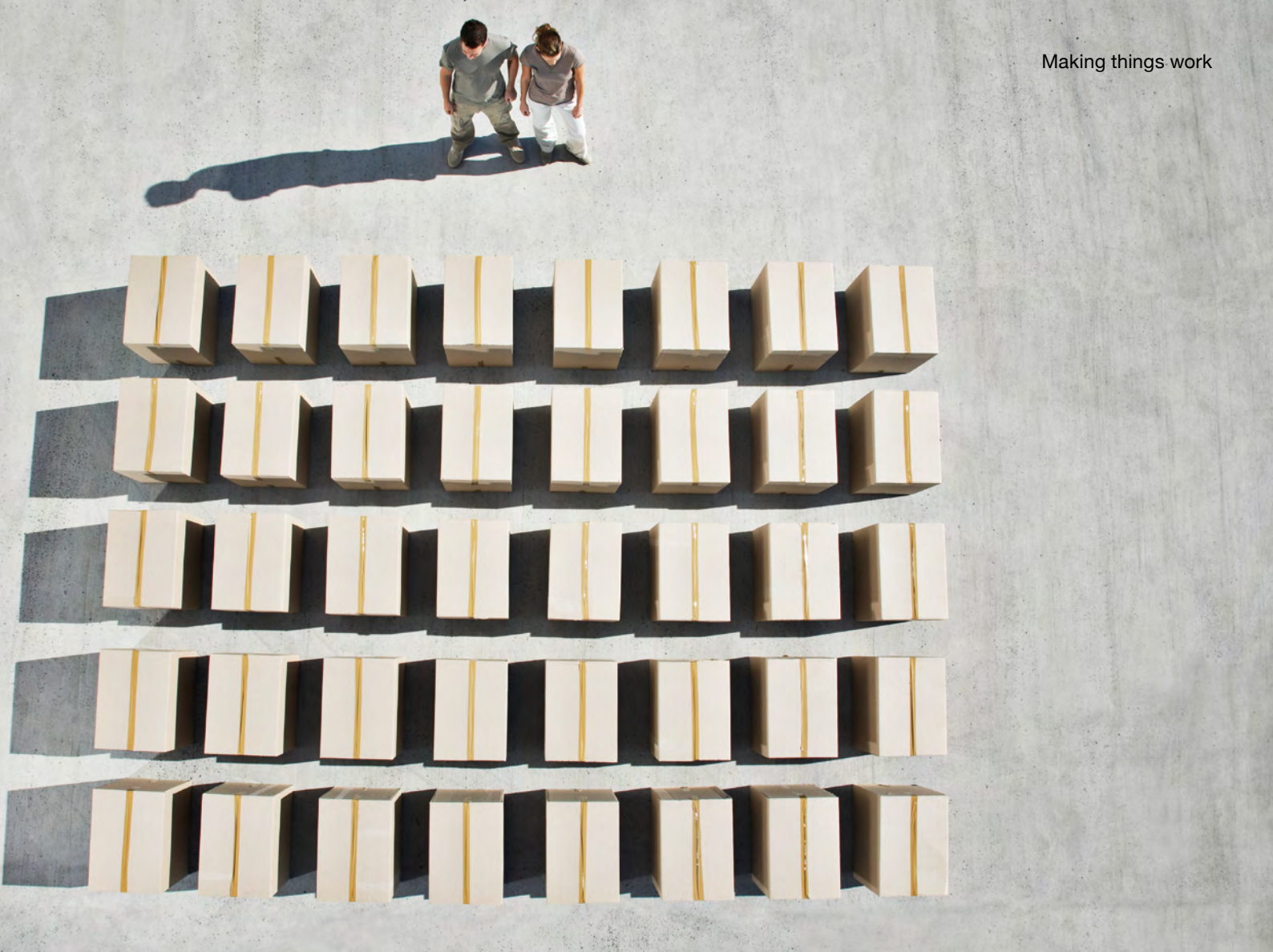
## Tasks of the project management team

- Planning and controlling projects
- Monitoring the project progress in terms of time and costs
- Agreement and communication with the customer
- Coordination of the teams involved and definition of the interfaces to adjacent subsections

# “From design to commissioning”



As project manager, Steffen Klein is responsible for implementing projects right on target, technically, on time and financially.



The project management team is the first contact for customers. Project managers agree the control solution with the customer and provide a smooth implementation, from design up to commissioning.

“I must be flexible in my job so that I can switch quickly between the different projects that I am in charge of,” Steffen Klein describes one challenge of his job. As the project manager, Klein is the most important contact for customers. First of all he agrees the control solution with the customers to select suitable components, to define interfaces and clarify further details.

And even in the other project phases Steffen Klein and his team colleagues take the lead. “From the start of the project until it is handed over to our service team, we are responsible for implementing projects in accordance with the contract, technically, on time and financially.”

This involves a large number of topics that Klein values in his job - whether it is electrical construction, software creation, electrical installation, commissioning, scheduling, staff management or procurement.

Klein was in charge of a project for the Swiss e-commerce supplier, Digitec Galaxus AG where an existing facility was extended to become a logistics centre. In all, the Sit team installed 15 control units and about 4000 drives within 18 months. “Such a project means a great deal of responsibility,” stressed Klein. “However, at Sit I have the necessary freedom to control it successfully.”



## Tasks of the E-layout team

- Creating and working on the electrotechnical layout
- Internal company support for all e-layout issues
- Compiling the construction site plans
- Writing and providing electro-technical documentation



# “Each system is unique”



Monika Bräuer is the leader of the e-layout team. Together with her colleagues, she compiles and works on the electro-technical layout for conveying systems. “Each system is unique even within the individual business units,” declared Bräuer. “Consequently we compile each e-layout individually for the relevant project.”

One example of this is the sorting system in Terminal 2 of Hamburg Airport, which was completely replaced after 25 years of operation. “The particular challenge for us is that the system was converted while it was still running,” reported Bräuer. Therefore the interaction with the other Sit teams must work quickly and smoothly.

At Sit the team leader values particularly being able to work on her own. “Here we have a great deal of leeway and can perform our work independently and under our own responsibility,” stressed Bräuer. “There are simply fewer rigid forms and formal processes than in large companies.”

**As the e-layout team leader, Monika Bräuer is responsible for compiling and coordinating the system plans correctly.**





# “We have a plan“



Christian Preiß is a member of the electrical construction team. Together with his colleagues, he compiles the wiring diagrams for the control cabinet construction and the installation of the electrical system.

The e-construction team's work is over when a system's design has been compiled and agreed with the customer. Using the functional specifications, Christian Preiß and his colleagues prepare the wiring diagrams for the control cabinet construction and electrical installation with the EPLAN or ELCAD CAD solutions.

“Finally we prepare the plans for the PLC control unit, electrical installation and e-layout teams”, declared Preiß. The electrical construction team is also responsible for material management: “We schedule the dates for making the individual components in the workshop and pass the parts lists on to Purchasing.”

For Christian Preiß, flat hierarchies and constructive collaboration, these are the great assets of his work at Sit as well as the ground breaking technologies. “We have a great deal of contact and exchange of ideas with the other departments for the projects,” said Preiß. “Everybody knows everybody else and everybody helps everybody else which contributes to a cooperative atmosphere.”

## Tasks of the E-construction team

- Compiling the wiring diagrams with EPLAN or ELCAD
- Automatic generation of the wiring diagrams for control cabinet construction and electrical installation on site
- Compiling testing and measuring logs in accordance with the respective standards in force

Team leaders amongst themselves: While Kurt Weisenburger, as the electrical installation team leader, ensures that everything runs smoothly at the construction sites, Lutz Auerswald and his team are responsible for control cabinet construction.



Kurt Weisenburger travels a lot and, almost in passing, is getting to know the whole of Europe. The master electrical engineer has headed up the electrical installation team for about 13 years and has already been present on many construction sites. “We not only coordinate the Sit teams but also all subcontractors,” explained Weisenburger. “In addition we ensure that deadlines are kept to, we are responsible for material management and arrange things with the customer.” When the system is ready, the site manager coordinates commissioning and performance and acceptance tests.

“We don’t have any standard projects because we have many large customers who place specific requirements on our control units,” reported Weisenburger. “This gives us the opportunity to manage demanding projects using state-of-the-art technologies.” One example of this is the Amazon logistics centre in Darlington, North East England. The Sit team’s task was to design and install the control system for the whole system from goods inward up to goods outward. “In order to implement such a complex project the working atmosphere must be right and collaboration must work.”

The control cabinet construction team is closely interlinked with the electrical installation team. Mass produced or custom made - Sit SteuerungsTechnik control cabinets come from our own production facility. “In this way we ensure that assembly and wiring comply exactly with the specifications,” emphasised the team leader, Lutz Auerswald. And his team is also responsible for quality control. „We test cabinets and housings in accordance with the defined standards.”

At the end of 2015, Auerswald was recruited as team leader for control cabinet construction at Sit SteuerungsTechnik. Previously the master industry electrical engineer had already worked as a team leader for several years. At Sit he particularly values the commitment to innovation and the family working environment. “We use state-of-the-art technologies and machines, which makes mechanical work easier. In addition, we make rapid decisions through short chains of command.”



## Tasks of the electrical installation team

- Site management including material management and monitoring deadlines
- Installing the control system and wiring the system
- Testing the electrical installation in accordance with currently applicable standards

Making things work

# “We don’t have any standard projects”

Sit’s electrical installation team installs the control system and wires the customers’ systems. Here site managers not only ensure the quality of the work. They also ensure that all components are available on time and the systems can be brought into operation at the right time. The control cabinet construction team manufactures the cabinets, either mass produced or custom made.

## Tasks of the control cabinet construction team

- Assembly of the control cabinets and wiring the components
- Manufacturing the control cabinets either mass produced or custom made
- Testing the control cabinets in accordance with currently applicable standards






## Tasks of the PLC control team

- Developing the PLC software with Siemens, Bosch or Beckhoff control units
- Supervising complete customer projects – from compiling the design to commissioning
- Inhouse commissioning on the virtual model (3D emulation)
- On site commissioning and detailed coordination with the customers

“Like a  
LEGO kit”



The PLC control team develops customised PLC software solutions for the customers' systems. The software is tested with a virtual 3D emulation before it is commissioned. The SCADA team is responsible for the system's visualisation which enables the operating staff to manage, control and analyse the system.

“Our job as the PLC control team is to replicate the system in question in terms of control using the relevant programme library,” explained Frank Hauer. “I like to compare it with a LEGO kit, from which you pick out the right bricks to assemble something.” The 41 year old started at Sit as a PLC programmer. Now he manages programming teams that involve up to 25 members for major projects, such as for Amazon. Apart from coordination and quality control, testing is an important task: The PLC control team subject the control units to exhaustive tests before they are implemented at the customer's.

The SCADA team, of which Cristina Naumann is a member, is closely associated with the PLC control team. “We are responsible for the web-based SCADA with which we monitor and control our systems,” explained the SCADA specialist. They both value the flat hierarchies at Sit, the exceptional team spirit and the opportunity to work with state-of-the-art technologies. The size of the company is also a great asset for Frank Hauer: “We are big enough to manage many large and smaller projects at the same time but also so manageable that you know all your colleagues personally and do not feel as if you are just a number as in many large companies.”



## Tasks of the SCADA team

- Creating control station visualisations for controlling and monitoring systems
- Displaying the statistics data for analysing the system and diagnosing malfunctions
- Coordinating, testing and commissioning the systems in collaboration with the PLC control team

PLC specialist, Frank Hauer and SCADA expert, Cristina Naumann, develop PLC programmes and SCADA systems for Sit control solutions. Apart from programming and testing, coordination with customers on site is also part of their tasks.



Operating instructions, manuals and training documents – Sit SteuerungsTechnik also provides its customers with all the materials required for operating a system. The documentation team is responsible for compiling these materials. “Every system that we implement is unique and described to suit each project,” explained Elke Salzner, technical editor in the documentation team. As well as full documentation of the control systems, including clear operating instructions, Salzner and her colleagues compile documents for training the customer’s staff on site. “As our projects are based all over Europe and even beyond, we control the translation of all documents into the relevant national language,” reported the technical editor.

Salzner particularly values the open atmosphere in the company in her work: “At Sit, commitment and technical ability counts for more than formal training. As the staff, you are always encouraged to take on new tasks and so you can further develop constantly. We are never bored.”

# “We are never bored”



Elke Salzner works in the documentation team at Sit. She compiles operating instructions, manuals and training documents for the projects.

## Tasks of the documentation team

- Compiling project-specific operating instructions, manuals and training documents
- Preparing and supplying full documentation
- Internal company support for all documentation issues







Denis Schmidt is one of the rapid intervention team at Sit. As a member of the service team he is in contact with customers all over the world.

# “We are always there for you”

„We are always there for you,” runs the motto of the service team at Sit Steuerungs-Technik. And that must be taken absolutely literally: Sit offers its customers a 24/7 hot line service. If there is a problem anywhere, Denis Schmidt and his team colleagues are on the spot. “With our remote tools we can access any PLC controls and SCADAs installed by us and can rectify problems quickly.” And even if the system required someone to be deployed, the service team is on site quickly.

Apart from rapid interventions, Schmidt’s team is also responsible for regular maintenance of the systems. In addition, the team evaluates the system data continuously and optimises them in close consultation with the customers. A demanding task that, however, actually appeals to Denis Schmidt particularly: “Detecting and solving problems quickly, constantly finding out something new and in contact with customers all over the world, that is precisely my thing.”

## Tasks of the service team

- 24/7 hotline service
- Rapid problem solving due to worldwide online access to PLC controls and control station visualisation
- Identifying and solving malfunctions and problems at customers’ premises all over the world
- Regular on site maintenance

# Ordering at the click of a mouse.

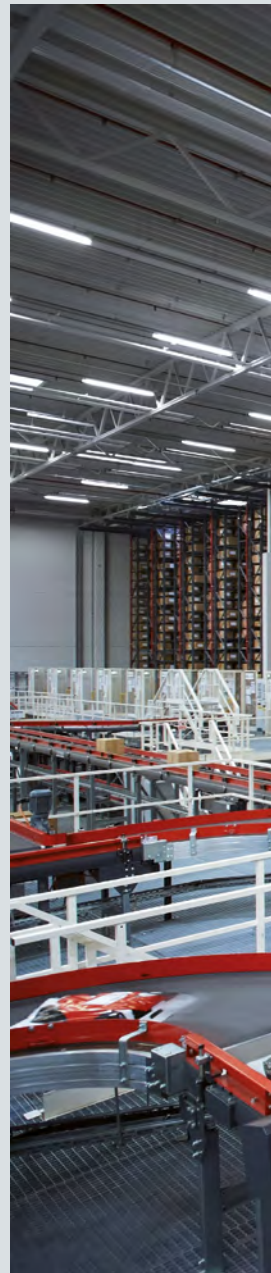
Amazon, Zalando, eBay & Co. – e-commerce is growing at an amazing rate. Our control systems ensure that everything runs smoothly in logistics centres all over the world – from goods inward through stores up to dispatch. And in this way help online traders to optimise their logistics further and can create processes even faster, more reliably and more efficiently.

## **Package routes – Amazon logistics centres**

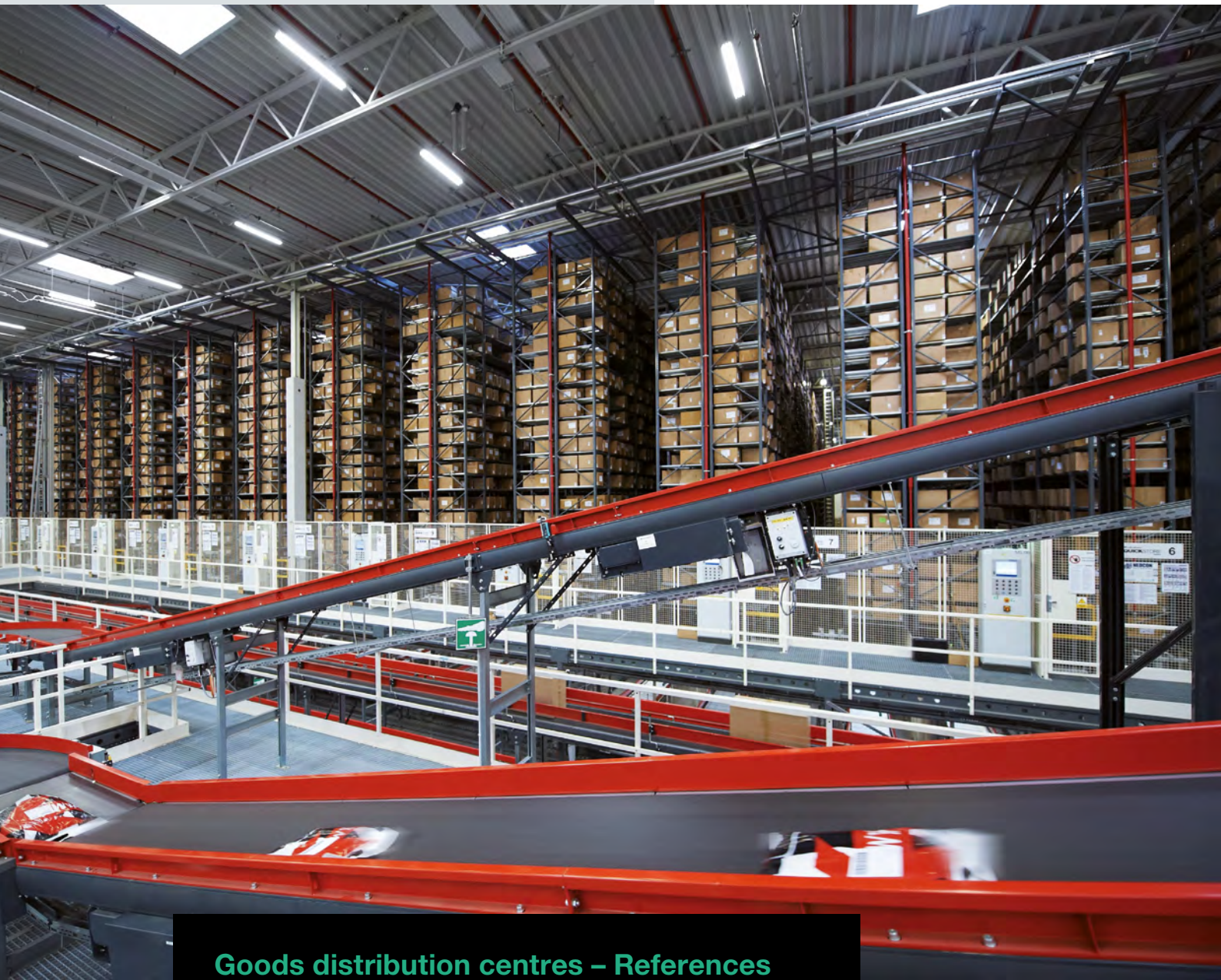
With a turnover of more than 100 billion dollars, Amazon is the largest Internet mail order company in the world. In Germany just under a quarter of the online sales goes to the American group's account. At about 30 locations all over Europe our control systems ensure that the packages and parcels reliably take the right route, leave the stores quickly and thus arrive at the customer's even more quickly. And so, for example, we have developed and implemented the control system for a just under 21 kilometre long conveying system for the logistics centre in Mönchengladbach via which about 650,000 packages are transported and prepared for dispatch.

## **Parts for the whole world – Bosch Global Distribution Centre**

Robert Bosch GmbH's "Automotive Aftermarket" division supplies more than 650,000 spare parts every day to private customers, workshops and vehicle companies. 5,000 goods containers are put into stock every hour and up to 3,600 consignments will be sent on their way in the distribution centre in Karlsruhe. We developed and installed the control system for the complex conveying equipment that controls around 2,100 motors with a total of six Bosch Rexroth L65/L75 control systems and thus helps to ensure that the right parts arrive at the right place quickly and reliably.

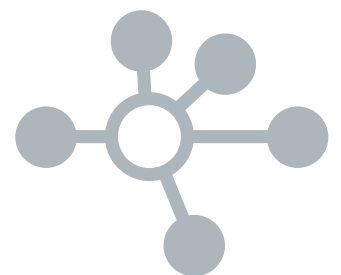






## Goods distribution centres – References

3M Jüchen / Amazon Bad Hersfeld, Berlin, Breslau, Bristol, Chalon, Dunfermline, Frankenthal, Hamburg, Koblenz, Leipzig, Madrid, Mailand, Manchester, Mönchengladbach, Orléans, Pforzheim, Posen, Rheinberg, Swansea / Arrow Venlo / Arvato Hannover / Baur Altenkunstadt / Bosch Karlsruhe / Casaventa St. Niklaas / Conmetall Celle / Continental AG Aachen, Korbach, Lousado, Otrokowitz, Puchau, Temeswar / Digitec Wohlen / Edeka Fleischwerk Süd Rheinstetten / Emex Moskau / Gabor Mindelsheim / Ihle AG Muggensturm / Kaufland Dortmund, Lübbenau, Möckmühl, Osterfeld, Wola / Nike Laakdal / PharmLog Bönen / Rhenus ZooPlus Hörselgau / Rossmann Lodz / Rutronik Eisingen / Schedl Kwasin, Neckarsulm / Stute Bremen, Hamburg, Kluftern / Theo Förch Neuenstadt / Van den Ban Hellevoetsluis / Witt Weiden / Würth Künzelsau / Zalando Erfurt, Mönchengladbach / Zooplus Breslau, Chalon, Krosno







# Next day? Same day.



## Package sorting systems – References

DHL Aschheim, Graben, Rheinberg / DHL Eurohub Leipzig / DPD Erfstadt, Föhren / Hermes Commerce BTOC Hem / Hermes Berlin, Ohrdruf / Österreichische Post AG Graz, Linz, Salzburg, Wolfurt / Schweizerische Post AG Frauenfeld, Klagenfurt / TNT Lüttich / UPS Fechenheim, Lyon

Whether a consumer or a company, today everybody expects to be able to order conveniently with a click of the mouse and for the goods to arrive swiftly and reliably. We support DHL, UPS & Co. with our solutions: Our control systems ensure that packages and parcels in the distribution centre always take the right route and arrive safely and punctually.

**DHL Air Hub Leipzig/Halle** – The air hub is one of the three inter-continental hubs in the DHL network as well as Hong Kong and Wilmington (Ohio). Consignments from all over the world arrive at these international hubs and are then further distributed by plane or HGV. In Leipzig/Halle our control system ensures with its 72 Siemens S7-319F control units that everything runs smoothly on the approximately 20 kilometre conveying system at the site and packages and bulk goods are transported quickly and safely.

Air traffic and passenger numbers are increasing worldwide year on year. Our control systems ensure that millions of pieces of luggage arrive at their destination quickly, safely and reliably to airports all over the world.



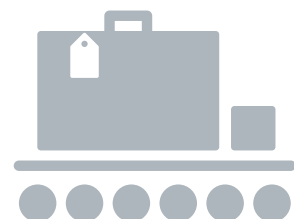
**Kuwait International Airport** – The airport is one of the most important hubs in the Near East with about 10 million passengers annually. In the new international terminal it was possible to install the baggage sorting carousels under a canopy in the open air because of the constantly hot climate. We developed and implemented a customised control system for this special situation that meets international standards and complies with local requirements. In all, six Siemens S7-400 control units ensure that 3,600 pieces of luggage per hour reach their destinations quickly and safely.

# Ready for take-off!



## Baggage conveying systems – References

Flughafen Ankara-Esenboğa / Astana Airport / Baden Airpark / Flughafen Berlin-Brandenburg, Schönefeld, Tegel / Bremen Airport / Bremenports Bremerhaven, Bremen / Budapest Airport / Dalaman Airport / Dubai International Airport / Düsseldorf Airport / Frankfurt Airport / Frankfurt-Hahn Airport / Hamburg Airport / Hannover Airport / Izmir Adnan Menderes Airport / Köln-Bonn Airport / Kuwait International Airport / Flughafen Leipzig-Halle / Flughafen Lübeck / Mönchengladbach Airport / Domodedovo Moscow Airport / Vnukovo International Airport Moscow / Flughafen München / Airport Nürnberg / Paderborn Lippstadt Airport / Airport Saarbrücken / International Airport Sheremetyevo / Sochi Airport / Flughafen Stuttgart / Princess Juliana International Airport St. Maarten / Vienna International Airport / Flughafen Zürich





Automation Technology  
Solutions for your Business

Sit SteuerungsTechnik® GmbH  
Einsteinstraße 26–32 | D-76275 Ettlingen  
[www.sit-de.com](http://www.sit-de.com) | Fon +49 (0) 7243 56171-0