

# journal

Customer magazine · futronic GmbH · 2019

**futronic**  
automation



## Licence agreement

futronic service package supports  
glass manufacturers to operate  
GPS machines worldwide

### New Product Manager

Florian Pawlowski, our new recruit from GPS, will mainly develop product ideas

### Values guide

Guidelines for respectful interaction at our company

### Modernisation

futronic supplies new controls for a particle accelerator in Darmstadt

automation in a new dimension



Editorial

## Dear readers,

Before this year draws to a close, it's time to cast a brief look back. GPS, the machinery and component manufacturer, became history early in 2019. Many people were asking "Who will now handle maintenance and repair of all the equipment installed worldwide?". The answer to that question is futronic. We've put together a comprehensive service package specially for this purpose. Discover more about it in our title story.

There's also been a lot going on outside the glass industry. For the first time, we took part in a Europe-wide bidding procedure for a control system project – and won! We had the privilege of modernising the controls for a particle accelerator facility at the renowned GSI Helmholtz Institute in Darmstadt. You can learn exactly what that involved in our report.

You can also read about our efforts to maintain our excellent working environment – with a guide setting out our company's personal and professional values. In another article we tell you about our new Product Manager, our new trainees and other events of interest at futronic.

On this note, I wish you plenty of exciting reading with the new Journal.

Sincerely,

Michael Preuß

## Info

By the way: You can also find news and reports about our company on our website ([www.futronic.de](http://www.futronic.de)) as well as at Facebook, Twitter and YouTube. Please feel free to check them out.

- [www.facebook.com/futronicGmbH](https://www.facebook.com/futronicGmbH)
- [www.twitter.com/futronicGmbH](https://www.twitter.com/futronicGmbH)
- [www.youtube.com - futronic GmbH](https://www.youtube.com/futronic GmbH)

Values guide

# For respectful interaction

It all began with a question: how can we maintain our friendly tradition on a long-term basis – with a pleasant working environment, an atmosphere of well-being in which everyone is motivated and works together productively? Precisely – it's something we have to work hard to achieve, over and over again. In addition to structural parameters, soft factors also play a key role – a culture of open discussion, a constructive approach to conflicts and respectful togetherness. To enable these factors to be represented, standardised and visualised, futronic has collaborated with Jetter, our parent company, to develop a guide – and establish ground rules for respectful interaction in our relationships with customers, suppliers and colleagues.

### Communication of personal and corporate values

In the first step, the management of both organisations defined a comprehensive canon of values, which were subsequently debated candidly and critically in the various departments. The outcome: a so-called values guide, which all employees are urged to refer to, communicate and internalise. "On the one hand, our values guide sets out our personal values", explains Larissa Boso, Human Resources Officer at futronic. "Those mainly relate to the way we work together on a day-to-day basis and specifically to mutual respect, the ability to handle criticism, trust and honesty." On the other, it also has to do with corporate values which "determine our professional conduct, in other words what each and every one of us can do not only to bring our two companies closer together but to actively move them forward", she adds. Reliability, quality, sustainability and flexibility are a few obvious examples here.

### Lessons for daily use

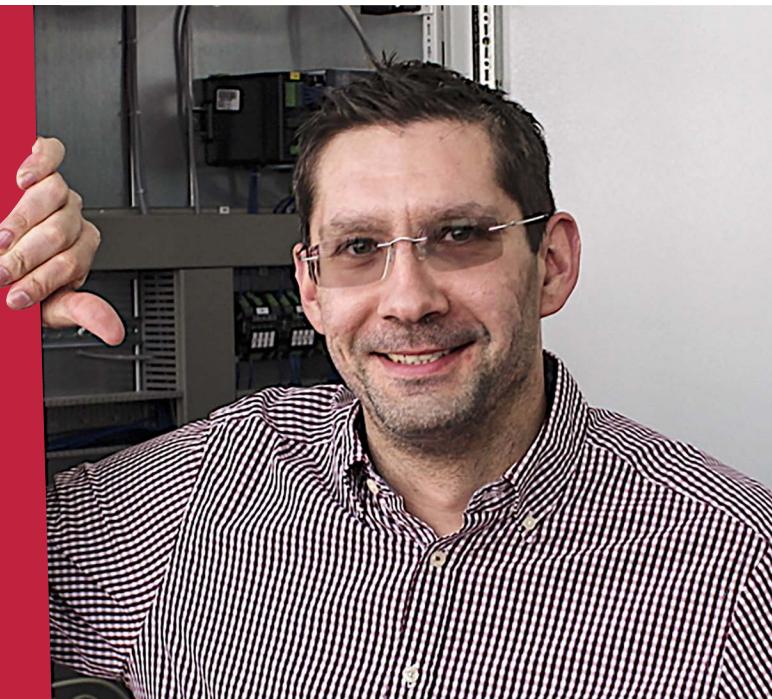
"Our new value system reinforces the way we have traditionally interacted with one another in the past", says Boso. It spells out what matters most both to us as individuals and to the company as a whole. Boso admits that it's too early yet to draw any conclusions: "We've only just begun, and it will be some time before everyone has internalised the values in our guide".

Respect is a top priority for Human Resources Officer Larissa Boso, shown here with the new values guide.



# Florian Pawlowski is futronic's new Product Manager

Aged 35, his new job at futronic mainly involves developing product ideas, tapping new business segments and potential markets and initiating strategic partnerships.



Wolfgang Lachmann, futronic's long-serving Technical Manager and Managing Director, once described himself as having been stricken by the glass virus at an early age. The same is probably also true of our new Product Manager. Florian Pawlowski is his name and he's been on board since the beginning of the year. He joined futronic from GPS Glasproduktions-Service GmbH, where he spent ten years altogether, most recently as project manager. A native of Essen, Pawlowski has remained faithful to the glass industry with his new position at

futronic, though he also has to deal with various other aspects of industrial automation. As Product Manager, he is right at the dividing line between engineering and sales. He has plenty of expertise to offer here, both mechanical and electrical. Plus, of course, an extensive knowledge of workflows and production processes. On the one hand, Pawlowski works closely with futronic's Sales team in his new role. On the other, he intends to visit customers as often as possible, to "talk to them and sound out their needs, their expectations

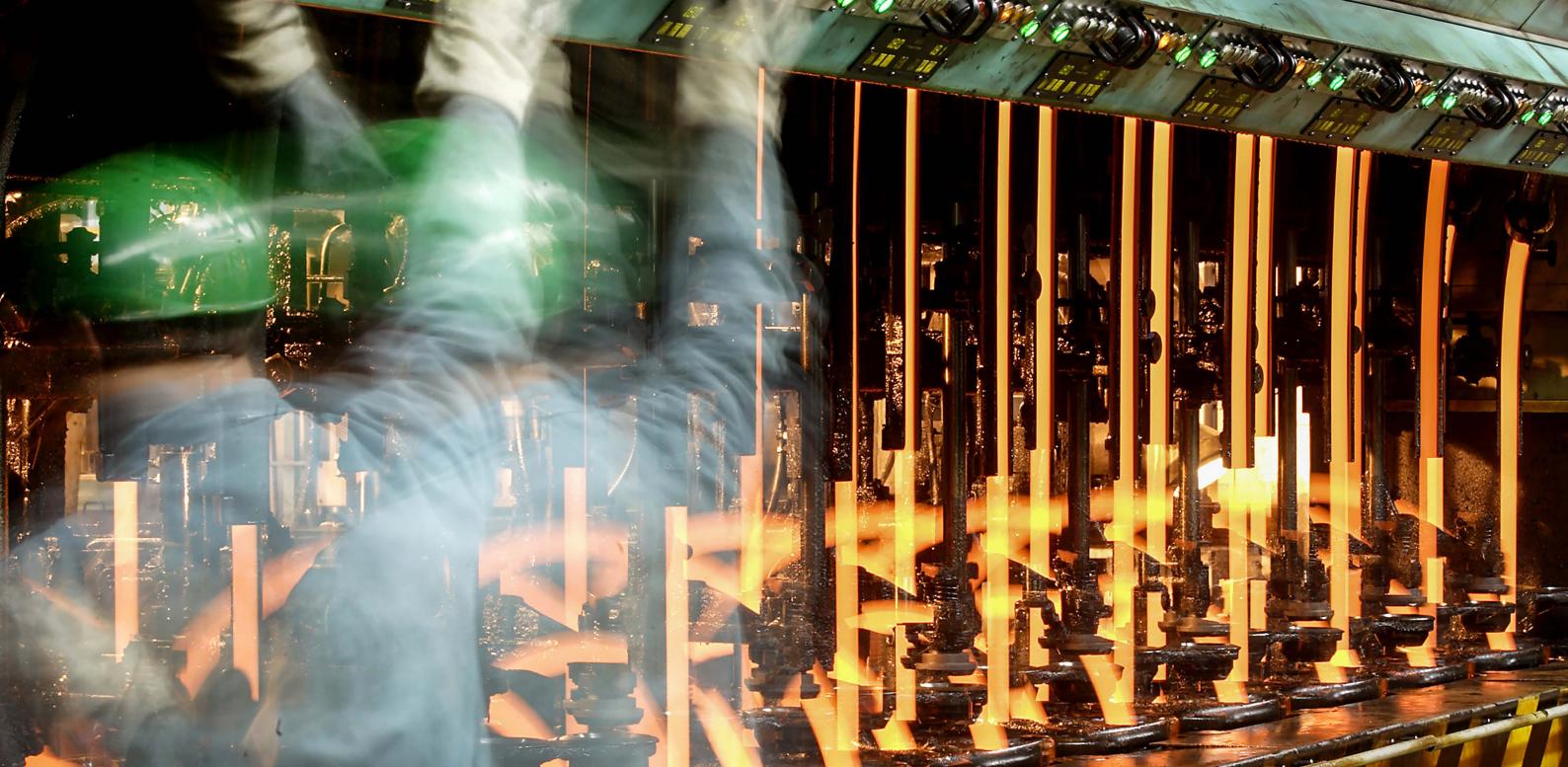
and their desires", as he says. These meetings will hopefully generate initial ideas for products, which he will then flesh out together with his colleagues in Development and Design and bring to market maturity. His job simultaneously involves tapping new business segments and potential markets and initiating strategic partnerships. Last but not least, he has been tasked with the conceptual optimisation of the existing product portfolio.

## News Flashes

A large, abstract background graphic on the left side of the page. It features a world map where the continents are composed of a grid of binary digits (0s and 1s). Overlaid on this are various chemical structures and molecular models, all in shades of blue, red, and white, creating a high-tech, scientific feel.

 **New telephone numbers**

futronic has grown considerably in recent years – and not just in terms of sales. There are quite simply more of us. We're now paying the price of our steady expansion: we've run out of numbers for the telephone lines at our employees' workplaces. From now on, all extension numbers will therefore have three digits rather than two. You can find the new telephone numbers for your most important contact persons in Management, Sales, Product Management, Purchasing, etc. on our website. Our switchboard will be happy to assist with all other numbers: +49 7542-5307-0.



Service package GPS machines

# futronic supports glass manufacturers to operate GPS machines worldwide

When GPS Glasproduktions-Service GmbH of Essen went insolvent last year, numerous glass manufacturers who produce on the company's IS machines were faced with serious problems. Who would now handle maintenance and repair of their equipment? To ensure continued trouble-free operation in the future, the firm's previous owner and futronic have just agreed a comprehensive service package with benefits for all of the machinery and component specialist's former customers.

When a few strong investors led by GPS Glasproduktions-Service GmbH's then General Manager bought out the company from a German packaging manufacturing group, the idea was to relaunch in eager anticipation of a bright future. The latter was planning to restructure its Production Facilities Business Unit – and concentrate on its core business. The new owners, on the other hand, were hoping the management buy-out would enable more flexible support to be provided to international customers in the container glass industry. The two firms simultaneously announced their intention to engage in strategic cooperation in the future. Both sides would profit from the decision – a classic win-win situation, it seemed. Yet those hopes were soon dashed. GPS went bankrupt in spring 2018 and was eventually wound up on 31 January this year. GPS Glasproduktions-Service GmbH, which had been developing and producing (IS) machines and components for customers in the global container glass industry for more than 90 years, was suddenly history.

## The key to the GPS technology

Numerous glass manufacturers who produce on the machinery and component supplier's IS machines were thus faced with a problem. The lights had gone out for good at GPS and many former employees had found a job elsewhere, so that the company's entire knowledge was lost. Who, therefore, would handle main-



Murat Yolaçan, Sales Engineer at futronic, does not want GPS customers to be alone.

tenance and repair of their equipment in the future? The previous owner – a leading glass manufacturer with plants in quite a few countries around the globe – had likewise trusted in GPS machines and technology developed in-house for decades, of course. And had naturally accumulated plenty of expertise over the years. What's more, its technicians had the key to the GPS technology – and hence the rights which were necessary to maintain the mechanics and electrics of GPS machines and carry out repairs, modifications or improvements. Was this a decisive competitive advantage? Maybe. The management had a better idea, however.

#### **At the heart of most GPS machines is Tettnang-made technology**

"We were approached by the company's buyer. He was looking for a partner to handle maintenance and repair of their GPS machines under licence", explains Murat Yolaçan, a sales engineer involved in the project at futronic. He confirms that a trustful supplier relationship has been built up between futronic and the manufacturer over a period of many years. The futronic specialists know the machinery at the company's various plants like the back of their hand. And in any case, there's Tettnang-made technology in most GPS machines – the robust EPRO controls, for instance, frequently provide reliable service there and some have even upgraded to the FMT24S. futronic was an obvious choice as service partner.

#### **Customised service package for former GPS customers worldwide**

The licence agreement means the Tettnang control system specialist now also has access to all maintenance levels of GPS machines – including all of GPS' own controls, drives and other components as well as the complete spare parts inventory. "As the service partner, we can now provide comprehensive support for the electrical part of the equipment", Yolaçan observes. Under the terms of the agreement, futronic is also allowed to offer this customised service package to all former GPS customers worldwide.

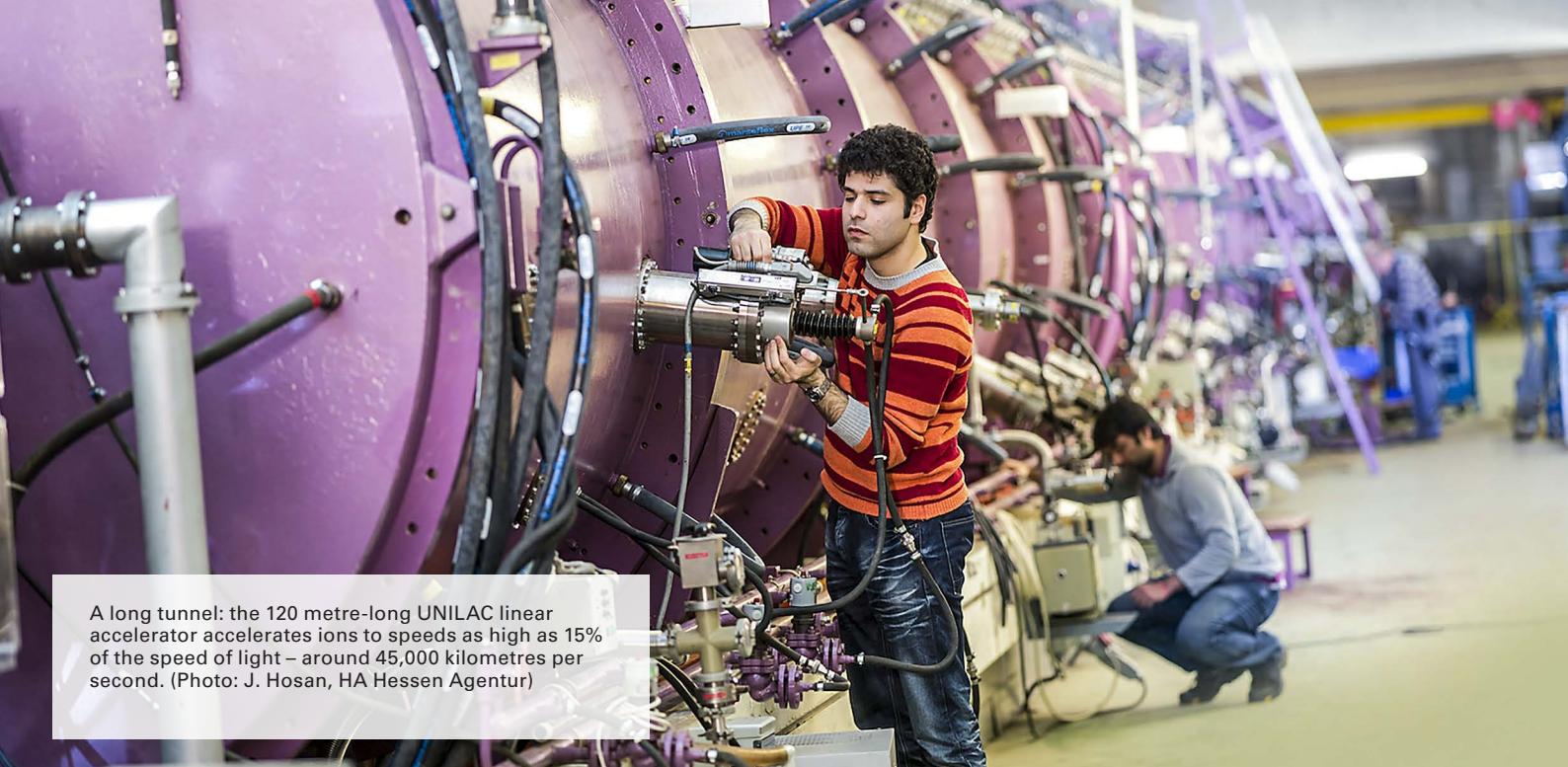
#### **GPS customers are not alone**

The agreement covers all maintenance and repair services – from failure analyses and troubleshooting to the procurement of spare parts. In its role as service partner, futronic also assists customers

seeking to modernise their GPS machines extensively, whether as a partial or a full retrofit. futronic technicians exchange drives and controls or replace wiring and motors – or sometimes even the complete drive technology and system controls – as required. Yolaçan cites one typical example: "There are still obsolete single-axis pusher controls from GPS installed in many lines. futronic has a pusher control in its portfolio that upgrades the equipment to the latest state of the art."

"The framework agreement means we work very closely with the production departments and we're reliably informed at all times. We have the know-how and the experience to guarantee trouble-free operation of all GPS machines worldwide." Former GPS customers will never be alone again.





A long tunnel: the 120 metre-long UNILAC linear accelerator accelerates ions to speeds as high as 15% of the speed of light – around 45,000 kilometres per second. (Photo: J. Hosan, HA Hessen Agentur)

GSI Helmholtzzentrum – FAIR particle accelerator

## New control systems for a particle accelerator

The GSI Helmholtzzentrum für Schwerionenforschung in Darmstadt (Germany) operates one of the world's leading particle accelerator facilities. The UNILAC facility is currently being modernised as part of the FAIR project. futronic has supplied the control cabinets with the control systems and controllers.

The GSI Helmholtzzentrum für Schwerionenforschung in Darmstadt (Germany) since the seventies operates one of the world's leading particle accelerator facilities. The facility is now being significantly expanded and upgraded to a "Facility for Antiproton and Ion Research" (FAIR) in cooperation with partners from several different countries. The international accelerator centre currently under construction is set to make Darmstadt, south of Frankfurt, one of the hubs of the global particle research community. In future, matter that usually only exists in the depths of space will be produced and researched there by scientists from all over the world. They hope to gain new insights into the structure of matter and the evolution of the universe from the Big Bang to the present.

### Vacuum control system for the UNILAC Beamlime

The existing accelerators serve as the first acceleration stage. In the course of the construction work at the GSI, the UNILAC (UNIversal Linear ACcelerator) – the oldest part of the facility – will undergo extensive modernisation, which can be separated by vacuum-tight slide valves. This is where futronic comes in. UNILAC consists of a 120 metre-long beamline divided into about 50

sections. High or even ultra-high vacuum conditions prevail in the beamline and are essential for particle acceleration and the following experiments. To enable this extreme vacuum to be produced and maintained, each section is equipped with special pumps, for example turbo molecular or so-called ion getter pumps. Countless gauges and other measuring devices keep a permanent watch on all relevant parameters. A SPS facility control system monitors, visualizes and archives the vacuum quality and controls the slide valves and pumps. It also offers the operator and vacuum expert the user interface for controlling the slide valves and pumps.

### futronic wins European tender

As part of the modernisation project, the complete vacuum controllers and discreet control systems have been replaced with SPS control systems and latest-generation equipment of different manufacturers. The new facility control system is housed in a total of 17 control cabinets, which have been built and wired at futronic in Tettnang. There will also be 75 junction boxes for the stationary backing pumping stations. The electrical planning and design, as well as all software, have been taken care of by specialists at GSI Helmholtzzentrum. The contract was put out to tender Europe-wide. Not only is this the first time that futronic has taken part in an international bidding procedure – it also proved to be a highly successful premiere against tough competition. "With futronic we found a reliable and competent partner who could simultaneously convince us with good value for money", explains Christine Betz, Group Leader Industrial Controls at GSI and as such responsible for the project. The conversion and commissioning of the UNILAC vacuum system is currently taking place.

# On call around the world



futronic currently supports some 1050 installations in glass-works worldwide. Yet what exactly does that involve in practice? What does futronic's comprehensive customer service actually consist of? And what about the promise of 24/7 availability?

It's still very early in the morning but David Schmid is already up and ready to go. His plane departs for Istanbul in a few hours from now. On another day, his destination could be Moscow, for instance, Rio, Taipei or Bangkok. In fact, he's a seasoned globetrotter – you name it, he's been there. There aren't many places on this planet that Schmid hasn't visited yet. He's always loved travelling. For a while, he didn't even have an apartment in Germany – it wasn't really worth it for him because he was living out of a suitcase the whole time. From the hotel to the airport, on to the next project, another hotel and another airport. There's a hint of disappointment in Schmid's voice: "It's such a colourful world but I've hardly seen anything of it". He's turned 40 plus in the meantime, and with a wife and young child at home he's gradually growing more domesticated. It hasn't stopped him travelling though. David Schmid grew up in Friedrichshafen and trained with a Tettnang firm as a technical assistant for automation technology. He then found a job in Switzerland and was also self-employed for about twelve years, amongst other things as project manager for PLC programming on behalf of Thyssenkrupp, the plant engineering group. That was when he took his first steps as a globetrotter. He's been working in Testing & Service at futronic for around three years now. Back in his home region. And today he's off to Istanbul.

## Controls and drives are the heart of any system

As a system supplier, futronic covers the entire spectrum from concept development right up to commissioning of high quality control and drive solutions – the heart of any system, as it were. Development, programming, production, testing and the final acceptance are all taken care of by futronic under one roof prior to commissioning on site at the customer's. Regardless of whether a new system needs to go productive or equipment that is getting on in years must be modernised, the machines can't be got up and running (again) until the control cabinets have been put in place, the operator panels and their wiring integrated, the software for the

drives and controls installed and all tests completed successfully. That can easily take up to a week. If there are any complications in production, if processes are disrupted or if the electrics give up the ghost, that's when futronic's specialists come to the rescue either over the phone or by analysing the fault online. Or, if necessary, by setting off immediately to whichever part of the world the customer happens to be in.

## The next trip to anywhere

Specialists like David Schmid. He doesn't get to do much sightseeing this time either. When he lands on the Bosphorus at around noon, a taxi takes him directly to the glassworks. He's met a few of the people there before; the safety briefing is pure routine and then it's down to work without further ado. He spends the rest of the day inside the control cabinet, so to speak – measuring, analysing and testing again and again until finally he pinpoints the fault. In the evening he stops off briefly at the hotel before heading off for a restaurant, where he's joined by a few colleagues. They're pleasant company and it's a nice opportunity to chat on a more informal, personal level. "There's only rarely any time to stroll the streets or buy some souvenirs", Schmid concludes. He's up early again the next day – there are one or two parts that need replacing and the software has to be modified. He then reconnects the power supply to the cabinet, carries out a short cold run to check that everything's working as it should, fine-tunes a couple of settings and at long last returns the machine to productive operation. He takes the next plane back home, where his family are waiting for him. Until he gets called out again on the next trip to anywhere.

Photos above: Extreme concentration is vital as David Schmid measures, analyses and tests the components and wiring in the control cabinet. Finally, the error has been found and corrected, and soon the IS machine at the Turkish glassworks is productive again.

# Electronics freak with petrol in his blood

When Marcus Fesseler is not busy managing automation projects, you'll probably find him fixing his black Pontiac called K.I.T.T.



Marcus Fesseler is probably what you'd call an electronics freak. A native of Weingarten, he initially qualified as a power electronics technician specialised in plant engineering with a nearby automotive supplier. He subsequently worked for around 13 years at a special-purpose engineering company on Lake Constance, where amongst other things he manufactured thermoform packaging machines for the pharmaceutical industry. During this time, he developed his skills and signed up for various further training courses – as a kind of Girl Friday, he says. He joined futronic in summer 2016; it was his brother Andreas,

who had already been with us for quite a while, who first gave him the idea. Marcus was taken on to manufacture control cabinets and soon became familiar with the company, its products and its workflows. He also gathered good arguments for switching to Project Management Automation when a vacancy cropped up there at the beginning of the year. Marcus, aged 38, is quick to grasp any unfamiliar aspects: "If I don't know how, I can learn", is his motto. He is supported by his brother, who sits at the desk opposite him, and department head Kurt Schwegler. He's steady in the saddle in the meantime. But there's more

to it than that, of course – something to do with electronics. The remote controlled 1:8 model cars, for instance – the ones that will do up to 50 mph. His masterpiece, however – and he proudly displays the photographs from the workshop as evidence – is an exact replica of K.I.T.T., the hero of the eighties series 'Knight Rider', which has long gained cult status. This jet-black, talking Pontiac TransAm has all the frills and special lighting effects we remember from the TV shows. He'll get it finished just in time for his wedding. It would leave David Hasselhoff speechless.

## futronic inside



Manuel Brosig

Manuel Brosig started to work at futronic as a production planner in June. His job mainly involves managing and optimising the workflow at the dividing line between design and production. The aim: shorter delivery times, fewer inefficiencies, lower costs. It was love that persuaded Manuel, a qualified industrial business management assistant and business economist, to move from Freiburg to Lake Constance. And eventually to us. Welcome to futronic!



New trainees

Once again, three trainees launched their professional career at futronic in September. Sarah Ruff, aged 23, hails from Weingarten and already knows futronic inside out. She spent many weeks here as a temporary employee during her school holidays. Sarah is now training at futronic as an Electronics Technician for Industrial Engineering. Larisa Mujanic, aged 20, comes from Bad Saulgau and has opted for an apprenticeship as an Industrial Business Management Assistant with a higher-level qualification in "International Management with Foreign Languages". She will spend part of her training abroad with partner firms, initially in Ireland and later in France. Fabio Herke, aged 16, is the youngest of the trio. He grew up in Tettnang and is now training as a Warehouse Logistics Specialist. He applied to futronic because a smaller company suits him better; it's a small community with a family way of doing things, he says, where everybody knows each other. We wish our new trainees an exciting and instructive time at futronic!