

# verbinder

The staff and customer magazine of the binder group

## New canteen

Impressions

## Industrial IoT

Data communications

## binder UK

Restart

# Realignment

We continue to grow and change as a company and as a brand. This is also reflected in our look and feel.

Black and white will play a central role in our corporate design going forward.

One example of this is our logo, which will appear exclusively in these two colours in future. Our signet – the inimitable 'b' in the binder logo – will also be taking on a special role as a visual signature in our communications.

Last but not least, our trade booth, which had always been a visual sensation, is undergoing a complete redesign.

Get ready for something new!

On that note!

**binder marketing**

## The verbinder is also online

Missed the last issue of the verbinder? No problem – the digital edition brings the magazine's topics to your smartphone, tablet or PC.

[www.binder-connector.com/de/  
news-presse/kundenmagazin-  
verbinder](http://www.binder-connector.com/de/news-presse/kundenmagazin-verbinder)



Visual signature: the binder signet

## Your opinion counts

We are open to suggestions, ideas and every form of criticism – both positive and negative – because it is only by keeping a dialogue going that the verbinder will keep its dynamic quality.

So be brave and tell us what you think of the verbinder:

[marketing@binder-connector.de](mailto:marketing@binder-connector.de)  
Tel. +49 (0) 7132 325-448

# Happiness and sorrow

**Dear reader,**

We are all deeply troubled by the war in Ukraine, which is both shocking and horrifying for everyone. We can only hope that peace is restored soon.

The Covid-19 pandemic is less on our minds now following the lifting of restrictions in early April. In spite of this, I would ask you not to let your guard down and continue to observe the hygiene measures. The pandemic is not yet over.

On the financial front, orders and revenues remain very strong at binder. We reported our strongest sales month in company history this March. This is an extraordinary achievement for which I would like to express my sincerest gratitude to all staff members.

Sales will be the main focus of this edition of verbinder, in which we'll be reporting on binder's rise to global player status, on our key account management and on our sales activities in South Korea.

**Happy reading!**

Kindest regards,

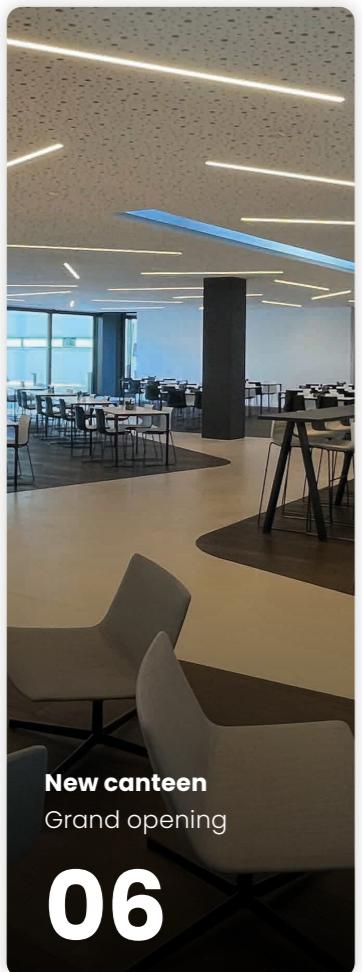
**Markus Binder**

General Manager of the binder group



# Content

Issue 54



**06**

**New canteen**  
Grand opening



**16**

**Industrial IoT**  
Connection solutions

**10**

**Global sales**  
International sales strategy

**22**

**Power segment**  
Department presentation

**12**

**Domestic sales**  
Key account management



**30**

**Fotoatelier M**  
Interview

**24**

**Product labelling**  
New software

**26**

**Team centre workflows**  
Optimised product development process

**28**

**Apprenticeships at binder**  
A success story



**binder  
cable assemblies**  
Changes at the top

**34**



**binder  
precision parts**  
What a board of directors does

**44**

**binder UK**  
Re-energised

**38**

**binder South East Asia**  
Sales activities in South Korea

**40**

**Kibre Koc**  
Portrait

**48**

**binder in figures**  
Current overview

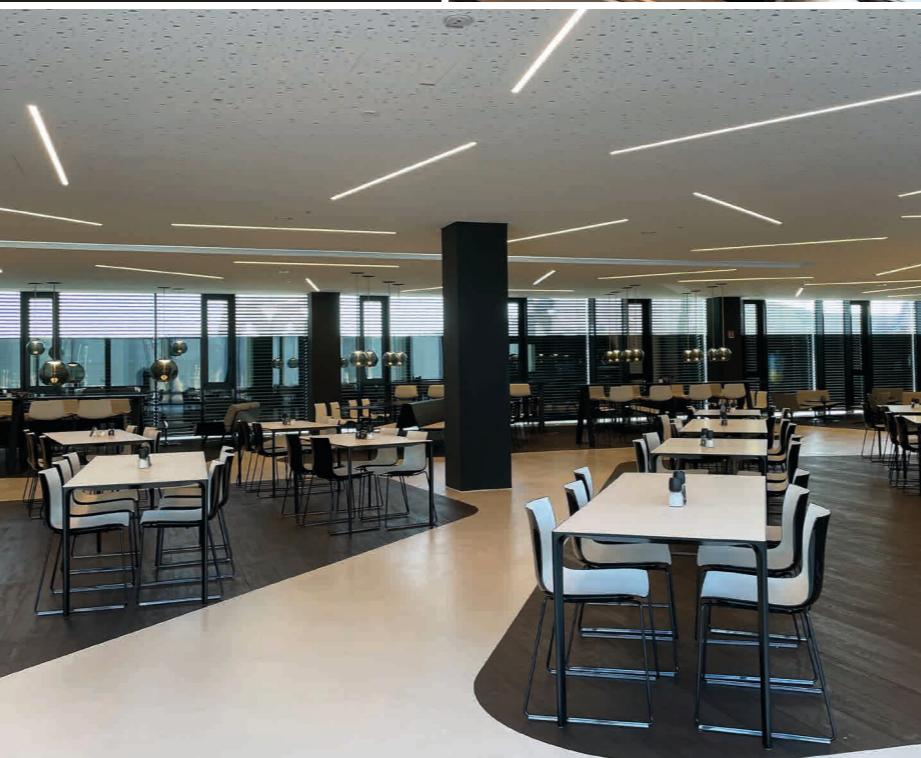
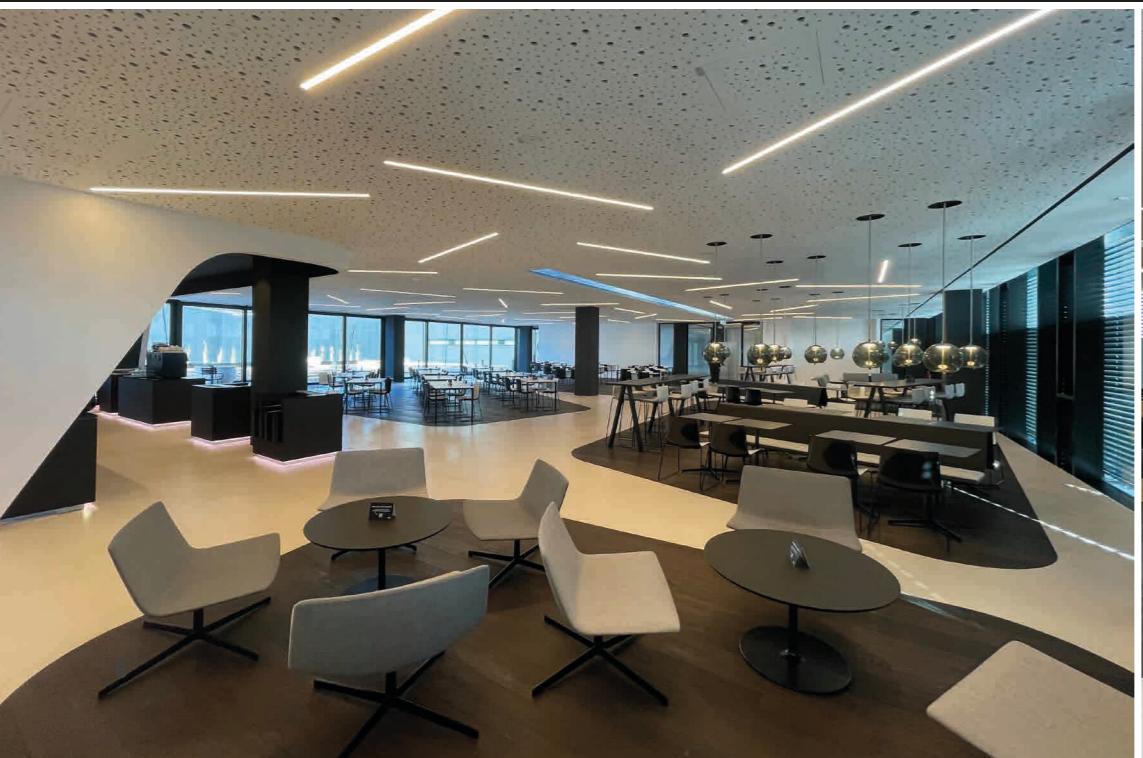
**52**

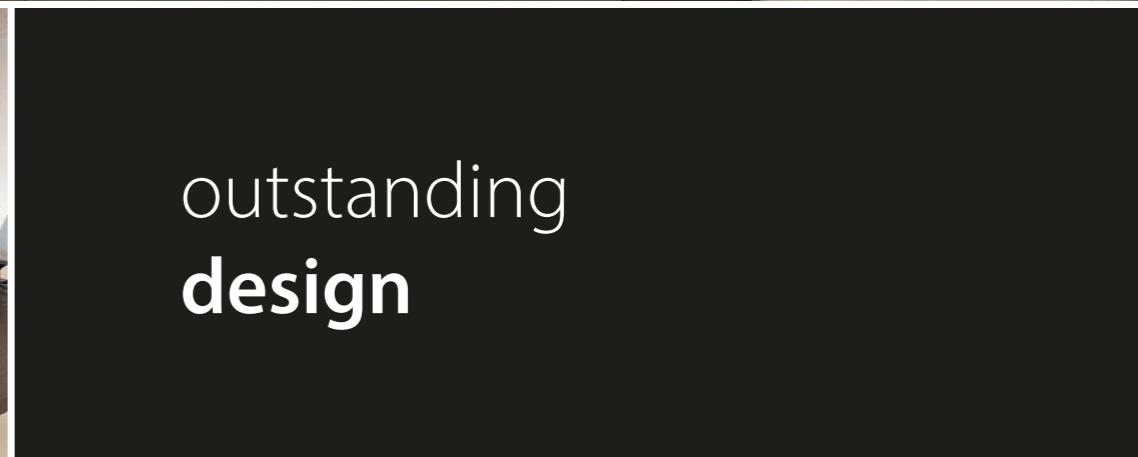
**02 Comment**  
**03 Editorial**  
**53 Abbinder**  
**53 Credits**

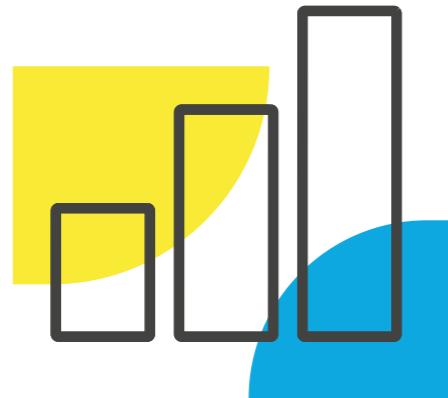


# Opening of the canteen

22 February 2022







# Equipped for the future with an international sales strategy

Record sales and high demand for connectors: binder is on an upward trajectory. As the new Director of International Sales, I want to position binder as a truly global player. How? With an international sales strategy developed in conjunction with our BSOs, stakeholders at headquarters and international sales team. It's time to get excited.

**Text** David Phillips

Until now, binder has never had a leader to oversee its BSOs (binder sales operations), which is why I am honoured to have been appointed to the role. It is no secret that binder has aspirations to become a global player and, after gaining momentum in recent years, I believe now is the time to hone our international sales

strategy and get our global sales operations firing on all cylinders. This will call for bold, brave decisions along the way – something that we at binder are no stranger to.

## Looking beyond Germany

It is clear that Germany is binder's strongest market, which

is why we are looking beyond its borders for more opportunities in terms of market share and sales growth. This involves identifying key new markets, target industries and sales channels, evaluating our (future) product range and the binder brand, and seeing which services can provide added value. It also

means taking a close look at our current organisational structure – ERP, Business Intelligence, CRM and HR – and considering how to optimise it. Above all, the strategy we decide on absolutely has to draw on the strengths of the binder group as a whole – and be supported by all BSOs.

## Discover, develop and deploy: our three keywords

We will build our strategy based on three pillars: Discover, Develop and Deploy. To start, the 'Discover' pillar focuses on the current state of play and changes to implement for the future. I plan to conduct a survey and SWOT analysis for each BSO as well as other stakeholders at binder Headquarters, after which we will conduct face-to-face interviews during personal visits to each BSO. The aim: to understand the local business and identify needs and opportunities. Based on the outcomes, we will move on to the 'Develop' pillar, in which we will map out an international sales strategy (encompassing Products, HR and IT) alongside the tools we need to put it into practice. Once again, this will be done in consultation with the BSOs and other stakeholders. Finally, 'Deploy' focuses on actually implementing the strategy

across all sales operations channels. We plan to do this during an international sales meeting in Germany at the time of electronica (depending on COVID-19).

## Moving in the right direction

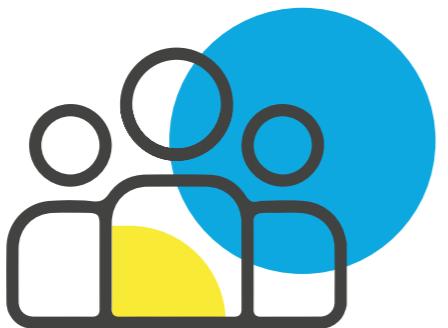
I'd like to say in closing that I cannot wait to get started on making binder a truly global player. My priority now is to get to know all the members of the international sales team – some of whom I know already – so that we can work together to tweak our strategy. After all, collaboration between talented individuals is the key to success in business. I look forward to taking binder to all-new heights with you. ■

## About the author



**David Phillips** has served as binder UK's managing director since the formation of the company in 2009. As international sales director he has been responsible for the binder group's nine global sales offices since early 2022.

**'We will build our strategy based on three pillars: Discover, Develop and Deploy.'**



# Key Account Management

## Feeling the pulse of the market

From an organisational point of view, Key Account Management, or KAM for short, is part of Sales. One of its foremost tasks is to foster and maintain business relationships with key accounts. Read on to find out about the importance of KAM, the major challenges of binder's key account managers and how their job profile has evolved over the years.

**Text** The Editorial team

binder's national sales structure rests on two pillars: direct sales and sales via distributors, with whom the Neckarsulm-based family company has built and maintained trusting partnerships over many years. A large number of end customers are supplied by Börsig, EVG, R.E.D., Bauer Distribution, MC Technologies and Lacon. For these dealers, the products of binder – a leading supplier of industrial-grade circular connectors – are the first choice. The binder

headquarters directly tends to the needs of the distribution partners and key customers, and this is where the KAM comes into play.

'For most industrial companies, key customers account for a significant proportion of sales. binder is no exception. To provide individual and comprehensive support is therefore of the utmost importance,' says Jochen Luksch, head of national sales at binder, stres-

sing the importance of the work of Thomas Huthmann, Jörg Thomas, Steffen Weirauch and Daniel Wölfel. The four key account managers act as personal contacts for key customers and collect information on their specific preferences and requirements in order to always be able to present the right product for every need.

### Teamwork is key

In their daily work, the key account managers are assisted primarily by Customer Service, Product Management and Internal Sales, who regularly collaborate with them. 'Working as a team takes on a central role, because we have to know both our products as well as the internal processes insi-

de out,' emphasises Steffen Weirauch. Beyond the sales sphere, the Design and Marketing departments provide essential support to KAM in terms of checking the feasibility of product ideas and creating technical drawings, or by supporting sales activities with sample cases, presentations and brochures.

### High degree of customer orientation

Daniel Wölfel breaks down the scenarios that can arise during a customer meeting as follows: 'When a customer approaches us with a specific need, there are three options: an existing standard product will do, a standard product will require some modification, or the customer needs a fully customised product.' Whatever the scenario, the key account managers must use their diplomatic skills to mediate between the customer's wishes and the feasibility of implementation by our production team.

'We don't just want to sell our customers products that can be found in the catalogue. We consider our customers' input and constantly strive to meet their needs and expand our innovative product range. Customer orientation is our top priority,' adds Daniel Wölfel. The 620 and 720 connector series



Daniel Wölfel, with binder since November 2015

are exemplary products that were developed as a result of this type of exchange with customers and have since established themselves as standard connectors on the market.

### Premium

At customer meetings, key account managers usually meet with a product manager, a design engineer and a procurement specialist. In order to be able to present compelling arguments during such discussions, a key account manager's duties also include analysing the competition and obtaining external assessments regarding our own market position. ▶



Jochen Luksch, with binder since July 1987



Steffen Weirauch, with binder since July 2021

Jörg Thomas, who is responsible for northern Germany, presents powerful factors that speak for binder from the customers' point of view: 'We are perceived on the market as a traditional medium-sized family business that stands for premium products and reliability. In combination with our high level of vertical integration, this is a significant competitive advantage for us.'

One aspect that has been criticised increasingly by customers recently is the exceptionally long time it takes us to deliver products. Here, too,

issue, however, is not specific to binder – instead, it affects the entire industry.'

#### From yesterday to today

Thomas Huthmann is keenly aware of how the work of key account managers has changed over the past decades. After all, he has been working in sales at binder for more than 34 years as a 'field salesman', as the key account manager role used to be called. 'I've seen the evolution from index cards to CRM systems,' he notes with a smile, going on to say that

'In the past, standard products were pretty much the only commodity in demand, but today custom projects account for an ever greater share of the business. Of course, digitalisation has also had an impact on our work.'

What still hasn't changed is the importance of maintaining close personal ties with the customer: 'You can only achieve resilience and depth through face-to-face communication. In addition, it is enormously important that customers are given the opportunity to assess a product not only visually, but also on the haptic level,' says Thomas Huthmann. ■



Jörg Thomas, with binder since October 2007

Jörg Thomas has a convincing answer: 'The current delivery times are strongly linked to the strained supply situation and the lack of raw materials. This



Thomas Huthmann, with binder since January 1988

#### Looking forward

In order to be able to meet the requirements of customers and the market with even more precision and depth in the future, KAM will be strengthened and further developed in the coming months. 'Our sales strategy clearly states that we want to support our customers and distributors even more intensively in the future. In addition,

the newly created New Business Development division will help us to focus even more strongly on developing customer-specific products and to offer solutions beyond the connector,' says Jochen Luksch, providing an optimistic outlook for the future. ■

**'The newly created New Business Development division will help us to focus even more strongly on developing customer-specific products and to offer solutions beyond the connector.'**

**JOCHEN LUKSCH**



Connectivity solutions for data transmission in the Industrial IoT are becoming increasingly important

## Plug and Produce

The digitization of production is gaining momentum. As technology trends such as SPE and Ethernet API become established, automation levels are beginning to merge. High-performance and highly reliable electrical interconnect components that take on essential functions in the industrial networks play a key role in this scenario.

**Text** The Editorial team

### Basic components of decentralized automation

The digital transformation in automation technology – as part of Industry 4.0 – is already having a massive impact on the need for industrial-grade connection technology. It is also defining the future, expanded requirements for all automation components. One of the key features of this transformation is the merging of the physical and IT worlds within the aforementioned CPS. These represent a new type of factory automation concept that is evolving from strictly hierarchical to decentralized, modular and self-organizing architectures.

The traditional rigid structure of automated plants is thus increasingly giving way to a highly flexible interaction of modules: Industrial IoT devices such as networking-capable sensors, actuators, controllers, embedded computers, and software. One of the new challenges of automation is to integrate all these components into the manufacturing processes in a way that is as variable as possible, configurable at any time, and yet efficient. For the user, it is essential to find advantageous solutions in terms of time, costs and space requirements.



Figure 1: Circular connectors in the M8, M12 and M16 form factors are suitable for cost-effective connectivity solutions under the requirements of Industry 4.0

With regard to connection technology, this decentralized concept results in a rapidly growing number of interfaces that must be served with high-performance and reliable products. Circular connectors in sizes M8, M12 and M16 are proving their significance here as basic Industry-4.0 components (Figure 1). They are optimized for the decisive operating conditions, especially with regard to the above-mentioned economic aspects. Available as cable assemblies or freely

under the requirements of Industry 4.0.

### Designed for factory and process conditions

With regard to electromagnetic interference, circular connectors with metal housings are advantageous. To achieve 360° shielding, the cable shielding must be sufficiently coupled to the conductive housing of the connector. When mated, the plug and socket are securely galvanically connected, and the permanent coupling of the socket housing, for example to a conductive panel, can be easily implemented by the user. ▶



Figure 2: M12 connectors with screw locking stand for maximum safety in mechanically demanding environments

As a result of the variability and modularization of industrial processes described above, robust connection solutions must endure a growing number of mating cycles. The mechanical resilience of the contacts is primarily a question of materials technology. The contact material and the composition and thickness of the contact coating are decisive here. For 100 and more mating cycles,



Figure 3: Contact robustness is a question of material; beryllium copper and gold plating are recommended if frequent mating is required

for example, thick gold-plated contacts made of suitable materials such as beryllium copper are recommended. Figure 3 shows an example product.

#### Ethernet, data analysis, and miniaturization

High-bandwidth Ethernet connectivity is a cornerstone of Industry 4.0. In future, it will link the field level of automation with the company's data infrastructure and an – if necessary external – cloud. High-bandwidth Ethernet creates consistency in communication protocols across the levels of the classic automation pyramid and enables, for example, the real-time acquisition and analysis of data from field devices such as sensors, but

also power supplies. If, for example, network component data such as load profiles, temperature development or the quality of the mains voltage can be evaluated in real time, plant operators can use these analyses to optimize process parameters, avoid overload situations or identify maintenance requirements at an early stage. This is an important prerequisite for reducing down-times in machines and plants and lowering operating costs.

Applications like these are driving the miniaturization of connectivity components. The M8 circular connector, which in the past was reserved solely for signal transmission, has therefore evolved into a solution for data commu-

nication under particularly constrained space conditions. M8 connectors with D coding enable users to integrate field devices with data rates of up to 100 Mbit/s into Ethernet networks. In addition, thanks to PoE or PoE-plus functionality (Power-over-Ethernet), they enable power to be supplied to the connected devices. In view of their application environment in factory or process automation, these products are also equipped with secure locking and designed to meet the industry-relevant protection degrees (Figure 4).

#### Future potential: SPE and Ethernet APL

Lightweight, thin cables, high bandwidth, flexible installation with reduced effort: Single-Pair Ethernet (SPE) is a technology that promises users continuous TCP/IP data communication from the field-level sensor to the cloud. This is because, unlike fieldbuses, Ethernet penetrates all levels of automation. Field devices can be connected via SPE at data rates of up to 1 Gbit/s across applications using just one twisted pair – instead of the previous two or four, depending on the bandwidth required. Thanks to PoDL (Power over Data Line) compatibility, the same twisted pair can be used to supply power to the



Figure 4: M8 connector with D coding and screw locking for Ethernet connectivity including power supply of Industrial IoT components. The connection meets the requirements of protection degree IP67 when mated and locked

relevant field components. Sensors, actuators, and other instruments can be integrated into existing Ethernet installations without interfaces and protocol converters – in factory as well as in process and building automation.

In the field of process automation, Ethernet cabling is facing an extended requirements profile: In addition to high data rates and the robustness criteria of a factory floor, the range of communication matters; furthermore, devices must feature the intrinsic safety property that enables them to be used in potentially explosive environments. The Ethernet Advanced

Physical Layer (APL) defines a physical transmission layer for Ethernet communication at 10 Mbit/s and power supply via a twisted pair at distances of up to 1,000 m. As a special form of SPE, Ethernet APL is also suitable for end-to-end and cross-application field instrumentation.

The consistency of the communication protocols from the operating to the field level enables users to access not only process data but also device data – for example, from the self-diagnostics of intelligent power supplies, as shown above – in real time. Production planning, process control and data analysis in real time ►

are thus within reach. Technology experts like binder Product Manager Dieter Sandula follow trends like these very closely: on the one hand, in order to incorporate their insight into new product generations for the benefit of customers; on the other hand, in order to support binder customers in their projects as competent advisors.

#### Summary

Connectors are key components of Industry 4.0. In the course of the digital transformation in automation, the demand for connectivity solutions suitable for industrial use is growing rapidly. At the same time, however, the requirements placed on the products are increasing (Figure 5): particularly with regard to communication bandwidth, integration density, and signal integrity under production or process conditions. binder offers seven circular connector product series in this segment in the M8, M12 and M16 form factors, which can be configured by the customers depending on their specific applications. ■



Figure 5: Shielded X-coded M12 connector for data transmission rates up to 10 Gbit/s

**Single-Pair Ethernet (SPE) is a technology that promises users continuous TCP/IP data communication from the field-level sensor to the cloud.**

**'Particularly in family-run businesses – in addition to maintaining traditional values – it is essential to be bold, to take risks with innovations and always keep looking towards the future.'**

**MARKUS BINDER**



Outstanding quality: UL-approved connectors of the 820 series

# Introducing the Power segment

The second floor of the new production and logistics centre at the Neckarsulm site is home to production, which had previously been housed in plant 2 before the move. Occupying approximately 2,000 square metres, roughly 250 employees currently work here in three shifts. In this issue of verbinder, we present the Power segment – one of binder's four production departments.

**Text** Simon Prang and Simone Sandrisser

With 22 employees, the Power segment – also known as the A segment – is binder's smallest production department. Two fully automatic assembly facilities, two packaging machines, a semi-automatic machine and a printing machine are located on approximately 204 square metres. Several manual workstations complete the segment.

## Small but powerful

Despite its moderate size, a lot of important work takes place in the A segment. Production techniques include:

- Automated assembly of electrical components
- Manual assembly of electrical components
- Printing on plastic bodies
- Packaging with centre-folded film bags

The diverse activities require a consistently high degree of flexibility, expertise and concentration.

## Maximum efficiency

In the A segment, particular focus is placed on the UL-approved connectors of the 820 series. The products, which are equipped with a 7/8-inch thread and screw locking, are used in automation technology

for voltage and power supply. Production is mainly carried out using the semi-automatic machine that can generate the maximum output through the optimal interaction of man and machine. In addition, manufacturing processes can be carried out without interruption thanks to the implementation of flow production.

## The workflows in detail

To ensure the process runs smoothly, the employees arrange the workstations or machines precisely according to the work steps required for the product. They also accompany the workpiece through the various machining operations.

At the beginning, production staff press in the contact body and socket body – depending on the design – on a hand lever press. The contact numbers are then printed onto the body using a pad printing machine. Only after the paint has been applied precisely and cleanly can the employees place the body in the semi-automatic machine device.

The system attaches an O-ring to the body and inserts the contacts. It is also important to screw the assembled contacts directly into the system. While

the semi-automatic machine processes the inserted body, the specialist staff can remove a finished body from the turntable.

In the next step, the employees press the threaded ring in on a press to test it electrically via a device. Only once the inspection has been successfully completed does the finished body reach the packaging machine, where it is placed in a bag and packed together with other components. ■

## About the authors

**Simon Prang** has been at binder since 2018 and is a production assistant at Plant 2 (PW-2). **Simone Sandrisser** has been with the company since 2008 and is jointly responsible for the Power segment together with Mustafa Sevren.



Labels are ready at the press of a button thanks to new software

## New label software

### Opal label management and BarTender

Whether it's a new logo, updated address or additional test mark, new packaging imprints or layouts are needed at binder almost every day. New label software has been in place for this purpose since the end of 2020. Production staff in Neckarsulm, Germany, use this software to create and manage various identification labels. binder cable assemblies has also been using the new system successfully since October 2021.

**Text** Joachim Wagner

Due to licensing and support problems with the label system used at the time, the K-IT (IT), K-PO (processes and organisation) and P-AP (work planning) units were already working together in 2019 to find a solution that would also be compatible with the newly emerging EWM warehouse system. The combination of Opal label management, which is fully integrated into SAP, and BarTender's designer software promised a future-proof solution.

#### Challenges

The previous software was not compatible with the new one. This meant that binder had to recreate all layouts that would be needed in future. But at the time of the changeover, around 1,000 layouts (90 per cent from customers, 10 per cent from binder) were activated for printing – the idea was to recreate a considerably smaller amount.

At the same time, the label formats had to be as uniform as possible. This could eliminate the double maintenance of layouts for articles from binder Headquarters (made in Germany) and binder cable assemblies (made in Hungary) and make the application in day-to-day business simpler and more effective overall.

#### Implementation

Together with Opal Holding, the K-IT and K-PO units created the system-side conditions necessary to introduce the new label management system. They connected all printers to the binder network in order to be able to control them from a central print server.

The required SAP environment was redesigned/programmed. The specialists transferred around 40,000 data records to the newly designed Opal print database. P-AP then created the required layouts and was able to reduce the number by over 50 per cent thanks to the options now available.

#### Conclusion

The extremely complex project took a lot of time and required staff to remain calm and determined. But the success certainly justifies the effort that was put in. It was possible to query almost all master and transaction data of the binder articles and transfer them to the respective layouts. This made it easier to create and maintain them. In addition, the risk of incorrect entries was reduced to a minimum.

The number of layouts required was drastically reduced and

Logistics was able to persuade many customers to adopt the binder standard format for labelling. As binder Headquarters and binder cable assemblies can use the same layout, there is also no need to maintain redundant data for both plants.

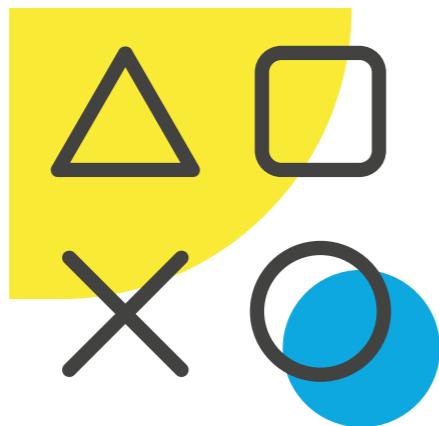
#### Looking ahead

During the course of 2022, binder would like to successively switch all affiliated companies that print labels over to the BarTender software and so also position itself excellently on the global market to master the future challenges of article labelling. ■

#### About the author



**Joachim Wagner** has been at binder since September 1998 and is Team Lead in Work Planning (P-AP).



# Optimised product development with Teamcenter workflows

Workflows are self-defined and specially programmed processes that evaluate information and supply this information to specialist units and attached systems. For this purpose, e-mails are sent, drawings are generated and data is exchanged. Two examples illustrate how valuable the workflows are for binder product development.

**Text** Robyn Hensel

binder workflows effectively improve important processes. Without them, designers and technical drawers would have to carry out many more manual tasks. In order to reduce the workload in a meaningful way and transfer information even more accurately, technical system support

continuously optimises and expands the binder workflows.

## Importance of Teamcenter

The development of products is multi-faceted. This makes it all the more important to have an orderly process that automates in the right places

and involves and networks all relevant units and specialists. This is exactly what Teamcenter does as an innovative PLM (Product Lifecycle Management) system.

Teamcenter's one major advantage is that the digital solution is very flexible and so

allows companies to adapt the process optimisations specifically to their own requirements.

## Digitalised release processes

Workflows ensure that binder employees always know exactly what state product development is currently in and what comes next. Within holistic PLM processes, they ensure that the life cycle of products is as efficient as possible from the first to the last step – for both simple and complex processes.

When programming workflows, it is important to consider the officially released processes in ViFlow. For example, digital drawing release was developed in consultation and cooperation with the specialist units more than ten years ago. Based on this, our programmers were also able to digitalise the distribution of drawing changes after a release.

## Example binder workflows

The 'T-KE – Status 35 – SAP Development Release' process checks whether a certain part may be given the status 35, assigns it to a revision (an element in Teamcenter) and sets off further processes.

The binder workflow checks the following:

- Is the syntax (naming) of the revision correct (Check\_Syntax)? If yes (True), the workflow assigns the status 35 (Set\_Status-35).
- The Create Image Server (CRI) creates a TIFF, which is an image of a drawing (CRI-TIFF-35).
- CRI creates a JT file, which is 3D data of the construction element (CRI-JT-35).

■ The TESIS user logs on to SAP (TESIS SAP Logon Task).

- The information that the designer has created in Teamcenter for this purpose is transferred to SAP with TIFF and JT (SAP\_DIR\_UPDATE\_35).

■ The previous version of the part receives the status 90 and is therefore invalid (Release Previous 35).

- The 'starter' of the workflow receives information about the assigned status 35 by e-mail (SendMail development release).

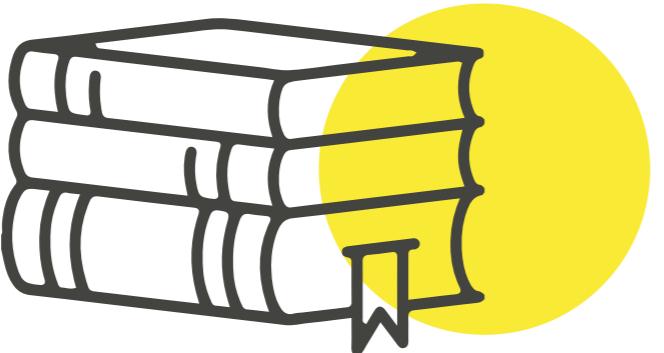
This completes the workflow. If the revision fails the syntax check (False), the workflow ends immediately without any further action.

This is a relatively simple process. Much more complex is 'Status 5X – TKE – SAP' – one of the most frequently used workflows that is supposed to release a design with status 50 and perform 39 tasks for this purpose. In addition, the process contains further 'sub-workflows' that perform even more checks. ■

## About the author



**Robyn Hensel** has been at binder since January 2018 where she works an employee in the Standardisation, Organisation & System Management department (T-NO).



# Keep going, keep going!

Our procurement planner Christian Greiner has long since ceased to be a binder apprentice.

But that doesn't stop him from constantly learning and tackling new challenges.

Here, he reveals what has driven him at binder for almost 17 years and why he has never lost touch with the world of training.

**Text** JAV

Whenever an employee reaches for a screw or a die-cast part, it is clear that Christian Greiner has had a hand in it somehow beforehand. As an operational purchaser in the Procurement unit, he ensures that production is always supplied with the components it needs.

In doing so, he knows very well what his colleagues need. Christian was initially a trainee industrial sales representative at binder from 2005 to 2008. After that, he worked for eight years in what is now Produc-

tion Control. But that was not enough for him.

#### **Constant urge to go further**

After work and on weekends, Christian completed two years of further training to become an Industrial Business Administrator at the IHK (German Chamber of Industry and Commerce) and then immediately after added a degree in Business Administration. Although he had to sacrifice a lot of his free time for this, binder always provided the support he needed: 'I was always given

special leave for important exams or periods of training and my further training was supported at every stage,' he says.

At first, Christian was only interested in learning new things and developing himself. But it wasn't long before he was eager to put his skills into practice. Even though he briefly toyed with the idea of building a new career elsewhere, the first thing he did was glance at the internal job advertisements.

His current position in procurement came along just at the right time – and was no surprise to him: 'If you are looking for a new challenge, binder will find a solution.' To this day, Christian has never regretted the step he took. Every day is different and presents him with new tasks – whether in contact with suppliers or when searching for the most effective procurement solution.

#### **Improving training continuously**

Anyone who has spent their entire working life with binder and always volunteers to go back to school would naturally also have an opinion on the current training offered at binder. Christian says: 'Times have definitely changed. Even during my training, binder was well organised. I gained insights into many units and was able to learn a lot. But the networking and qualification of apprentices in all important subject areas is much better today than it used to be.'

The same applies to how apprentices are integrated into the company: 'I am a bit jealous about the onboarding days that exist today. Although we had similar joint events, today's apprentices are even better integrated into the processes at binder, which I think is very good.'

We, that is, JAV, think that Christian is a great role model for diligence and determination. We wish him all the best for the future and eagerly await his next steps. ■

#### **About the authors**

The **JAV** (Youth and Apprentice Council) at binder consists of **Lucca Stoppani** (Chairperson), **Andrea Messer** (Deputy Chairperson), **Vincent Kühnle** (Secretary) and **Janina Fischer** (Backup Member). These four dedicated young professionals were elected to the board for two years on 22 October 2020.



Christian Greiner works as a managing clerk in procurement at binder

# 'Pictures bring a company to life'



Master photographer Terzo Algeri is the owner of the Fotoatelier M photo studio in Heilbronn, Germany and has been working with binder Marketing since 2014. In an interview with the verbinder editorial team, she talks, among other things, about the importance of photography, current trends and her partnership with binder.

## Interview The Editorial team

**Ms Algeri, you have been the contact person for binder Marketing for almost eight years for all issues concerning photography. How did the cooperation with binder begin in 2014?**

Our partnership started at the time with the 'binder, what do they do?' training campaign. We shot various portraits of company apprentices that were then used in the regional campaign. We have been working for binder since then – taking photos of staff, archi-

tectural photographs and also taking photos at the company's summer parties.

Alena Bischoff, Terzo Algeri, Irem Aslan and Carolin Braunschädel from Fotoatelier M (from left to right)



**You mainly work with customers from the consumer goods sector (B2C). As an industrial company (B2B), how does binder fit into your portfolio and what is the biggest difference to B2C customers?**

We now have several customers from the industrial sector, but binder was indeed the first from this area. The main difference compared to our B2C customers is that the cooperation is much more personal. We maintain regular and direct contact with binder Marketing; there are no agencies 'in between'. We can contribute our ideas and live out our creativity at binder – and that's exactly what we enjoy the most.

**What makes having binder as a customer so appealing for you?**

Our customers include global corporations from Hamburg, Munich and Düsseldorf in Germany. Having said that, getting involved with projects at binder is always very special for us. The company has a very good reputation and does a lot for its staff. We always enjoy working with binder employees. We also have a common regional connection – all in all, binder is simply the perfect match for us.



An architectural sensation: the new binder production and logistics centre in Neckarsulm, Germany

On a more personal note, binder was where I discovered architectural photography. Photographing such an impressive building as the new production and logistics centre is a great experience. I've broadened my horizons in the meantime and have been able to accept further architectural photography jobs.

**In your view, how does photography influence the image of a company?**

Pictures evoke emotions and feelings and bring a company to life. Pictures linger in our memory – the saying 'a picture paints a thousand words' is therefore absolutely justified. When building a brand, images, in my opinion, are definitely the most important component.▶



binder apprentices Fabian Sordon, Jonas Markel and Vincent Maurer at a photo shoot (from left to right)

**Speaking of brands; what do you think distinguishes binder as a brand?**

From my perspective, communication at binder is bold and energetic, and the company also comes across as very young and dynamic. Before we began to work together, I looked at the company in great depth. Putting the focus on the object, and setting it against plain, monochrome backgrounds was a style that I really wanted to keep in my photos and modify only slightly. This look is simply timeless and also fits perfectly with the current image of binder. I am proud that our photographs

can contribute to this stylish look.

**What qualities does a good photographer need?**

For me, it is essential to have a strong sense of beauty and a lot of empathy. Every person is beautiful – I really mean everyone! As a photographer, I need to be sensitive enough to bring out the unique beauty of every person. Basically, I may have all the great technical skills I need, but if I don't manage to find common ground and be in harmony with the person in front of the camera then I've already failed as a photographer.

**Thanks to the advance of technology, every smartphone user these days can take the role of photographer. What do you make of this development and how has this affected you and Fotoatelier M?**

Unfortunately, there are hardly any traditional photo shops left. This is because business with private customers has plummeted as a result of digitalisation. We have always based our business on several pillars and have a broad customer landscape thanks to the cooperation we enjoy with numerous companies.



Portrait photo of Israel Ereme, with binder since September 2015 and employed in plastics production



World-class architectural photography

**What are the latest developments in photography?**

I am still of the old school and have actually experienced the development from analogue to digital photography. That was a huge leap at the time, which some photographers had to struggle with – especially at the beginning. At present, there is a trend towards moving images – film is definitely the in-thing.

In addition, as you have already mentioned, anyone with their own smartphone can take on the role of photographer nowadays. As a photo studio, this means we have to offer our customers something more than just photography. Photo boxes and selfie stations with creative backdrops are the new trend here.

**Finally, where do you see Fotoatelier M in the future?**

I imagine us having a large company building with a film and photo studio and a cosy café for both staff and customers. Of course, the new premises should offer enough potential and space for any further ideas we may like to try out. We would like to expand our business model and offer other services in addition to photography. This will help us to inspire our customers and ensure we are in the best possible position in the future. ■

**About  
Fotoatelier M**

Fotoatelier M was founded in 1985 by Margarete Hacker. Terzo Algeri joined the company in 2004 having completed her professional training as master photographer and make-up artist and has been the company's owner since 2 April 2005. The Fotoatelier M team, whose office is located at Bismarckstrasse 6/B2 in Heilbronn, Germany, consists of eight people in total. In addition to photo and film shoots for companies and agencies, the range of services offered by the 'M' photo studio also includes wedding photography and film, portraits as well as passport and job application photos.



The office building (front left) and the production building (back right) of binder cable assemblies (Jánossomorja, Hungary)

# The end of a great era

János Vida, Managing Director of our Hungarian affiliated company binder cable assemblies, is retiring. After a total of 18 years of service to the company, his retirement is well deserved. He is succeeded by Zoltán Szakács, who has been with the company since 2009 and plans to continue the successful course of his predecessor.

**Text** Rozália Felföldi

From 1997 to 2001, János Vida worked as Production Manager at AMB – as binder cable assemblies was called at the time. In 2008, he returned to the company as an authorised officer and had to deal with numerous difficulties in the midst of the economic crisis that existed at the time. During this period, numerous decisive transformations also took place in the company itself. This includes, among other things, the far-sighted decision to withdraw from the automotive industry and produce entirely for binder. With a functioning management team, János Vida has succeeded in turning binder cable assemblies into an attractive, successful family business. Now he is taking his well-deserved retirement.

## Highs and lows

During János Vida's 18 years of working for binder cable assemblies, the company has had to cope with several phases of upheaval. In addition to the global financial crisis of 2008, this also includes the internal crisis of the company (still operating under the name of AMB at the time) that was struggling with dysfunctional processes and a lack of structures. Another challenge involved learning about and mastering many new binder

products and manufacturing technologies.

The success of binder cable assemblies today is due in no small part to János Vida's tireless commitment to the company and its employees. 'Mr Vida made all the right adjustments and initiated numerous changes thanks to the acceptance and respect within the workforce,' says Markus Binder, General Manager of the binder group. In addition, he has used his strengths, which include team spirit, strategic talent, tenacity, empathy and objectivity, to contribute to the continuous development of the company.

Today, binder cable assemblies, which is an affiliated company of the binder group and based in Jánossomorja, Hungary, manufactures and assembles plastic connectors and cable assemblies with binder connectors.

## The legacy of János Vida

When János Vida retires, he will leave his successor well-functioning and well-established structures, a motivated team and a positive, family-like corporate culture. In his farewell speech, Markus Binder highlights János Vida's contribution to these achieve-



János Vida worked for 18 years at binder cable assemblies

ments: 'Today, binder cable assemblies is a successful family business and an attractive employer where the focus is on people – Mr Vida, this is mainly thanks to you.' János Vida himself is particularly proud of the reputation the company has regained as an employer, the good cooperation with local authorities and other companies and the great importance of social responsibility within the company. ▶

Although the 66-year-old already has lots of plans for his retirement, at the same time he admits that he will miss the people and the joint activities in the company. One reason for this is that binder cable assemblies enjoys a corporate culture that is alive with shared activities such as singing together and outings and that also maintains its Hungarian identity within the broader binder culture.

**Into the future with  
Zoltán Szakács**

János Vida's successor Zoltán Szakács is not an entirely new face: He has been working for binder cable assemblies since 2009 and was in charge of the company's finances for a long time. This means the 45-year-old is already extremely familiar with the company, its values and its employees. In this role, he also contributed a great deal to the economic recovery of the company.

His declared goal as Managing Director is now to continue the successful course of his predecessor. He enjoys the complete trust of Markus Binder: 'If there is anyone who, thanks to their modesty, loyalty and commitment, has earned the right to succeed Mr Vida, it is Mr Szakács.' In addition to



Zoltán Szakács is the new managing director at binder cable assemblies

his many years of experience in the company, what makes Zoltán Szakács unique are his leadership skills, commitment and strategic way of thinking.

The future of binder cable assemblies will therefore continue to be a success story in keeping with the motto 'We are binder'. ■

**About the author**



**Rozália Felföldi**, who has been with the company since September 2000, is Head of Human Resources at binder cable assemblies.

**'Today, binder cable assemblies is a successful family business and an attractive employer where the focus is on people – Mr Vida, this is mainly thanks to you.'**

**MARKUS BINDER**



The binder UK team: Karola Eames, Graham Ellis, Dawn Kelly (front row, from left to right), David McKenzie, Stephanie Halke, Joe Walker (back row, from left to right)

# Making our mark with fresh momentum

New marketing ideas, a shake-up in sales and a promising direction: binder UK is meeting the challenge of how the firm is perceived in the market head on. With the pandemic finally abating, now is the time to restructure our sales management and establish our brand as the number one for industrial circular connectors by showing existing and potential consumers what we do best – being part of their project every step of the way.

**Text** Graham Ellis

Ever since binder UK was founded in 2009, our goal has been a simple one: to become the go-to brand for industrial circular connectors. We want to have a hand in designing a customer's product from the ground up and to make our connectors an integral part of the design, as this ensures we are specified as the nominated manufacturer in the original product design and on the bill of materials. How do we do it? By making customers aware of our quality services and getting them on board through targeted marketing. Our focus going forward will increasingly be on digital marketing, though traditional print channels and trade fair appearances will continue to play a role in reaching the widest possible audience.

## A new dawn

Change comes from fresh ideas, which is why we appointed David Phillips to be our new Director of International Sales as of 1 January 2022. David has wasted no time in creating a new blueprint – based in part on tried-and-tested methods – for how binder pursues global sales in a market that is always volatile, yet presents ample opportunities. He will be bolstered in his efforts by a close-knit team of profes-

sionals who are all very clear on their responsibilities. Expert design assistance, comprehensive support, a seamless after-sales service experience: our customers can look forward to all three. And we can look forward to an even better reputation.

## The backbone of the business

Of course, we aren't starting from scratch. Pandemic or not, the markets are in a constant state of evolution, which is why binder hasn't stood still when it comes to building up our distribution network. Samples to prototypes and volume production to end of life: we have mapped out the phases of the life cycle that our customers' products undergo and developed channels that meet their demands at every stage.

## Our time is now

With all the changes that have happened – both within binder and globally – in the past couple of years, now is the time for us to strike hard, double down on digital marketing, attract new customers and cement our status as the market leaders for industrial circular connectors. We're excited about what the future holds for binder UK. ■

## About the author



**Graham Ellis**, with binder UK since 2009, has been sales director at the UK sales office since the beginning of the year.



Charlie Moon, Christenna Chua and Achim Klett (from left to right) meeting with representatives from distributors after a trade fair in Busan, South Korea

# With best connections to South Korea

The Asian market is ever growing – and not just in the connector industry. binder has recognised the signs of the times and established a sales office in South Korea through binder South East Asia – visiting a country where unique rules for success apply.

**Text** Achim Klett

Geographically speaking, binder in South Korea should be represented under a different roof than binder South East Asia. That is because the industrial nation lies in the north-east of the continent and, with its unique position between China and Japan, forms an economic universe of its own.

South Korea is one of the most important technology locations in the world but it is almost entirely dependent on imported components and raw materials. They are processed into high-quality electronics there, which in turn are mainly destined for export. But this cycle is not the only aspect that makes the South Korean market a special playing field for international companies.

## High demand, strong competition and complex specialisation

High-tech and connectors belong together – and not just in South Korea. For this reason, binder established itself in South East Asia in 2014. From the very beginning, the importance to rely on strong personal competencies on site was recognised. As sales manager and de facto South Korea boss, Charlie Moon undoubtedly brings these skills with him. He knows the market

like the back of his hand and is an important reason why binder was able to gain a firm foothold in the country.

South Korea's demand for connectors is two-fold: Low-cost versions for the domestic market are almost exclusively sourced from local manufacturers, whereas technology groups order high-quality components from global companies and brands.

This creates enormous competition. Numerous subsidiaries and distributors of global connector manufacturers from the USA, Europe and Japan fight for the favour of South Korean buyers. However, not only do these competitors vie for the electronics sector. South Korea's automotive, railway, aviation semiconductor and medical technology industries are also looking for the best connections.

## Those who want to be successful are not (only) based in Seoul

South Korea's capital Seoul is considered the heart and the symbol of economic success. But it would be fatal for a foreign company to be represented only in this city. Production centres and industrial areas are spread all over the country;

each cardinal direction has its own specialisation. The technology hubs, semiconductor companies and developers of medical devices are primarily located in the North, machinery is mainly constructed in the centre, whereas steel, ship and railway construction are concentrated in the South.

This is why Charlie Moon has built up a whole network of binder distributors who maintain direct contact with customers in the respective industries. ►



Charlie Moon is expanding sales activities in South Korea

He himself runs his command centre in Sejong, one of Korea's regional administrative capitals. From there, he can reach every major city within three hours and thus also spontaneously drop in on traders and customers. When Charlie Moon is not directly on site, he conducts technical trainings, organises trade fair appearances or looks after binder sales partners on a local visit.

#### Market leadership as a benchmark

Quality 'made in Germany' has a very special reputation in South Korea – especially when it comes to connectors for industrial cameras, precision laboratory equipment and servo motors. Here, binder is way ahead with its high-end portfolio. Charlie Moon has contributed greatly to this success.

He insisted on entering the South Korean market with only the highest-quality components and on outrunning the competition, for example by cross-selling bundles of connectors and sensors. With this, Charlie Moon and binder South East Asia are now setting their sights on undisputed market leadership. ■

**South Korea is one of the world's most important centres of technology**

#### About the author



**Achim Klett** has been with binder since 2000. In 2013, he established binder South East Asia as Managing Director and shaped their market entry locally for over two years. He is currently responsible for sales in the Asian region and supports a number of key German customers with production facilities outside Germany.

**'As the new Director of International Sales, I want to position binder as a truly global player.'**

**DAVID PHILLIPS**



The company headquarters of binder precision parts ag (Grenchen, Switzerland)

# What does a Board of Directors actually do?

In every major company, there are boards and committees whose names everyone has heard of before. But what do they do? Who is involved, and what are the consequences of their decisions? Let's shed some light on this – with a portrait of the Board of Directors of our Swiss affiliated company binder precision parts ag.

**Text** The Editorial team

Swiss law is clear: there can be no public limited company without a Board of Directors! This board is responsible for all supervisory tasks and for making all decisions that are important for the company. The Board of Directors is at the same time the heart, brain and backbone of every listed company.

Three people hold the reins at binder precision parts ag in Grenchen, Switzerland: Markus Binder leads as President of the Council and is assisted by Alois Müller and Peter Kilchenmann. The issue of who takes the role of heart, brain or backbone is renegotiated depending on the task.

## The Magnificent Seven

According to the Swiss Code of Obligations, every Board of Directors, no matter how large, must fulfil seven duties – come what may. The Board must take over the overall management, organise the company, ensure the finances are under control, appoint the Executive Board, check compliance with all laws, prepare business reports and refer any case of insolvency to the courts. Furthermore, it lays down the articles of association of a public limited company, which is effectively the basic law of the company.

## Appointment of the Board of Directors

The Board of Directors is elected by the (Annual) General Meeting for a term of three years. If they do their job well, members can be re-elected as often as they like. Candidates are nominated from within their own ranks. The Board of Directors itself searches for suitable members, but the Executive Board may also nominate candidates.

All candidates are thoroughly screened. An excellent Board of Directors is made up of members with different skills and backgrounds. This ensures that the Council combines many perspectives and overcomes challenges with as much success as possible. Once the list of candidates has been drawn up, it is presented to the General Meeting of Shareholders, who elect the new members.

## Clear distribution of tasks

Every business professional knows that strategic and operational tasks should be tackled separately – this is the only way to keep business running. In a Swiss public limited company, the Board of Directors takes care of the strategy, while the CEO and Executive Board take care ▶

of the operational business. No one interferes in the affairs of the other. At least not as a rule. In exceptional situations, the Council and Executive Board may put their heads together

to solve a problem as quickly as possible.

Most public limited companies have up to five members. In large companies, sometimes

ten or more people sit around the table. This is not necessary at binder precision parts ag: with three members, its Board of Directors is one of the smaller bodies. ■

## The Board of Directors of binder precision parts ag



**Markus Binder** is the owner of binder precision parts ag and at the same time Managing Partner of Franz Binder GmbH & Co. Elektrische Bauelemente KG as the parent company of the Swiss affiliated company.



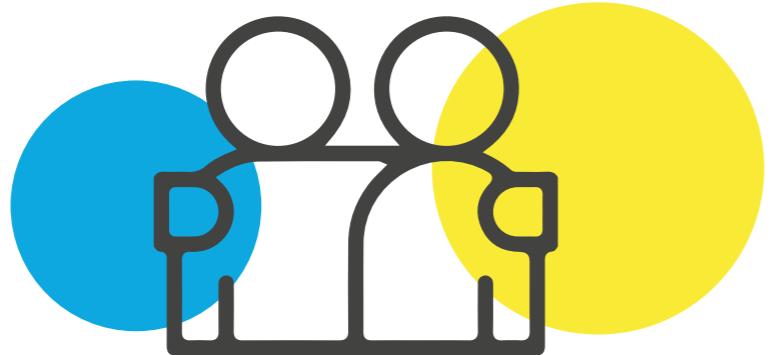
**Alois Müller** is a true financial expert. He was CEO of Baloise Bank SoBa for many years, which is now part of the Baloise insurance group.



**Peter Kilchenmann** is a binder employee of the old school. He had been with binder precision parts ag since 1986 and was its Managing Director until 2018. Since his retirement in the same year, he has remained with the company as a member of the Board of Directors.

**'Now is the time to restructure our sales management and establish our brand as the number one for industrial circular connectors.'**

**GRAHAM ELLIS**



# 'I want to be there for everyone'

Kibre Koc's life story is characterised by new beginnings and continuous development. Standing still is out of the question for the binder works council member. When she came to Germany from Turkey with her family at the age of twelve, she experienced invaluable support and security. Kibre Koc continues to pass these values on to others to this day. This is the portrait of a special binder employee who never loses sight of the bigger picture.

**Text** The Editorial team

When Kibre Koc talks about her career, she lapses subtly into an exciting, rousing tone – as if she were recounting great adventures and incredible stories. For the 54-year-old, this is almost a kind of occupational illness. When Kibre Koc is not at work in binder cable assemblies or supporting her colleagues in her role as works council member, the trained storyteller

is busy whisking away young listeners in schools, nursery schools and at the Heilbronn Theatre to fantastic worlds. But that's not all: Kibre is also a volunteer migration officer for the city of Heilbronn in Germany, cultural facilitator, language facilitator for children, mother of two, trained balance sensor at binder and mediator.

While many others may run out of breath just reading about all this training and different roles, Kibre is just getting started. Why does she wear so many hats? Where does her relentless drive for self-development come from? The answer is simple: 'I want to be there for everyone,' says Kibre, as if it were the most natural thing in the world. After all, she experienced for

herself how the commitment of others has moved her own life forward.

## New starts, strokes of fate and the love of the Ländle (Baden-Württemberg)

When Kibre Koc's family moved from Sivas, Turkey to Nuremberg, Germany in 1980, they were supported by the German authorities and experienced a lot of commitment and patience – especially when the father died in a car accident shortly after they arrived. From then on, Kibre, her mother and her six brothers had to find themselves all over again. They needed help and found it – over and over. This was to have a lasting impact on Kibre Koc's attitude to life.

Kibre attended secondary school, learned German and trained as a hairdresser. During this time, she also met a man from the Ländle. She fell in love, moved to Heilbronn in 1987, had two children – and stayed.

Her children are now grown up and are Kibre's pride and joy: 'I always wanted to be a role model for my children and always look ahead,' says Kibre. It was important to her to teach them values that would turn them into people of good

character. She obviously succeeded, because her children have achieved everything Kibre wanted for them.

## The road to binder

Kibre's own professional career led her to binder in 2010. She initially worked as a temporary worker before being offered a permanent employment contract in production in 2011. She accepted this position just as courageously as she accepted her nomination for the works council three years later. Here, too, she was initially only a temporary member before being permanently elected to the team in 2018.

As in any company, management and the works council are not always on the same side. But Kibre has a very pragmatic attitude to her own function on the committee: 'a company that does not have a works council is a company that is not looking forward.' In her role, she stands up for the workforce – and no company can function without a workforce.

This is why she takes special care of the physical and mental well-being of all binder employees. A positive working atmosphere is at the top of her agenda. In addition, she is a member of the company

health management team and, as a balance sensor, she accompanies employees who suffer from mental stress or have to deal with conflicts. ▶



Kibre in her role as storyteller

**Looking beyond one's own nose**

Those who entrust themselves to Kibre Koc are in the best of hands because it has always been her dream job as a social worker to assist other people and help them with their personal development. If it were up to her, such commitment would be much more self-evident in society: 'I wish people would look beyond their own nose and do something for the community,' says Kibre. You can always make a difference. All you need to do is summon up a little bit of energy. It certainly doesn't hurt to be as communicative, open-minded and capable of taking action as Kibre.

Due to the Corona pandemic, events and performances with children and young people, in which Kibre is normally involved, could only take place to a very limited extent over the past two years. Kibre very much regrets this and at the same time is extremely hopeful that the situation will change again as soon as possible: 'I long to light up many children's eyes again with my fairy tales.' ■



Kibre Koc has worked at binder since 2010

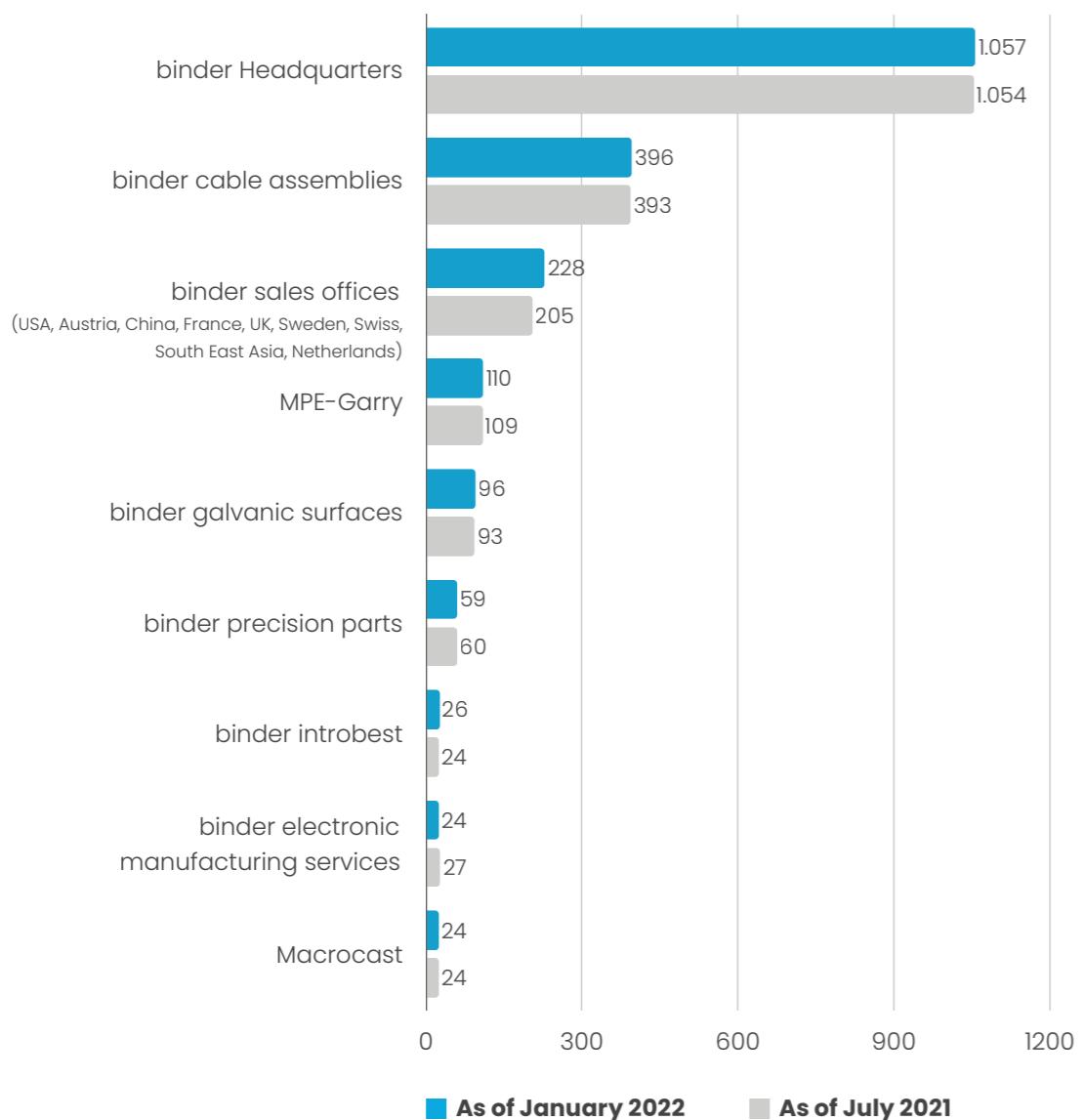
**'I wish people would look beyond their own nose and do something for the community.'**

**'I have the responsibility to shape the future of our company with courage and foresight. Only with motivated employees we can continue to be successful in the future.'**

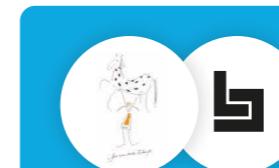
**MARKUS BINDER**

# binder in figures

## Staff deployment within the binder group



As of **1 January 2022**, the binder group employed **2,020 members of staff**.  
On **1 July 2021** – six months earlier – it employed **1,989 members of staff**.



## Partnership in action

binder is keen to further intensify its decades-long partnership with the **Neckarsulmer Astrid-Lindgren-Schule**.

As a company, we would like to help promote the individual development and support of pupils at the Astrid-Lindgren-Schule in the best way possible. For example, the annual donation handover took place in April of this year.

Some exciting collaborations and activities are already planned for the current year together with the special needs education and counselling centre – with the focus on mental and physical-motor development.

## A warm thank you to everyone who has written articles for this issue!

It is only through you that a magazine can come into being, only through you that ideas are generated, only through you that the verbinder comes to life. Feel like writing something? Then please send in your idea for an article – the moment one issue of the verbinder is finished, it's time to start the next one!

## The Editorial team

## Credits

**Responsible according to German press law**  
Markus Binder

**Editorial office**  
Rötelstraße 27  
74172 Neckarsulm (GER)  
Tel. +49 (0) 71 32 325-293  
Fax +49 (0) 71 32 325-150  
marketing@binder-connector.de

**Published by**  
Franz Binder GmbH & Co.  
Elektrische Bauelemente KG  
Rötelstraße 27, 74172 Neckarsulm (GER)  
Tel. +49 (0) 71 32 325-0  
Fax +49 (0) 71 32 325-150  
info@binder-connector.de  
www.binder-connector.de

**General Manager**  
Markus Binder

**Editors**  
Patrick Heckler, Timo Pulkowski

**Art Direction**  
venice branding UG  
(haftungsbeschränkt)  
Lohrtalweg 61/1  
74821 Mosbach (GER)  
info@venicebranding.de  
www.venicebranding.de

**Printing**  
Raff & Wurzel Druck GmbH  
Industriestraße 14  
72585 Riederich (GER)

All rights reserved. Reprinting, inclusion in online services and reproduction on data storage media only with the permission of the publisher.

**Evidence | Astrid-Lindgren-Schule** Graphic p. 53 | **Fotoatelier M** Photos p. 3, p. 13, p. 14, p. 27, p. 29, p. 30, p. 31, p. 32, p. 33, p. 42, p. 50 | **Franz Binder GmbH & Co. Elektrische Bauelemente KG** Photos p. 4, p. 5, p. 6, p. 7, p. 8, p. 9, p. 11, p. 12, p. 13, p. 17, p. 18, p. 19, p. 20, p. 22, p. 24, p. 25, p. 31, p. 34, p. 35, p. 36, p. 38, p. 39, p. 40, p. 42, p. 44, p. 46, p. 49 | **Steffen Walter Studios** Photo p. 46 | **venice branding UG (haftungsbeschränkt)** Photos from www.stock.adobe.com p. 4, p. 16; Illustrations from www.flaticon.com p. 10, p. 12, p. 26, p. 28, p. 30, p. 48

**verbinder**

**binder – a family business.**  
[www.binder-connector.de](http://www.binder-connector.de)