

ISSUE 62

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The magazine of the
binder group

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APRIL
2025

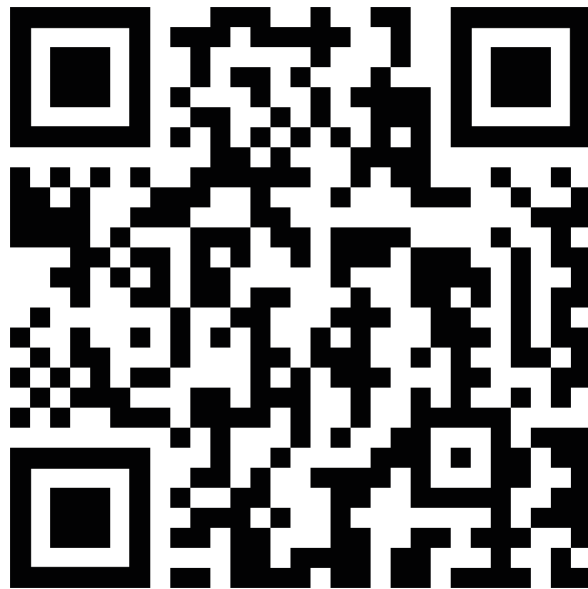


M12-X Connectors for Rail and Transport Applications

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/01

THE RIGHT ATTITUDE?

The basic attitude or mindset. The way you approach someone or something expresses a certain attitude.

THE MINDSET.

For us as a family business, the attitude of each individual is the decisive factor for the further development of our company.

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SIGNAL FOR THE FUTURE

**THIS STEP SECURES
THE FUTURE AND
CONTINUITY OF OUR
FAMILY BUSINESS.**

DEAR READER,

The appointment of my son Len Binder as Managing Director marks the start of a new chapter for our company: the third generation is stepping up to continue binder's success story. This step symbolises continuity, responsibility and the future-oriented development of our family business.

The economic conditions remain challenging, but there are initial positive signs: incoming orders are increasing again and a light at the end of the tunnel is becoming visible. Perhaps the measures of our new sales strategy are already beginning to take effect. With a clear market focus and close ties to our customers, we are confident that we can overcome these challenges and emerge from them stronger than before.

In order to position our company sustainably for the future, we are increasingly focussing on results, innovative solutions and bold decisions. This requires a committed and proactive management team. We have therefore reorganised our management level:

- Sales now has a permanent place in the management team in order to be even closer to our customers and market needs.
- The Technology division has been integrated at the highest level to further strengthen collaboration between Development and Sales.
- The digital transformation is being systematically driven forward by firmly anchoring digitalisation in corporate management.
- In addition, new appointments have been made to the Finance department to ensure our continued economic stability.

A special moment is the farewell to Siegbert Vollert, who helped shape our company for over 38 years. Dear Siegbert, your tireless commitment, your expertise and your loyalty have had a decisive influence on us. As commercial manager, companion and valued advisor, you were a mainstay of our company. We thank you from the bottom of our hearts.



Markus Binder

Geschäftsführender
Gesellschafter



Len Binder

Geschäftsführer





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ELECTRICAL CONNECTOR

COMPAS



SS

/04 NAVIGATE YOUR WAY TO SELECTING THE IDEAL CIRCULAR CONNECTOR

Connectors are essential components in modern electrical and electronic systems. They ensure that power and signals are transmitted safely and reliably between different devices. Among the many types of electrical connectors, circular connectors are characterised by their robust design and user-friendly properties. But how do you find the right solution for a specific application?

Circular connectors are specifically designed to ensure safe and efficient connections in space-constrained environments while providing protection against environmental influences such as moisture and dust. They are available in a variety of designs and pin counts to suit different power and data transmission requirements. Due to their ability to maintain electrical integrity in harsh conditions, they are a preferred choice for professionals seeking optimum performance and reliability in their systems.

Understanding the different types of circular connectors is critical to selecting the right solution for a specific application, as each type fulfils different purposes based on the installation requirements. Circular connectors can be categorised into different types, each designed for specific environments and functions: Flange connectors, overmoulded cable connectors and field-wireable connectors. Suppliers such as binder also have other connector types and special compo-

nents such as solenoid valve connectors, cable splitters, dual distributors, distribution blocks, control cabinet feed-throughs, adapters, LED lights and raw cables in their portfolio.

THE DIFFERENT STRENGTHS OF CIRCULAR CONNECTORS

The common circular connector types have different strengths and areas of application. Flange connectors are generally used in devices. They are characterised by their robust design, which was specially developed for stationary applications. Their ability to be securely integrated into device housings or control panels makes them ideal for permanent installations in machines and fixed device boxes. The fixed mounting ensures high stability and durability, making them a preferred choice for demanding industrial environments.

Field-attachable connectors are characterised by their flexibility and user-friendliness. They enable quick and easy rewiring directly on site, which is particularly advantageous in high-maintenance environments such as industrial automation. These connectors are ideal for applications where cables need to be changed or replaced frequently without the need for special tools.

UNDERSTANDING TO SELECT THE RIGHT SOLUTION FOR AN APPLICATION.

Overmoulded cable connectors, on the other hand, offer excellent strain relief and protection against environmental influences such as moisture, dust or chemical substances thanks to their robust sheathing. They are universally suitable as a standard solution, as they can be used quickly and do not need to be assembled or connected.

INITIAL CRITERIA FOR SELECTING THE RIGHT CIRCULAR CONNECTOR

Selecting the right circular connector is crucial for optimising the performance and reliability of a project. Given the diverse requirements of the applications, it is important to choose a connector that meets the specific needs. The first step is to identify the right type of connector that is suitable for the application in question. The environment, the installation conditions and the specific requirements play a key role here.

REQUIREMENTS FOR SAFE CONNECTIONS

To ensure a correct connection and safe contacting, the right combination of socket and plug is crucial. The choice between male and female connectors depends on the installation situation and the safety requirements. While male connectors allow easy contact due to their exposed pins, female connectors with protected sockets offer better protection against accidental contact or short circuits. Pin and socket connections are always used together in practice, so the decision must be tailored to the specific circumstances.

Another important aspect is the rated current, i.e. the maximum current that can safely flow through the connector. It is important to ensure that the selected connector fulfils the performance requirements of the application. This rating can be influenced by various factors, including the contact material, thermal management, contact resistance, number of contacts and environmental conditions. At the same time, the rated voltage, the max-

imum transmissible voltage, must be kept in mind. These factors are particularly important in safety-critical applications to avoid overloads and potential failures.

The locking mechanism ensures a secure connection between the pin and socket. The available locking types include threaded locking, bayonet locking, push-pull locking and snap-in locking. Threaded connections, which are common with M8 or M12 connectors, offer high mechanical stability and are ideal for environments with high vibration. Push-pull or snap-in systems, on the other hand, enable quick and easy handling and are particularly suitable



THE RIGHT COMBINATION OF SOCKET AND PLUG IS CRUCIAL.



for applications where frequent connections and disconnections are required.

SPECIAL REQUIREMENTS FOR DEMANDING APPLICATIONS

The environmental conditions in which the circular connector is used play a key role in product selection. It is important to evaluate the IP (Ingress Protection) rating of the connector, which indicates how well the connector is

protected against dust and water, as well as its ability to withstand extreme temperatures and other environmental factors. For connectors used in extreme conditions such as high temperatures or high vibration, ensure that the connector has a suitable IP rating and environmental seals.

In demanding environments, such as in medical technology or food processing, it is essential to select connectors with robust and hygienically safe seals

to prevent breakage, contamination or exposure to harmful substances.

In addition to environmental influences, electromagnetic compatibility is a key criterion. Electromagnetic interference can impair data transmission. Shielded connectors are suitable here. They minimise such interference and ensure high signal quality.

Attention must also be paid to the connection methods and the coding

of the connector. Whether soldered, screwed or crimped - the connection method must meet the requirements for reliability and ease of installation. Clear coding also ensures that incorrect connections are ruled out. The compatibility of the connector with the wire gauge of the cable used must also be taken into account. This must correspond to the current carrying capacity of the application in order to avoid overheating and voltage drops.

Space restrictions, choice of material and industry-specific requirements also play a role. For applications with limited space, the size and weight of the connector as well as the geometry are important considerations. Angled connectors can offer better accessibility in tight or hard-to-reach areas. At the same time, the material of the connector housing must be adapted to the specific environmental conditions: Stainless steel offers corrosion resistance and high resilience, while plastic is a lightweight and cost-effective solution for standard applications. Metal housings, on the other hand, are particularly robust and suitable for industrial environments.

Certifications and approvals are key aspects in ensuring compliance with safety and quality standards. Industries such as food or medical technology, for example, require FDA or Ecolab conformity, while UL approval is often

necessary for the US market. Careful examination of these requirements ensures that the selected connector fulfils both the functional and regulatory requirements of the respective application.

SIMPLY FIND THE RIGHT CIRCULAR CONNECTOR

Choosing the right circular connector is therefore a complex task that involves numerous factors. Many decisions influence the performance and reliability of the overall system. With a clear understanding of the application and a careful analysis of the technical requirements, it is possible to find the ideal connector that will deliver its benefits in practice. At binder, specialists in circular connectors, customers can use a product filter on the website to select the most suitable connector for their project.



DRIVE

The drive to continuously and proactively
push yourself and the company forward.



UNIQUE

/06

SIEGBERT VOLLERT, 38 YEARS BINDER

After 38 years at binder, we bid farewell to a long-standing companion and valued advisor – Siegbert Vollert, our Chief Financial Officer, who has played a vital role in the company's development and success with his extensive knowledge and dedication. His loyalty and expertise have had a lasting impact on both the company and the Binder family. Until 30 May 2025, he will continue to support us in an advisory capacity to ensure a smooth transition. On this special occasion, we take the opportunity to look back on Mr. Vollert's career and gain insights into his time at binder.

WHAT WERE YOUR FIRST IMPRESSIONS, WHEN YOU STARTED AT BINDER 38 YEARS AGO?

You know, when I first came to binder, I said to myself: "I'm not going to stay here for long". And I really meant it.

I came to the company through Mr Andreas Binder - he was a fellow student of mine and left the company in 2014. After finishing my studies, which I did in a very short time, I was looking for a way to earn some money. I had financed my studies myself and had my own flat - so I needed to find a way to cover my rent and living expenses. I didn't qualify for BAföG because it was based on parental income. I had been in the army before and received a severance payment, but of course that ran out at some point.

Then Andreas Binder approached me and said, "There's a vacancy at binder right now. It was about a computer-based tool amortisation calculation - which ended up being the subject of my diploma thesis. I then sat down with the technical and commercial director at the time to see if I could have a closer look at it. I thought, "That sounds like a good practical task - I'll do it.

So I wrote my diploma thesis at binder - and I stayed.

WHAT HAS ESPECIALLY MOTIVATED AND INSPIRED YOU DURING YOUR LONG TIME AT BINDER?

Even though I was with the same company for 38 years, it never felt the same. The tasks kept evolving - as did the company itself.

What motivated me most along the way were the people I had the opportunity to meet.

Every new challenge, every change brought new perspectives. Everything was always on the move - and that's what made working at binder so exciting and fulfilling over the years.

WHAT VALUES HAVE ALWAYS BEEN IMPORTANT TO YOU IN YOUR WORK AND IN INTERACTING WITH COLLEAGUES?

For me, it was always clear: a company is, above all, about people.

My goal has been to create an infrastructure that allows colleagues to focus on what really matters - our product, the connector. Whether in development, production or sales: if the conditions are right, quality will follow.

What's needed is a "caring structure" - an environment where people feel

supported. That was important to me - and that's always been my understanding of leadership.

And most importantly - and this is the crucial part - the very best decision a company can ever make is always the decision in favour of the person.

ARE THERE ANY PARTICULAR CHALLENGES OR MOMENTS THAT HAVE STUCK WITH YOU AS CHIEF FINANCIAL OFFICER?

Yes, absolutely - especially the first major crisis. Looking back, there have always been economic cycles in which crises have occurred. But the difference with the first one was that we had no experience. Nobody knew how things would turn out.

I still remember what Franz Binder said to me: "Mr Vollert, when things go down, they'll go up again". It sounded a bit simplistic at the time - but he was right.

As a company, you have to prepare for good times, just like in nature. Even if it's not popular to build up reserves or prepare for more difficult times during a boom, that's the key. It's the only way to get through a crisis.

Every crisis is different. We successfully managed the crises of 1992/93 and 2009, but each brought its own unique challenges. Today, we're increasingly faced with what are known as multiple crises - several events happening at the same time over a short period of time.

One of binder's advantages, then and now, is our high level of in-house

production and expertise. We're less dependent on third countries, which makes us more resilient in times of supply shortages. Even during the 2023 crisis, it was clear that the market would eventually level off. At the time, we made a very clear decision not to expand our production capacity, despite the high demand. In retrospect, this was the right decision. Had we gone ahead, we might not even be around today.

What has changed dramatically is the volatility of the market - it's enormous now. Binder is no longer a speedboat, it's more like a tanker. If we slam on the brakes today, we will pass two ports before we dock at the third.

That's why it's more important than ever to think ahead and take the long view. You can't become complacent just because you've survived past crises. Each new crisis brings new challenges.

HOW HAVE YOU EXPERIENCED THE TRANSFORMATION AND GROWTH OF THE COMPANY OVER THE YEARS?

One of the key driving forces behind our internationalisation was certainly Mr Markus Binder. It was a fundamental step in our growth.

Locations in China, the USA, the UK, Sweden, Singapore - and, of course, Hungary, the development of which I was personally involved in - opened up new market opportunities for us.

Internationalisation wasn't just about business - it was also about culture. I have fond memories of the town twinning between Neckarsulm and Grenchen in Switzerland, where Binder

is also active. The fact that Franz Binder even received an award there shows how close the ties have become - even across borders.

The general conditions for industrial companies have become considerably more difficult - rising energy costs due to political regulations and increasing bureaucracy are putting small and medium-sized companies in particular under pressure. Today, administrative tasks often take precedence over real value creation.

This makes it all the more important to refocus on what really matters: interacting with customers and colleagues. Collaboration is the key to lasting success - it always has been, and it always will be.

ARE THERE ANY EXPERIENCES OR PROJECTS THAT ARE PARTICULARLY CLOSE TO YOUR HEART THAT YOU'D LIKE TO SHARE WITH US?

What is really close to my heart is the people in this company. They have always been at the centre of everything for me - and that has been a key part of my understanding of leadership.

A company is built on many 'C's: communication, customer - and one very important one, even if it's a soft 'C' in English - collaboration. This sense of togetherness, of standing up for each other, has always been essential to me.

Of course there were many projects, exciting developments and challenging phases - but in the end it's the meetings, the conversations, the moments of working together that really remain. Binder was never just a workplace for

me - it was a place of collaboration. And that has made all the difference.

WHAT ADVICE WOULD YOU GIVE TO YOUR SUCCESSOR FOR THE FUTURE AT BINDER?

Trust - that is the most important factor for me. I sincerely hope that Mr Lang will enjoy the same trust that I have been fortunate enough to receive over the years.

After all, it's never the achievement of one person that leads to success, but the interaction of many. Trust creates space for responsibility, openness and joint development - and that's exactly what's needed.

What I'd also like to pass on to him is that what's needed now above all is calm. After these eventful years, it's important to pause, understand what has happened and draw the right conclusions.

Only when we have truly understood everything that the past years have brought can we take the next steps - with clarity, strength and the necessary foresight.

THANK YOU.

SALES FORCE

**AS A KEY
COMPONENT OF
OUR DIGITALIZATION
STRATEGY**

/07

Digitalization presents companies worldwide with both challenges and opportunities, fundamentally changing the way businesses operate. The binder Group is actively embracing this transformation and taking a significant step toward the future by implementing Salesforce as its Customer Relationship Management (CRM) platform. The goal is to optimize sales processes, strengthen internal networking, and leverage innovative technologies for greater efficiency.

A STRATEGIC STEP TOWARD GREATER EFFICIENCY

The CRM project was officially launched in February in collaboration with the implementation partner Kliqxe. This milestone marks the beginning of a profound transformation that will not only enhance sales efficiency but also drive company-wide connectivity. The introduction of Salesforce is not an isolated initiative but rather part of binder's comprehensive digitalization strategy, which also includes projects such as M365 and S/4HANA. Seamless integration with the existing IT infrastructure, particularly the ERP system S/4HANA, enables improved data processing and creates synergies across business processes.

Currently, the project is in the design phase, where specific requirements have been developed and integrated into the system architecture through numerous workshops. The initial focus is on optimizing sales processes for connectors, with other business areas to follow gradually.

NETWORKING AND STANDARDIZATION AS KEY SUCCESS FACTORS

A crucial factor for the successful implementation of Salesforce is the close involvement of binder Group's specialized departments and subsidiaries. The project team's diverse composition ensures that different requirements from various business areas are taken into account. At the same time, the introduction of the CRM system promotes the standardization of internal processes across multiple locations—a critical step toward greater efficiency and transparency.





ARTIFICIAL INTELLIGENCE AS THE KEY TO THE FUTURE

Beyond optimizing sales processes, Salesforce opens up new opportunities for binder Group in the field of Artificial Intelligence (AI). The data collected within the CRM system serves as the foundation for AI-driven analyses that support sales decisions, forecasts, and customer interactions. Automated analytics and intelligent pattern recognition help make data-driven decisions and identify new efficiency potentials. AI integration is a key component of binder's long-term digitalization strategy and contributes significantly to the company's innovative strength.

The Salesforce go-live is scheduled for August, with a total of 120 licenses. Until then, the focus will be on finalizing the system architecture and training users. To ensure a smooth implemen-

tation, regular project status updates will be provided.

CONCLUSION: DIGITALIZATION AS AN INVESTMENT IN THE FUTURE

By implementing Salesforce, the binder Group is making a clear commitment to a forward-looking CRM strategy. This initiative not only enhances the efficiency and transparency of sales processes but also strengthens internal networking within the company. Additionally, the targeted use of AI maximizes the value of existing data and translates it into actionable insights. For binder, digitalization is far more than just technological progress—it is a strategic investment in long-term business success.



ABOUT THE AUTHOR

Daniel Pfeil has been at binder since 2016 and is the department of Head of Processes and Organisation (D-IT).

Paul Schwarz has been a dual student of business informatics at binder since 2024.



JOB HIGHLIGHTS

Few positions within a company are as diverse as that of a Product Manager. Every day, you collaborate with various departments—from development and sales to direct customer interactions. The primary goal is always to develop innovative solutions and successfully establish them in the market. This versatility makes the profession particularly exciting and dynamic. The perfect combination of technical expertise, deep market understanding, and strong communication skills enables Product Managers to guide products from the initial idea to a successful market launch, contributing sustainably to the company's success.

THE JOB IN THE FUTURE

The role of the Product Manager will become even more dynamic and digital in the future. In addition to traditional responsibilities, content creation and a strong presence on social media are gaining increasing importance. Networking and direct interaction with the community will be essential to gain valuable insights and further develop products in a targeted manner. At the same time, the role is evolving toward Product Ownership: Product Managers are increasingly becoming strategic architects who leverage the latest technologies to develop innovative and future-proof solutions.

INTERVIEW

DIETER SANDULA

CHALLENGES IN THE JOB

The challenge in product management lies in balancing the old with the new. On one hand, managing existing products requires continuous optimization and market adaptation. On the other hand, it is crucial to develop innovative solutions that ensure future success. This balancing act between past and future makes product management a dynamic and demanding field.

TAKING RESPONSIBILITY AND APPROACHING FUTURE CHALLENGES WITH OPTIMISM.

APPLICATIONS

Our products are used wherever data is transmitted in industrial environments—they form the backbone of modern automation processes and ensure smooth, efficient communication between machines and systems.

PRODUCTS OF THE FUTURE

A clear trend in connector development is ongoing miniaturization and compaction—while simultaneously meeting increasing performance demands. Additionally, innovative sensor solutions are becoming increasingly important, driving technological progress and opening up new application areas.

WHAT MAKES OUR PRODUCT MANAGERS UNIQUE

What makes me special? I prefer to leave that question to others. Ultimately, it is the shared successes within the team that make the difference and truly demonstrate the value of collaboration.

BEING A PRODUCT MANAGER AT BINDER MEANS ...

taking responsibility and approaching future challenges with optimism.

/08

/09

M12-X

BINDER INTRODUCES NEW CONNECTORS FOR RAIL AND TRANSPORT APPLICATIONS

With the increasing digitalisation and connectivity in the rail and transport sectors, the demand for reliable, robust, and high-performance connectivity and communication solutions is growing. In response, binder, a provider of industrial connectors, is strategically expanding its product portfolio. The company is currently advancing its M12-X-coded connectors to meet the stringent demands of these challenging markets. This development creates forward-looking solutions for applications such as Ethernet-based communication infrastructures, camera-based monitoring systems, and passenger infotainment services.

"The rail industry and the transport sector are becoming increasingly digital. We are currently adapting the M12-X-coded connectors for the specific applications in these target markets. Our connectors will be used in backbone communication structures with high data rates as well as in passenger infotainment systems," explains Dieter Sandula, Product Manager at binder.

binder will ensure reliable data transmission according to the Cat6A standard – even under extreme conditions such as strong vibrations and shock loads. Connectors for these target markets must meet specific requirements. The DIN EN 61076-2-109 standard specifies, among other things, the requirements for the mechanical robust-

ness, vibration resistance, and sealing of connectors specifically designed for industrial and harsh environments. In addition, there are stricter requirements for new areas of application. For railway applications, for instance, connectors must pass additional shock and vibration tests according to DIN EN 61373. Connectors that pass these tests ensure their functionality even under short-term stresses, such as those that occur during shunting or coupling operations.

Dieter Sandula explains: "Mechanical robustness and fire safety of materials are particularly significant challenges. binder addresses these by using new materials that are reliably processed in





adapted manufacturing processes. These materials have been selected based on the criteria of EN 45545-2. Additional manufacturing steps are necessary to ensure that the quality standards and protection levels expected by our customers are met."

ON TRACK FOR THE MOBILITY OF THE FUTURE – ALSO IN AGRICULTURE

In addition to the rail industry, where several hundred connectors may be installed in a single carriage, and the transport sector, which demands ever-higher data rates in every vehicle, the robust connectors are also finding applications in agriculture. Highly complex machinery in this field requires reliable, robust functionality to prevent downtime. Furthermore, increasingly data-intensive real-time monitoring systems are being integrated into this sector. These systems work with real-time data, such as in combine harvesters, where camera-based systems help to avoid collisions with wildlife.

Dieter Sandula draws a conclusion: "The railway industry, as well as other transport sectors, is evolving rapidly in the wake of digitalisation and the mobility transition. For us, it is a logical step to literally jump on this train in time, actively shape the future of these industries, and unlock new business opportunities."



/10

EASY LOCKING

binder, a provider of industrial circular connectors, is expanding its portfolio: The Easy Locking Connector (ELC) of the 570 series, originally developed for homecare applications and already proven in many medical applications, is now also available in black. This new color variant is the result of increased demand from the industry. The shock- and vibration-resistant ELC remains available in a 12-pin version.

BINDER ADAPTS EASY LOCKING CONNECTOR TO INDUSTRIAL REQUIREMENTS



"The decision to introduce a black variant is based on industry requests. While light gray is commonly used in homecare applications, where this product originated, black is more in demand in industrial environments. Here, it is not necessarily required to immediately recognize contamination," explains Jana Wagner, Product Manager at binder.

The Easy Locking Connector of the 570 series is suitable for both medical applications and industrial requirements. Featuring a snap-in locking mechanism and an asymmetrical hexagonal contour in the plug section, this cable connector ensures high operational safety and a long service life. The ergonomically shaped housing is made of durable PA66 plastic.

IDEAL FOR FREQUENT PLUG-AND-PLAY IN INDUSTRIAL SETTINGS

With over 5,000 mating cycles, the Easy Locking Connector is ideal for applications requiring intuitive and frequent plugging and unplugging. The snap-in locking mechanism and asymmetrical hexagonal contour prevent incorrect mating, making handling particularly easy. Additionally, the connector's design effectively prevents unauthorized opening and accidental contact with cable ends.

If the cable connector needs to be re-opened after assembly, a corresponding release tool is available. The flange socket is protected against dust and splashing water from all sides with an IP54 rating, even when unplugged. This eliminates the need for an additional protective cap, saving both time and costs for the end customer.

Jana Wagner states: "A prime example of an industrial application is display connectivity, allowing machine statuses to be easily retrieved. Here, a high number of mating cycles, IP protection rating, and intuitive operation are key factors."

For device installation, various sealing options are available to enable flexible mounting. In addition to an O-ring, a flat gasket can also be used, eliminating the need for a recess in the housing.

SERIES 570 NOW ALSO AVAILABLE IN BLACK

FOR INDUSTRIAL REQUIREMENTS

ARTIFICIAL INTELLIGENCE AT BINDER

/11

Whether in social media, trade journals, or daily newspapers, the topic of Artificial Intelligence (AI) is omnipresent ... naturally, also at binder. AI already plays a role at binder and is used in various aspects of everyday work.

AI IN EVERYDAY BUSINESS: INCREASING EFFICIENCY AND SIMPLIFYING TASKS

Many employees are already using AI-powered tools to perform their tasks more efficiently. Some examples include:

- Translating emails and texts with AI-based online tools.
- Automatically summarizing lengthy information.
- Quickly researching suppliers and business partners.
- Generating well-structured text suggestions from brief bullet points.

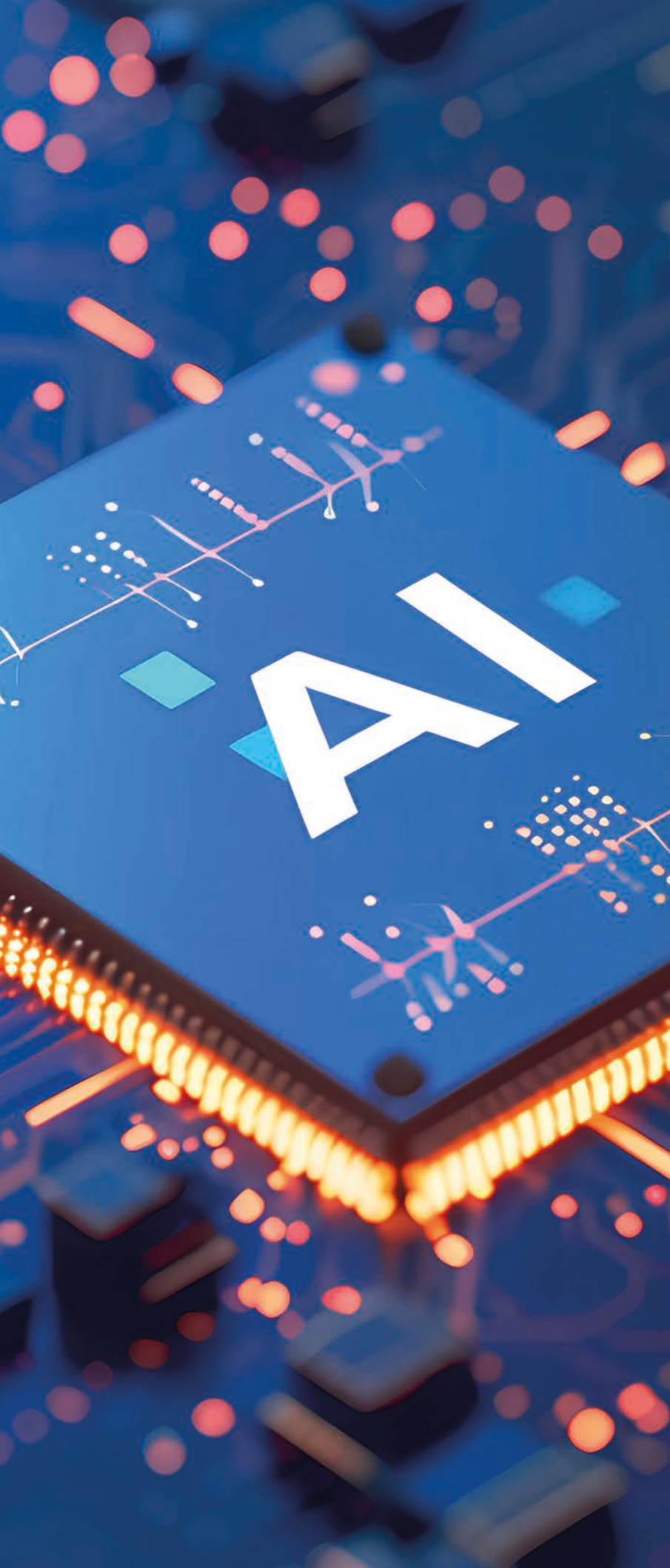
These applications, which we refer to as "Workplace AI," significantly simplify daily

work. However, despite all the advantages, clear guidelines regulate the use of AI tools.

SECURITY AND DATA PROTECTION: CLEAR RULES FOR AI USAGE

AI systems learn from the data entered—and this is precisely where caution is required. To ensure the protection of company and personal data, binder has established binding guidelines for all employees:

- No entry of personal data.
- No use of internal company information or key figures.
- No input of sensitive email content or confidential data.
- Always critically review AI-generated results, as they are based on probabilities and may contain errors.



■
The model aims to
optimise business
processes.

FROM “WORKPLACE AI” TO STRATEGIC USE: “BUSINESS DATA AI”

In addition to the individual use of AI in daily work, binder is already working on a strategic integration of AI into company processes. The binder digitalization initiative is creating a group-wide foundation for business data and information, upon which an internal AI model—“Business Data AI”—can be built. This model aims to optimize business processes and support decision-making with high-quality information and forecasts.

In the area of product information, binder is already leveraging artificial intelligence: Visitors to the binder website can interact with the binder AI assistant. You can find it at www.binder-connector.de, at the bottom right under “Ask me anything”—the chatbot is available at all times.

CLEAR RULES FOR THE USE OF AI TOOLS

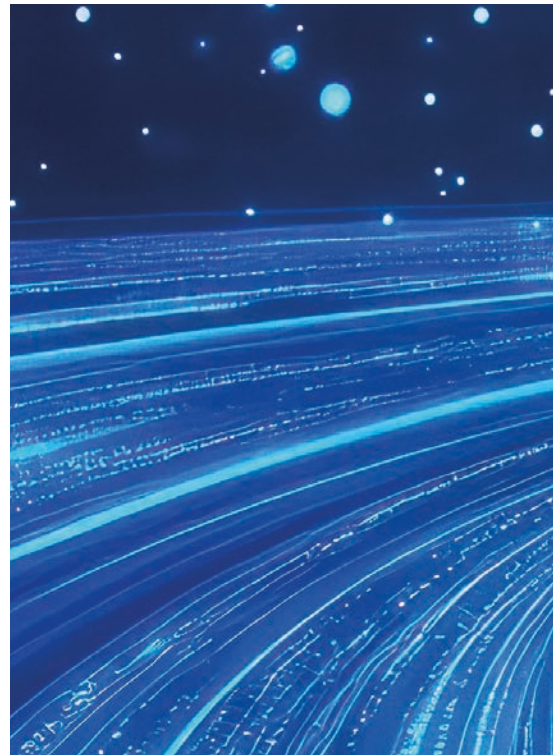
FUTURE

LOOKING AHEAD: AI AS PART OF THE CORPORATE STRATEGY

Our IT department closely monitors developments in AI and evaluates the strategies of leading software providers, including SAP. While the technical implementation of “Business Data AI” still requires significant effort, the cost-benefit ratio will continue to improve in the coming years.

CONCLUSION

Artificial Intelligence is also a key future topic for binder. We remain proactive, providing our employees with helpful tools and clear guidelines for “Workplace AI” while actively driving the development of “Business Data AI” with our digitalization strategy. This is an important contribution to binder’s future viability and competitive strength!



ABOUT THE AUTHOR

Johannes Gaus has worked at binder since 2004 and has been Head of Strategic Projects (GL-SP) since his return in 2018. He has been Head of Digitalisation (Chief Digital Officer) and a member of the Executive Board since 2024.

BUZZING FOR BINDER

Happy to work at binder, eager to make a
difference, proud to contribute – and proud to
be a part of it.

24/7

MEET OUR NEWEST EMPLOYEE – ALWAYS AVAILABLE, ALWAYS READY!

We continuously seek ways to enhance customer experience and optimize internal workflows. Our latest addition is a game-changer—an AI chatbot that operates 24/7, speaks multiple languages, and instantly retrieves thousands of product details.

WHY AI? A SMARTER WAY TO ASSIST CUSTOMERS

With a portfolio of over 7,000 standard products, finding the right connector and accessories can be overwhelming. While our sales and customer service team enjoys assisting customers, they often handle repetitive questions that take time away from more complex inquiries. That is where our chatbot comes in. It provides instant answers to standard requests, freeing our experts to focus on in-depth technical consultations and personalized service. The chatbot is also a valuable tool for international customers. With multilingual support, it adapts to different regional needs, ensuring seamless assistance across markets.

HOW WE TRAINED OUR AI ASSISTANT

Like any new employee, our chatbot needed extensive training. We built a robust knowledge base containing product specifications, FAQs, and smart filtering capabilities to navigate over 20 technical characteristics.

Early testing revealed challenges, such as misinterpreting certain industry specific terms. Fine-tuning was essential to improve accuracy and ensure clear, relevant responses.

ENHANCING CUSTOMER SERVICE – NOT REPLACING IT

We understand that technology should support, not replace, human expertise. Our chatbot efficiently handles routine inquiries, allowing our team to dedicate more time to strategic customer needs. For complex cases, users can seamlessly switch to a human representative, ensuring a smooth customer journey.

/12



THE RESULTS: FASTER ANSWERS, IMPROVED EFFICIENCY

Since launching, our chatbot has significantly improved customer interactions. Users find the right product faster, reducing frustration and increasing website engagement. Meanwhile, our sales and support teams can focus on high-value tasks, enhancing overall efficiency.

WHAT'S NEXT? SMARTER AI FOR AN EVEN BETTER EXPERIENCE

Our chatbot will continue to evolve, learning from interactions to refine its responses and predict customer needs more accurately. Future enhancements can include personalized recommendations based on past interactions or alternative product suggestions. At binder, innovation drives us forward. Our AI chatbot is just one of many steps toward providing out-

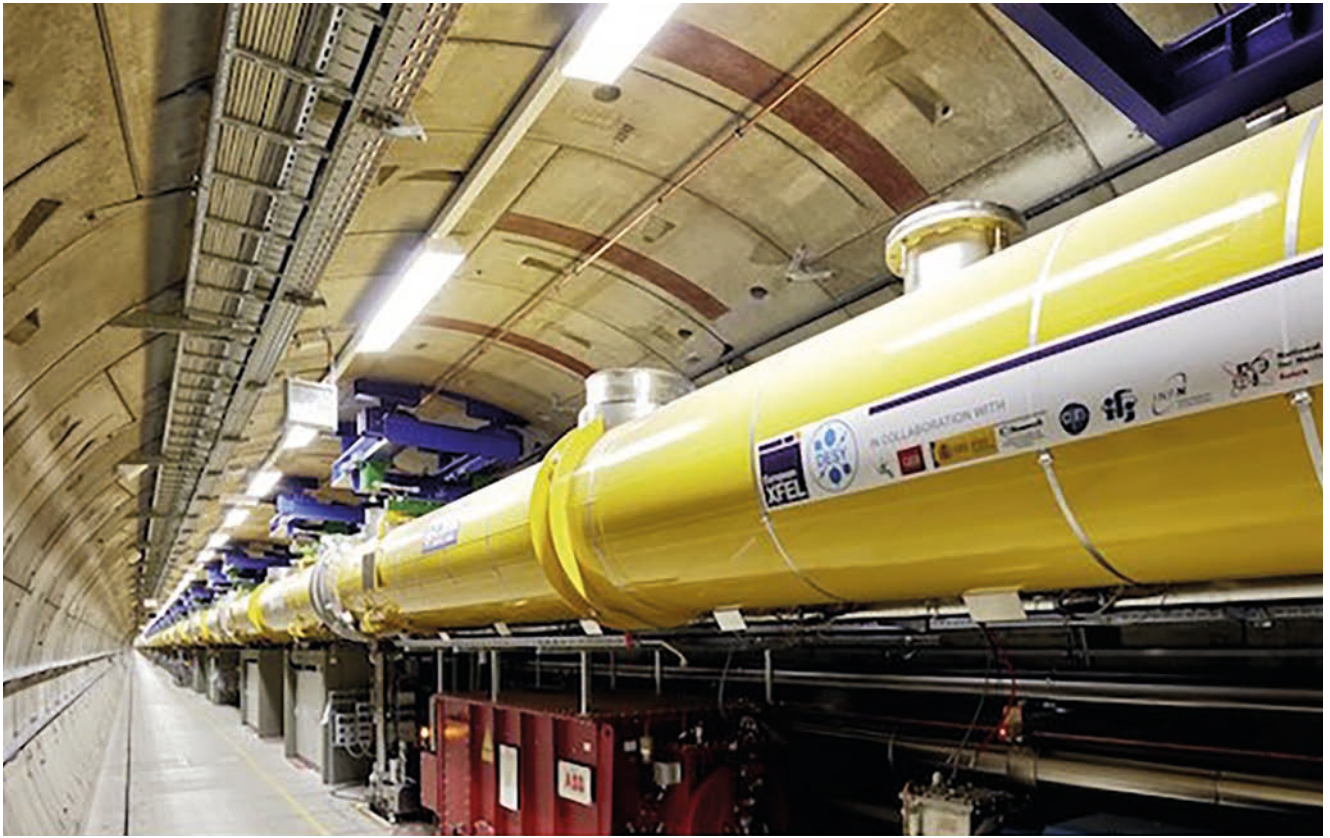
standing customer support. Next time you visit our website, let our digital assistant help you find exactly what you need—instantly and effortlessly!



ABOUT THE AUTHOR

Paul Pulkowski has been Marketing Manager at binder USA since February 2021.

USERS FIND THE RIGHT PRODUCT FASTER



DESY /13

UNVEILING THE MYSTERIES OF THE MICROCOSM

The Deutsches Elektronen-Synchrotron (DESY) is a research institute whose scientific achievements, particularly in accelerator physics and technology, are considered groundbreaking. As one of the world's leading accelerator centers, DESY serves as a central hub for researchers and engineers striving to push the boundaries of our understanding of the microcosm. Its research spectrum covers the behavior of elementary particles, the intricate dynamics of nano-

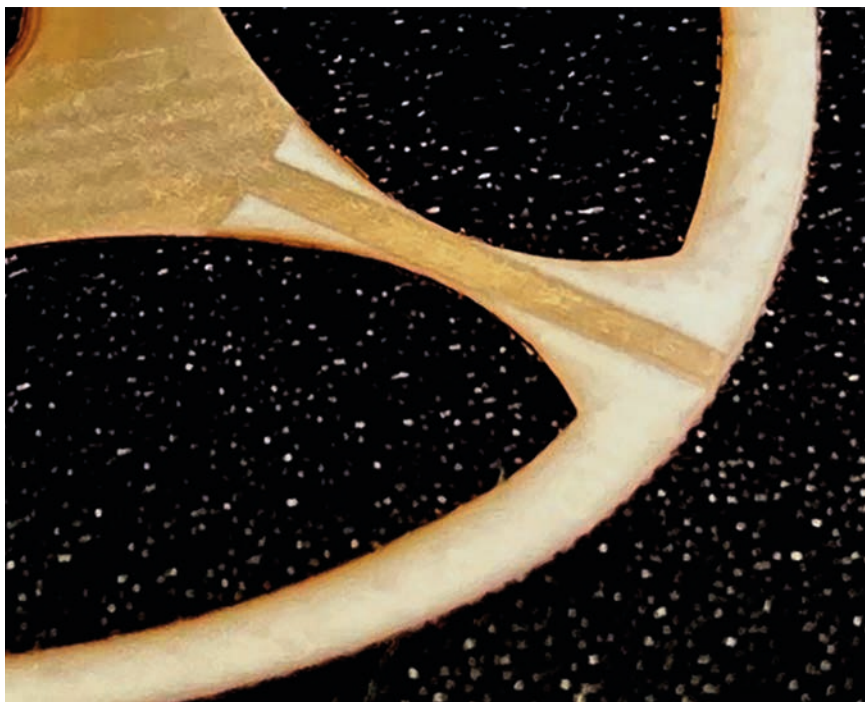
materials, and the complex interactions between biomolecules. With state-of-the-art accelerators and detection instruments, DESY generates the most intense X-ray light in the world, propels particles to record-breaking energies, and opens entirely new perspectives on the universe.

One of the essential devices developed by the SDiag team at DESY is the Bunch Arrival Monitor (BAM). These monitors measure the arrival time of electron bunches at various points within the accelerator tunnel. BAMs play a crucial role in synchronizing experiments where precise time measurement is essential.

To tackle the challenges involved in manufacturing BAM components, DESY has established a partnership with the binder Group. The binder Group is one of the leading specialists in circular connectors, recognized for its advanced manufacturing capabilities. Its core competencies include the customized development, design, and automated production of connectors, industrial engineering, plastic part supply, CT-based metrology, quality assurance laboratory services, and toolmaking. The binder Group offers a comprehensive range of services, including high-precision printing, etching, and silver-plating at the micrometer scale—making it an ideal partner for DESY's demanding requirements.

The binder Group is a leading provider of advanced manufacturing solutions and is highly regarded for its expertise in producing high-precision components for specialized scientific and industrial applications. The company has established itself as a trusted partner for organizations like DESY, which require the highest standards in component manufacturing and assembly. This reputation is built on a strong focus on innovation, quality, and customer satisfaction.

A STRONG PARTNER-SHIP FOR INNOVATION



The collaboration between DESY and the binder Group serves as an exemplary model of how close cooperation between different stakeholders can drive technological innovation and overcome technical challenges. The binder Group's ability to deliver cost-effective, reliable, and vacuum-compatible components has significantly enhanced DESY's diagnostic capabilities, particularly in the development of Bunch Arrival Monitors (BAMs) and other critical diagnostic systems.

DESY's endorsement of the binder Group is a testament to the company's outstanding manufacturing expertise and customer-centric approach. The binder Group is a key partner in DESY's continuous innovation efforts, contributing significantly to cutting-edge technology that strengthens DESY's position as a global leader in accelerator research.

Through its partnership with the binder Group, DESY not only optimizes the performance of its particle accelerators but also sets new standards in the production of high-precision components for scientific research. This collaboration underscores the importance of interinstitutional and interdisciplinary cooperation between scientific institutions and research-driven companies to drive technological advancements and expand the frontiers of knowledge.

ABOUT THE AUTHOR

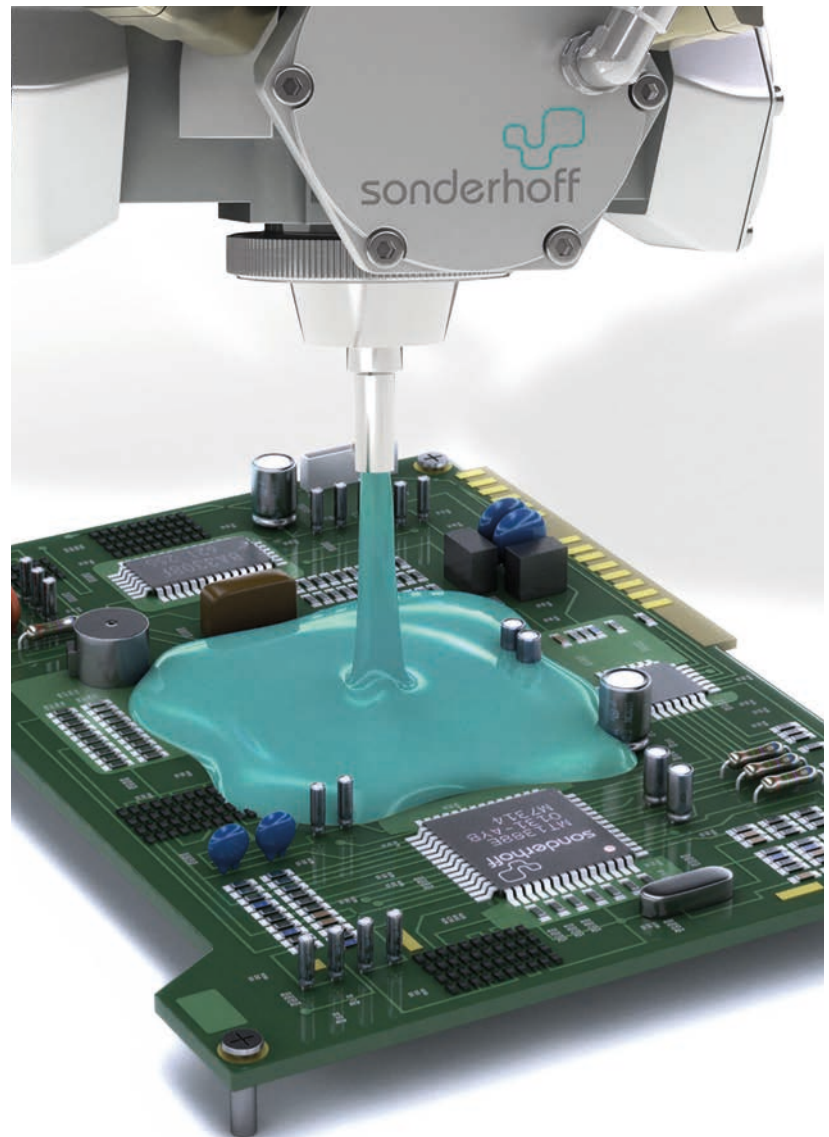
Dr. Nisamol Thevaruparambu
Abdul Nazer from DESY, Hamburg

PUR

/14

PUR FOAM & POTTING PROCESSES: RELIABLE PROTECTION FOR YOUR ELECTRONICS

In modern electronics manufacturing, protection and durability are crucial. To safeguard sensitive components from environmental influences, polyurethane (PUR) has established itself as the ideal material. At binder cable assembly, we utilize state-of-the-art PUR potting and foam technologies to provide our customers with customized solutions.



**PUR =
POLYURETHANE IS A
VERSATILE PLASTIC**



WHY CHOOSE PUR POTTING AND FOAM?

- **Optimal protection** against moisture, dust, dirt, mechanical stress, temperature fluctuations, and chemical exposure.
- **Electrical insulation** to prevent short circuits.
- **Precise customization** to meet specific requirements.
- **Easy and efficient processing**, even with automated systems.
- **Lightweight material**, minimizing the impact on the final product.
- **Excellent insulation** against heat and shocks.

VERSATILE APPLICATIONS

Our customers from various industries benefit from PUR technologies:

- **Electronics in demanding environments:** Protection of sensitive components in industrial applications, automotive manufacturing, and medical technology.
- **PCBs and sensors:** Shielding against corrosion, vibrations, and harmful external influences.
- **Batteries:** Extended lifespan due to protection from moisture and mechanical stress.

TECHNOLOGY AT BINDER CABLE ASSEMBLY

Thanks to cutting-edge equipment, we ensure precise processing:

- **High-precision dosing systems** that mix PUR components in the optimal ratio.
- **Efficient mixing technology** for homogeneous processing.
- **Advanced control systems** ensuring high quality and reproducibility.

SUCCESSFUL PROJECTS WITH PUR TECHNOLOGY

Our innovative PUR solutions are used in numerous applications:

- **Sealing foams for automation:** High-precision seals with optimal material properties.
- **Electronics potting for medical technology:** Protection of sensitive electronics for reliable operation.

THE ADVANTAGES OF PUR TWO-COMPONENT SYSTEMS

- **Fast curing** for efficient production processes.
- **Strong adhesion** to various materials.
- **Flexible customization** through specific formulations.

- **Easy application** in diverse manufacturing processes.

CONCLUSION

PUR potting and foam provide optimal protection and extend the lifespan of electronic components. With our expertise and state-of-the-art technology, we develop tailored PUR solutions for your projects.



ABOUT THE AUTHOR

Michael Schroers has worked for binder since 2013 and is responsible for sales and logistics at binder solutions

/15 HIGHEST QUALITY

CAPACITY EXPANSION AT BINDER PRECISION PARTS AG

For years, binder precision parts ag has relied on state-of-the-art sorting systems to make its manufacturing processes more efficient and ensure the highest quality. In addition to performing reliable 100% inspections on a large portion of the produced contacts, these systems also help optimize existing workflows. They enable rapid quality control of new production systems and assist in sorting out defective products.

SUCCESSFUL COMMISSIONING OF THE NEW SORTING SYSTEM

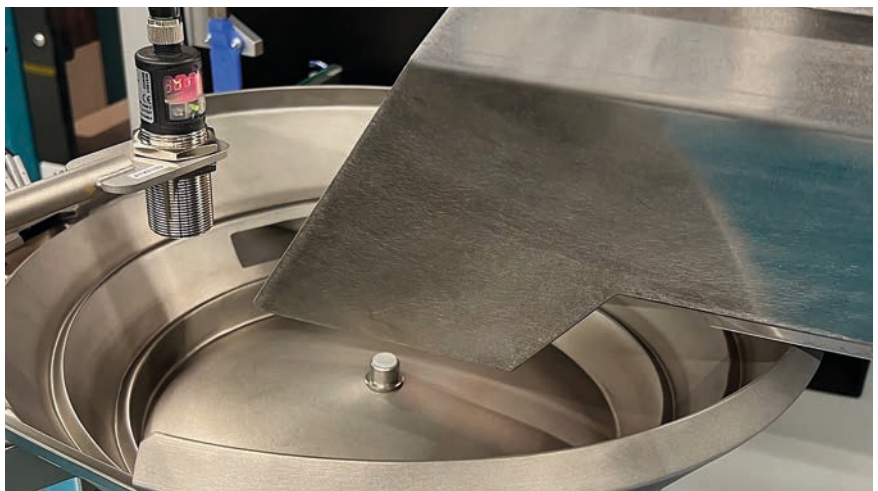
With the commissioning of the latest Sonsmall sorting system from SONTEC, another customer-specific project has been successfully implemented. The goal: to inspect the con-

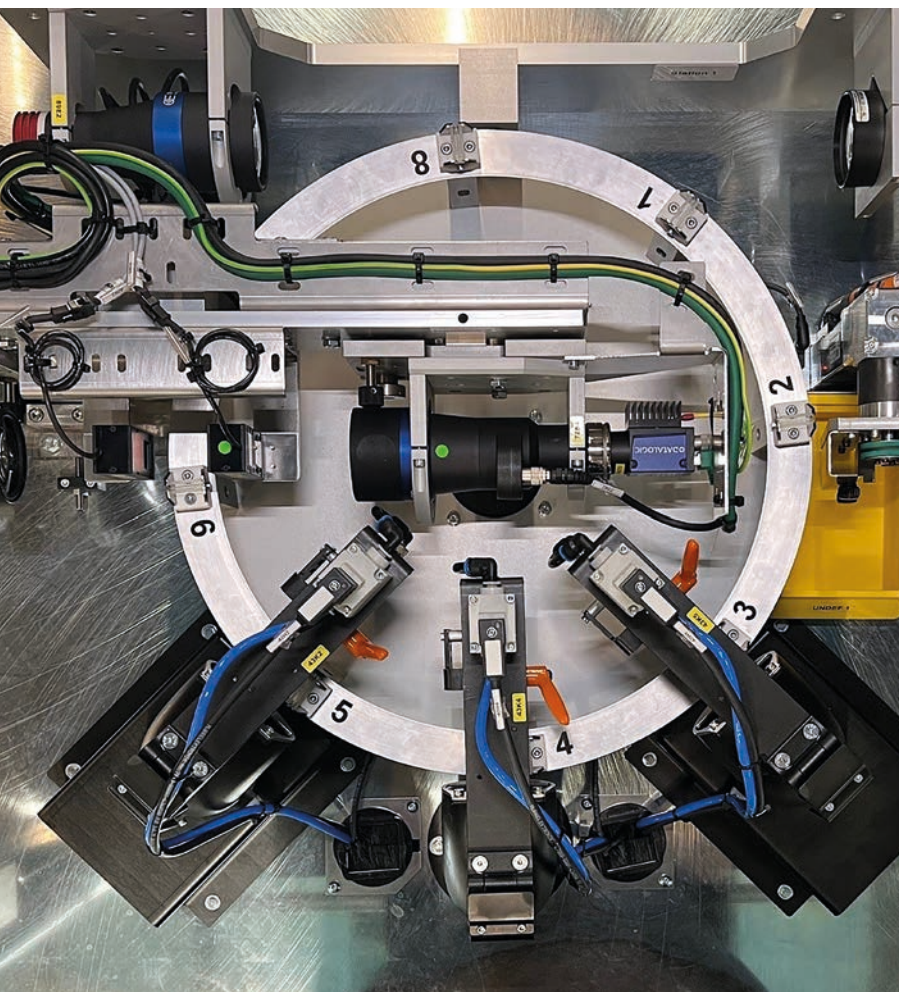
tours of contact sockets and pins at a speed of at least 140 parts per minute while precisely detecting any contamination—a challenge for which no market-available solution previously existed.

PRECISION AND EFFICIENCY THROUGH CUTTING-EDGE TECHNOLOGY

The parts are fed via a vibration bunker and a feeder bowl, ensuring consistently high performance regardless of the fill level. A first camera captures the positions of the parts and controls the loading process for optimal handling.

At the heart of the system is a high-resolution 12-megapixel camera system with a measurement accuracy of ± 0.006 mm. The inspection takes place in multiple stations: first, the outer contour is checked, followed by an exact position determination. Two additional cameras on a movable rocker capture real-time





INNOVATION FOR THE HIGHEST QUALITY ASSURANCE

With this innovation, binder precision parts ag is positioning itself for the future—particularly for the inspection of lead-free contacts. Customers benefit from even more reliable quality assurance that combines maximum precision with efficient process management.

data to detect any contamination or chips in the drilled holes of the parts. A high-precision spindle aligns the cameras for each individual part, enabling flawless inspection.

AUTOMATION FOR MAXIMUM RELIABILITY

Defective parts are specifically sorted out using air nozzles and directed into designated containers. Even so-called “pseudo rejects”—flawlessly produced parts that are mistakenly identified as defective due to factors such as color changes or environmental conditions—can be analyzed afterward and adjusted in the system. This ensures continuous improvement of the inspection algorithms.

Thanks to an integrated, space-saving magazine with a conveyor belt, the system can accommodate up to three full

KLT containers, allowing for extended unmanned operation. Relevant measurement data is stored directly in the system and can be retrieved for statistical analysis. Additionally, machine run times and downtimes are integrated into the production data acquisition system, ensuring that the machine operator receives email notifications in the event of stoppages.

FUTURE-PROOF QUALITY CONTROL

Another advantage of this modern technology is the efficient learning process for new parts, which is carried out in collaboration with the machine manufacturer. Through remote maintenance, the manufacturer can connect to the system and quickly adjust programs.



ABOUT THE AUTHOR

Frank Schär has been working for binder precision parts since 1995, since 2009 as technical manager.

/16 MY JOURNEY AT BINDER AUSTRIA

A SUCCESSFUL PATH IN SALES

As a passionate technician, my professional career began in the field of IT. Early on, I realized that I not only enjoyed solving technical challenges but also sharing my knowledge and passion in conversations. This realization led me to take the leap into technical sales in 2004, serving the Austrian market in the fields of IT and electrical engineering. I quickly understood that sales is much more than just selling products—it's about understanding customer needs, offering tailored solutions, and building long-term relationships.

EARLY SUCCESS IN SALES

In 2018, I joined binder Austria as a sales partner, successfully representing the product portfolio. This was a crucial step in my professional development, providing me with valuable experience while strengthening my confidence in binder Austria's products and corporate philosophy. Through close collaboration with customers and partners, I learned what tru-

Was wir machen

Industriesteckverbindungen

Steckverbindungen für die Sensor- und Automatisierung
für medizinische Anwendungen

Individuelle Entwicklung, Konstruktion und automatisiert
Steckverbindungen nach Kundenwunsch



www.binder-connector.de





ly matters in technical sales: clear communication, in-depth technical knowledge, and a strong customer service orientation.

At the beginning of 2021, I took the next step and joined binder Austria directly, opening a new chapter in my career. In September 2024, I was appointed Sales Manager for Austria, taking on a position of great responsibility and shaping the future of our company together with an outstanding team. One of my top priorities is fostering a positive and respectful team environment where everyone—regardless of background, age, or gender—feels heard. I firmly believe that openness and a willingness to learn from one another are key to our success.

**KEY SUCCESS
FACTORS:
CLEAR
COMMUNICATION,
DEEP TECHNICAL
EXPERTISE,
AND A STRONG
COMMITMENT TO
SERVICE.**

TEAM SPIRIT AS A SUCCESS FACTOR

Especially in today's economically challenging times, team cohesion is more important than ever. Only with a strong, motivated team can we achieve our goals and successfully drive our "sales momentum" forward. Our mission is to work in a more customer-oriented manner, offer customized solutions, and further strengthen our market position through unique selling propositions. To achieve this, we maintain continuous communication with our customers to understand their needs and develop tailored solutions.

NEW APPROACHES FOR GREATER CUSTOMER PROXIMITY

To serve our customers even better, we are incorporating local EMS service providers, cable assembly companies, and other specialized areas of the binder Group into our strategy, in addition to our standard product range. Our close collaboration with binder solutions has already yielded initial successes, and we plan to expand our sales efforts further. This will allow us to be even closer to our customers, stay on top of market developments, and build long-term customer relationships through expertise and reliability.

LEXIBILITY AND SPEED AS A COMPETITIVE ADVANTAGE

One of the key benefits of being a family-owned business is our short decision-making paths and high degree of flexibility. These enable us to respond quickly and solution-oriented to customer demands, creating real added value. In a rapidly changing market landscape, agility is essential to best serve our customers.



I firmly believe that we are on the right path with our current strategy. Our approach is based on innovation, customer proximity, and a strong team culture. By making targeted investments in our sales channels, expanding our partner network, and continuously developing our product portfolio, we will further strengthen our market position. I am proud to be part of the binder family and to shape the future of sales in Austria together with my team. Our goal is not just to sell products but to provide real solutions that support and inspire our customers in the long run.



ABOUT THE AUTHOR

Thomas Brunner has been working in sales at binder Austria since the beginning of 2021 and took over as site manager for Austria in September 2024.

AGILE DECISIONS AND HIGH FLEXIBILITY

MAKER

Take responsibility, find solutions,
achieve results - just be bold.

FAIRS IN MAY

12. - 15.05.2025

AUTOMATE IN DETROIT

20. - 22.05.2025

SMART AUTOMATION IN LINZ

21. - 22.05.2025

ADVANCED ENGINEERING IN GENT

21. - 22.05.2025

INDUSTIMÄSSOR ÖRESUND IN MALMÖ

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!!

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