

EDITORIAL



Dear customers,

The days are getting noticeably longer, and spring is just around the corner. At the moment, it very much looks like some normality might be returning to our everyday business. But we'd probably do well to remain as flexible as possible, because the situation in the surrounding sectors remains fragile – in geopolitical terms, too.

Economically, while we believe the environment we are in is still very positive, we face huge challenges. If a supply situation that is putting our Supply Chain staff to the test wasn't enough, we have now also had anti-dumping duties imposed on certain products in the EU for several weeks. These tariffs are so high that we are having to build up alternative resources, which is upping complexity and is definitely not helping product availability.

We acquired the Dutch company Jeveka B.V. just before Christmas. Like Bossard, Jeveka is a family-run business, and we've maintained a close and successful partnership with the company for years. The acquisition is ideal for all parties involved, allowing us at Bossard to now serve the extremely interesting market in the BeNeLux region directly, and Jeveka to benefit from Bossard's considerable clout with all its services and improve its ability to hold its own in the market.

In the Assembly Technology Experts section, you'll be able to read all about our Expert Teardown service. This is where we reverse engineer your products and specifically look for ideas to improve them – our suggestions might relate to the assembly time, product safety, functionality or, naturally, the number and variety of selected fastening technology solutions. I guarantee you – here and now – that Expert Teardown will be worthwhile for you, too.

The pandemic has clearly demonstrated that thinking and acting with the entire supply chain in mind is increasingly

important and the right course of action. This might lead to us modifying our mindset. That is to say, we might take more of an entrepreneurial and collaborative approach than before to all our supply chain operations and exchange information as well and as early as possible, playing on one another's talents. There are still many – or, indeed, a great many – possibilities in this respect.

Our practical examples take us into the world of pharmacy POS systems. The customer's comments on how our solution has boosted their productivity are impressive.

Finally – direct assembly screws for stainless steel. Bossard ecosyn®-IMX screws, an in-house development, are set apart by the fact that they are self-tapping, rustproof and anti-loosening. Read the article to find out where this screw can benefit you.

Robotics is a segment that is highly dynamic and growing rapidly. We serve a wide variety of customers operating in this sector and have specialized ourselves so that we can be your preferred partner, too.

Dear readers, the next few months are going to be tough across the board and the next while is going to be interesting. We are aware of this and have done everything in our power to guarantee you maximum security of supply. But things will remain challenging, and some pragmatism will be required at all levels to find solutions.

On behalf of Bossard, I'd like to thank all our customers for the trust you place in us. We appreciate it enormously.

PETER KAMMÜLLER

General Manager, Bossard Schweiz

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We are wherever you are.



Online

JEVEKA B.V.

Expanding market presence in the BeNeLux region

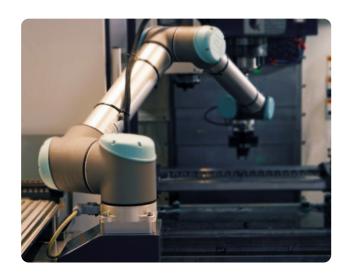


The Bossard Group has acquired Dutch firm Jeveka B.V., a renowned wholesaler of fastening elements, in a move that has significantly expanded its presence in the BeNeLux region.

Jeveka is a prominent technical wholesaler of fasteners and tools that was established back in 1937. The company employs 130 staff members and is based near Amsterdam. There are over 100,000 products in its range, many of which can be delivered directly from stock. Jeveka stocks popular brands such as Unbrako, Kato, Fibro and Schumacher, along with its own brands (like Jextar and Jeclin), which are mainly used in high-tech sectors such as the semiconductor industry.

Since it has its own production facilities, Jeveka is able to do more than just supply commercial articles – it also offers custom products and special designs.

"Our partnership with Bossard goes back decades. We're delighted to further this cooperative relationship by joining the Bossard Group and thus strengthen the range of products and services we can offer our customers," highlighted Stephanie and Adriaan Veltkamp, the former owners.



5 Jeveka



"Jeveka is more than just a strong partner we can use to significantly increase Bossard's market presence in the BeNe-Lux region – it has also been living and breathing the Bossard 'Proven Productivity' philosophy for years."

Daniel Bossard, CEO of Bossard

Acquiring Jeveka is a step that coincides with the Bossard Group's strategic approach to expand its market presence in technologically advanced end markets, and through Jeveka, Bossard has brought on board an experienced market player that will enable successful continuation of its profitability-focused growth strategy and allow it to harness further development and growth potential.

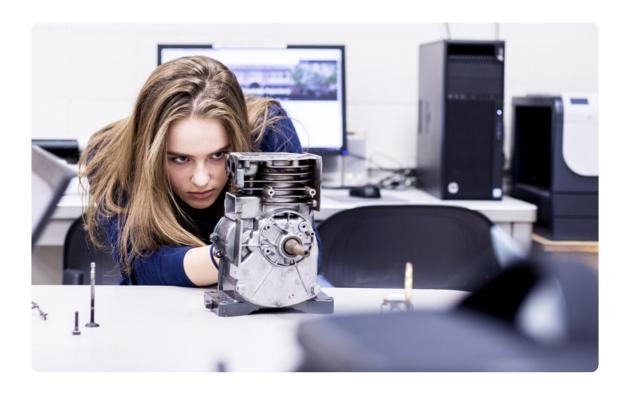
SCAN ME





DISMANTLING, ANALYZING, OPTIMIZING

End-to-end optimization with the Expert Teardown service



With the Expert Teardown service, we're doing more than just taking a close look at products from the manufacturing and production industry – we're also identifying potential for improvement and savings. The million-dollar question in this respect is: "Were the fasteners used the correct choice?"

The idea behind the service is incredibly simple. If you take a product or machine apart one piece at a time, examine it with an expert eye and check it down to the tiniest detail – all the while keeping an eye on the big picture – you'll sometimes end up replacing one part or another with a more suitable solution or even removing an unnecessary component.

Setting our sights on manufacturing costs, function, area of use and design

It keeps getting better

This is particularly true when scrutinizing fastening solutions, which is exactly what's involved in the

Expert Teardown service. Stefan Landthaler is an expert in this field. In his role as Business Development Manager, he advises small, medium-sized and large companies – all the while keeping one things in mind: "There's almost always an easier and better way. One experience I had relates to people who fall into the 'It can't be done' camp. And then someone oblivious to that mindset came along and simply got on with it," commented Mr. Landthaler.

By dismantling a product and systematically examining it to identify potential improvements, the Expert Teardown service successfully optimizes products and cuts costs for parts, manufacturing and processes.

Requirements such as mechanical strengths, load types, corrosion, ease of maintenance and recyclability, not to mention collision-free and efficient ease of assembly, are taken into account, all the while keeping technical feasibility a priority.

Running valuable additional information through the calculator to get the total cost of ownership (TCO)

Mr. Landthaler continued: "The perfect fastening solution determines the quality, price and competitiveness of a product on the market."

He also explained that Bossard offers excellent support in this respect with its Expert Teardown service – by conducting a "high-precision analysis that suggests solutions and improvements, which are in turn reviewed using the empirical data from our TCO calculator to check cost-effectiveness and return on investment (ROI)."

"Nothing is as constant as change." Optimized products cut your manufacturing, process and complaint costs — and therefore also your total cost of ownership.

Interested? Would you like a consultation with one of our experts? Join others benefiting from our expertise and let us find the best solution for you. We'd be delighted to offer you advice and support and provide a swift and expert consultation service. Find out more at:

www.bossard.com

Video: Expert Teardown - How it works!

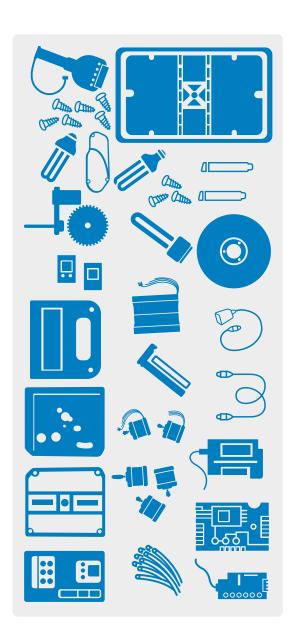
Scan the QR code and learn in less than 3 minutes how the Bossard Expert Teardown Service works based on a real customer example.

SCAN ME





Insight into the "How it works: The Expert Teardown Service" explanatory video

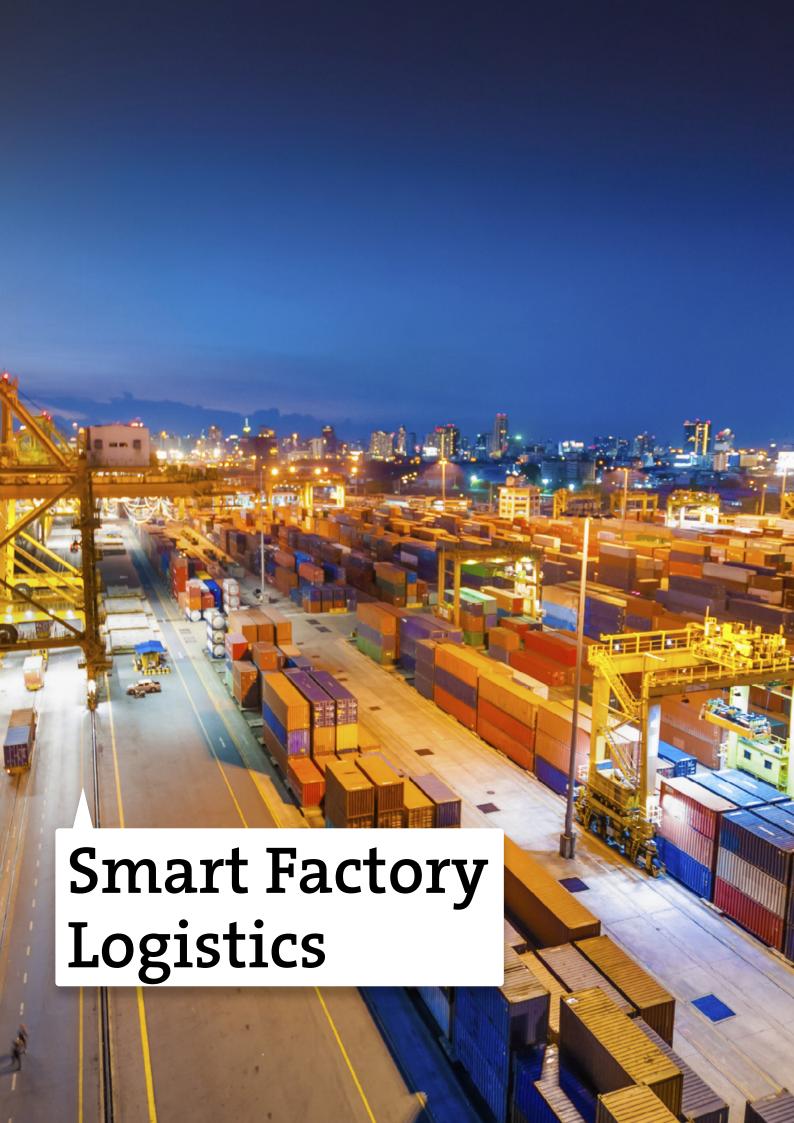


"The Expert
Teardown
service
allows you
to optimize
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for parts,
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and
processes."



"There's almost always an easier and better way. One experience I had relates to people who fall into the 'It can't be done.' camp. And then someone oblivious to that mindset came along and simply got on with it."

Stefan Landthaler, Business Development Manager



THE IMPACT OF THE PANDEMIC

Why supply chain resilience is becoming ever more important



The pandemic has brought a few things to light. Types of business risks have become more diverse and real. We're faced with new scenarios and unpredictabilities every single day. More than 80% of companies worldwide suffered supply chain problems during the COVID-19 pandemic.

If the experience of the last two years is anything to go by, there's plenty to suggest that supply chain disruptions caused by unforeseeable events will continue in the future. That's why now is the time to target the use of so-called Industry 4.0 technologies toward ensuring that your supply chains remain totally transparent at all times. This is the only way to make the best business decisions for your company.

People who therefore have the flexibility and insight that allow them to respond rapidly to changing conditions will have an advantage if and when a rare disaster occurs.

Here's why:



Accurate supply and demand forecasts = greater efficiency

Demand signals can, and often do, change in an instant. Your supply and demand forecasts should be able to account for fluctuations like these by incorporating live inputs from a variety of data sources, including internal departments that are responsible for procurement, planning and processing, along with external stakeholders such as suppliers and customers. If you don't have the right tools to integrate, summarize and analyze the data you collect, any forecast you prepare will end up outdated within hours. Your inputs also have to be accurate to ensure that readings are representative. This flexibility and, ultimately, smarter resource allocation, can only be achieved by using Industry 4.0 technologies more systematically.

Better visibility = smarter cooperation

Most companies in the 21st century have complex supply chains because the requirements of numerous departments have to be taken into account. Given that every decision and event within a company has the potential to affect many other divisions, it makes sense to invest in trade analyses and supply chain intelligence tools to improve visibility from start to finish. The introduction of control capabilities incorporating artificial intelligence and machine learning will be critical to optimizing cooperation throughout the supply chain. Taking a bird's-eye view allows you to identify potential disruptions early on and join forces to develop a strong plan of action. If you can keep up with your business partners, you'll benefit from faster production operations, less surplus and higher revenues.



Strong database = sustainable performance improvements

Even without disruption, your top priority will be to minimize your company's costs and identify business areas that will maximize growth. To do this, you need a robust Industry 4.0 infrastructure featuring analytics tools to measure and visualize operational performance and run simulations. A solid database enables your business to make better, faster decisions that drive more consistent productivity and revenue growth.

The demand for all-encompassing digitalization is far more than just a catchphrase. If you're still just starting out on your digitalization journey, you should be sure to check available digital systems and processes to see if they enable:

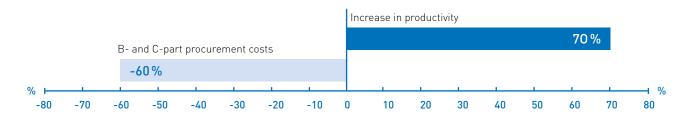
- 1. All-encompassing data storage
- 2. An integrated business network
- 3. The introduction of control capabilities

Ultimately, you need a comprehensive solution with the requisite end-to-end data transparency for an agile and efficient supply chain. Bossard's Smart Factory Logistics service enables you to do exactly that to manage your B- and C-parts.

Here's an overview of how we can use digitalization to influence your KPIs:

Conventional systems	Predictability	Smart Factory Logistics
No predictability. Reactive response to fluctuations in demand	Predictability of fluctuations in demand	Proactive response to fluctuations in demand Flexibility and adaptability if productive capacity changes
No transparency	Visibility of the material flow	Total transparency
	Time and costs for internal logistics activities	
Manual	Goods receipt	Savings of up to 30% possible
Manual	Goods storage	No longer necessary
Manual	Material output to production operations	Savings of up to 50% possible
	Accuracy of inventory data	
Manual monitoring and analyses with the risk of human error	Inventory data analysis and reporting	Big data analytics
Manual testing – susceptible to stock discrepan- cies	Inventory	Inventory at the touch of a button

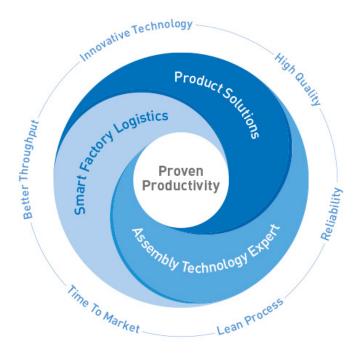
The impact of Smart Factory Logistics



"Proven Productivity" is our twofold promise to our customers.

First of all, that it is verified to work. And, secondly, that it measurably improves our customers' productivity and competitiveness in the long term.

There's no such thing as "one size fits all". We strive to develop a custom solution designed to meet your individual business needs from our range of different products and services. And years of working with our customers have taught us what has a proven and lasting impact.



"This is
'Proven
Productivity'.
This is our
philosophy
that motivates
us every
single day
to be one
step ahead
with you."

Working with Bossard means working with a flexible partner who is capable of:

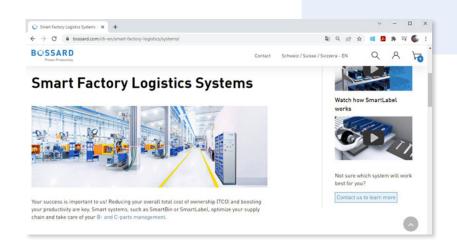
- 1. Developing individual solutions that meet your needs
- 2. Providing technical support and expertise during the digitalization process
- 3. Reliably procuring and meeting your inventory requirements

Incidentally, Bossard's Smart Factory Logistics service does more than just increase your company's efficiency – it also helps minimize surpluses and your ecological footprint to boot.

Want to find out if you, too, have potential lurking within your supply chains? If so, get in touch with us. We'll find out together.

You can calculate your logistics costs yourself on our website:

Accurate costing has become a real challenge in logistics and supply chain management. Optimizing processes and minimizing costs can save you money. This calculator will help you calculate your savings potential to turn your benefits into a reality.







DIRECT ASSEMBLY SCREW FOR STAINLESS STEEL

Bossard ecosyn®-IMX screws: self-tapping, rust-proof, anti-loosening

ecosyn®-IMX (BN 349), our new product innovation, brings together all the functions and benefits of self-tapping and rustproof screws. What makes ecosyn®-IMX screws particularly hard and rust proof is the use of quenched and tempered martensitic stainless steel during the manufacturing process. This means that they can also be screwed into stainless steels such as 1.4301/AISI 304. A transparent lubricating layer makes screwdriving easier, giving it the necessary process reliability. The reinforced female thread also doesn't allow for any play, ensures a high load-bearing capacity and makes the connection resistant to loosening if and when vibrations occur.

ecosyn®-IMX screws allow users to make several savings during assembly: the thread cutting step is eliminated entirely, and there's no need whatsoever for additional securing elements either.

Time-consuming and costly corrosion protection coatings are now unnecessary, too.

During assembly, the hexalobular internal drive ensures the optimum transmission of forces, making it highly suitable for automated assembly processes. Thanks to the magnetic properties of ecosyn®-IMX screws, they stay on the bit better compared to normal self-tapping A2 steel screws.

What's more, a standard metric screw can be screwed into the grooved thread if there are no ecosyn®-IMX screws available when maintenance is carried out.



How you benefit at a glance:

- Ideal for use in stainless steel
- Highly corrosion resistant (similar to A2 stainless steel)
- Work hardening of the female thread means the screw is guaranteed not to loosen if and when vibrations occur
- No thread cutting necessary
- Compatible with metric screw threads

All in-stock variations can be found in the Bossard online store. Please ask your local account manager for more details and information.



Trilobular cross-section (DIN 7500)



ROBOTICS SEGMENT

How Bossard offers manufacturers added value in a dynamic growth market

Automation of the manufacturing process is at the very heart of the future of industry. Smart production sites make use of robots and cobots working with the utmost precision, reliability and flexibility.

The huge investments being made and growth rates being recorded in this market segment are firm proof of the move toward robotics.

In most cases, industrial robots are used to handle high workloads in processes such as assembly, materials handling, palletizing, spraying and welding. They work in a clearly defined area without physically coming into contact with human staff. In contrast, cobots and humans share the same work environment. For the purpose of this human-machine interaction (HMI), cobots are designed in a well-rounded and more aesthetic way, and also feature numerous sensors to minimize the risk of injury.

The robotics industry needs reliable fastening solutions that are also capable of withstanding high dynamic loads and strong vibrations during operation. Ideal framework conditions for product development, process reliability, short throughput times during production and a lean assembly process are key to swiftly launching superior-quality robots on the market.

We understand these needs and the resulting challenges, which is why we supply suitable fasteners and services that meet the highest safety and quality standards and help you to boost your efficiency and productivity in the long term.





Cobots

Industrial robot with tool

What exactly does this mean for our customers operating in the robotics segment?



Expertise

We already maintain successful partnerships with robotics manufacturers from all over the world. Our new brochure contains two current testimonials (see the QR code below).



One-stop shop

Bossard is the go-to company for over one million off-the-shelf fastening solutions, electrical assembly accessories and controls.



Custom-made parts

Do you need custom parts? We've got the perfect product for you – from minor modifications to our standard solutions to brand-new innovations.



Assembly Technology Expert

Our Bossard engineers and fastening experts are on hand to assist you — with everything from initial product design to systematic analysis and optimization of your existing end product.



Test laboratories

We ensure that our suppliers' products are of the very best quality thanks to our test labs around the world. We'd be delighted to test and inspect your products and applications, too!



Ideal delivery terms

With 80 branches worldwide, Bossard is never far away and offers quick response and delivery times – guaranteed. Our catalog products are also available for our customers to conveniently order through our online store.



Smart Factory Logistics

Concentrate on your core business and leave us to deal with optimizing and increasing the transparency of your B- and C-parts management with a fully automated logistics system.



We have summed up the extensive range of products and services we provide for the robotics industry in a separate brochure.

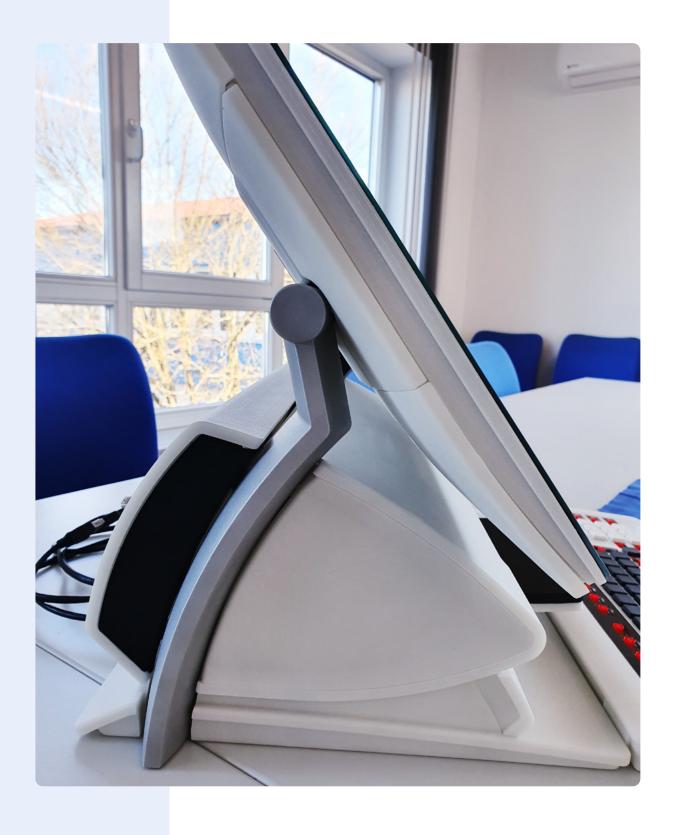
To open the brochure:

- please click on the cover image on the left
- scan the QR code with your cell phone
- or visit our website at:
 www.bossard.com/robotics



A STRONG, FLEXIBLE AND DURABLE BACKBONE

The development partner for JDM's ADGKAi pharmacy POS system





Swabian pioneering spirit and innovative strength lie in JDM Innovation GmbH's DNA. The company has been developing POS systems for the healthcare market for 35 years. Today, more than 12,000 POS systems are installed in the German pharmacy market, with any new generation released usually replacing the previous one. For ADGKAi, the latest generation, Bossard Germany/KVT-Fastening/Southco was brought on board as a development partner for the screen mechanics from the product idea to its series production.

Since the K3000 POS system was launched in 1995, a wide variety of metal press-fit elements (nuts and bolts) and plastic screw-in threads from our range have appeared in the JDM solutions through various individual component vendors.

As a Southco® development partner, we came on board in 2009 and were there to accompany the evolution of all the POS systems that followed:

- from the K4000V incorporating our standard friction hinges
- to the ADGRAYCE T, for which we and JDM joined forces to develop and subsequently supply the screen mechanics in 2014
- and finally to ADGKAi, which is ushering in a new era of pharmacy POS systems.

Ease of use was at the heart of the requirements placed on ADGKAi: the POS display, which can be swiveled through 120 degrees, had to be easy for pharmacy staff to adjust and move to suit their personal needs, while still allowing them to maintain eye contact with the customer. One crucial aspect besides flexibility was the load-bearing capacity of the display mount. Ideally, the mount's heavy-duty mechanics had to last the lifetime of a pharmacy POS without requiring any maintenance.

Finally, JDM was, and still is, very keen for its systems to feature a stylish design without any cable clutter, not least because of their discerning target group.





Well-established trust

While we started out as just a parts supplier for JDM, the company has increasingly relied on the skills of our engineers. During the ADGKAi development process, we cooperated closely to create the customer-specific display mount solution, incorporating all the mechanics of the POS screen system as its "backbone".

To this end, we designed the display mount to have two arms featuring reliable Southco® friction technology so that users could continuously adjust and position the touch display of the pharmacy POS system. The arms are mounted on the left and right as a supporting base frame on the base plate, and two tiltable adapters hold the display in place at the top. This allows users to touch the screen and turn it to face the customer, for example, without losing the tilt set previously.

To sum up: the complete package is what counts.

With regard to safety and design, cable routing between the screen and the electronics in the base plate proved to be particularly challenging. JDM opted for the difficult option: internally, through the arms and adjustable tilt joint. During the implementation process, we struck a balance between space requirements and functionality by using suitable guide elements to prevent any cable chafing.



How do you develop a highly customized product like ADGKAi? Ultimately, the key to success was the interplay of technical expertise and a comprehensive package of services for costing, organization and operating costs.

No competitor was able to offer or develop the display mount in this form.

Alexander Dobler (Senior Business Development Manager), Oliver Leitmann (Senior Expert Product Manager) and Rolf Ammann (Group Leader Sales South-West) from Bossard/KVT-Fastening were involved in this exciting project and creative solution. They were joined by Thorbjörn Missalek (Creative Director and Head of Innovation) and Roland Krautz (Design and Construction) from JDM.



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Find out more about access solutions and control elements or contact us at:



DIALOG BETWEEN SCIENCE AND PRACTICE

Universities of applied sciences and Bossard – perfect partners





Practical applications and a teaching focus are the defining features of universities of applied sciences. By joining forces with companies to perform application-oriented research activities, they particularly support the research and development work of SMEs and strengthen Switzerland's positioning as an innovation hub. Bossard has maintained close and intensive dialog with various universities of applied sciences for years to benefit from the latest technology and give students valuable insight into practical applications – so it's a win-win situation.

Bossard in intensive dialog

Bossard is aware of its responsibility to promote Switzerland as a business location and maintains intensive dialog with various universities of applied sciences, including the Lucerne University of Applied Sciences and Arts, the Eastern Switzerland University of Applied Sciences and the University of Applied Sciences of the Grisons.

The universities of applied sciences and Bossard alike benefit from these cooperative relationships. We maintain active dialog with students from a wide range of disciplines, including business, technology or industrial engineering and regularly welcome students from various universities of applied sciences to our Bossard Academy in Zug, where they can gain a deeper understanding of our fastening technology, engineering or logistics expertise by means of practical examples.

But the students aren't the only ones who benefit from our experience. The close cooperative relationship means Bossard does, too. For example, the universities of applied sciences assist us when we're researching and developing new products and services. With Bossard, you therefore have a partner who treats progress and innovation as top priorities.









PRODUCT MANAGEMENT AT BOSSARD

New additions to the range: cordless blind rivet nut tools

With "Products", the new main department created last year, Bossard Switzerland is focusing more keenly on product management and therefore on branded article sales. The hand riveters, hydro-pneumatic jigs or innovative cordless tools for blind rivets and blind rivet nuts used for this purpose are stocked in the Bossard range, too.

The cordless tools are economical and flexible to use thanks to wireless installation in production. What's more, the smart riveting tools offer a variety of other potential applications. As the basis of our Smart Factory Assembly range, they are another step towards digitalizing your production operations.



Qonnect® - Q-TOOL N12XL

Qonnect® - Q-TOOL N12XL

The new battery-powered "N12XL" blind rivet nut tool boasts a wide working range with high setting forces. Thanks to the quick-change system for thread mandrels and the innovative setting stroke and quantity information shown on the digital display, it is extremely easy to handle.

"We want to inspire you by launching innovative and powerful products."



Innovative digital display

The setting stroke, quantity and service functions can be checked at any time using the installed digital display. The reset button enables daily data resets.



Convenient

No more need to worry about sockets or cables. The device comes with a battery with 2x 20 V/2.0 Ah Li-ion charge level and a 100-240 V/50-60 Hz quick char-



Powerful with high setting forces

Our N12XL tool can be used to set M3 to M12 blind rivet nuts with a setting force of up to 25,000 N.



Productivity



Lock mode can be used to lock the blind rivet nut setting parameters, preventing distraction during assembly and allowing for efficient working.

A new partnership for crimping technology

Stocking a wide range of products for electrical engineering, Bossard covers the requirements of the electrical and mechanical engineering industries, power plants, the chemical sector, railroad and tunnel technology and many other markets. Our renowned manufacturers guarantee a comprehensive range of innovative and high-quality solutions – and Gustav Klauke GmbH is no different.

To meet the steadily growing needs of the cable industry, Bossard has included Gustav Klauke GmbH's range of crimping connection technology in its product portfolio since last fall.

Delivering a perfect synergy between connecting elements and tools, Gustav Klauke GmbH is synonymous with high-quality electrical connection technology, not to mention crimping and cutting tools in different industries. The extensive product portfolio and system solutions offer you the right tools and materials for all tasks. After all, when it comes to establishing the perfect connection in electrical engineering, two things are critical above all others: having the right tool for every task and ensuring that the connection material and tool are perfectly matched.

"We are looking forward to the new partnership and are confident it will improve any future advice and services we provide you with."

The new Gustav Klauke GmbH range of crimping cable lugs, crimping connectors and tools is now available in Bossard's online store: www.bossard.com





www.bossard.com

