

EDITORIAL



Dear customers

The summer of 2022 will remain in our memory as hot and dry, and the geopolitical developments and their economic and socio-political fallout will likewise not be quickly forgotten. Ideologically blinkered, power-hungry politicians continue to shake our fragile world order. Inflation has returned, and energy shortages are on everyone's lips. Every day, ugly images of the war in Ukraine are plastered across front pages. Let us hope that sanity and understanding will be restored as soon as possible and that we can once again unite to address the urgent issues that threaten our planet.

After a pandemic-induced break, Bossard returned to Paris to exhibit at the world's leading trade fair for composites, JEC World, where we presented innovative connection technologies such as MultiMaterial-Welding, bigHead* and ecosyn*-BCT.

In the Assembly Technology Expert section, we have launched the Bossard E-Learning portal. This service offers access to a wide range of topics in the field of connection technology, allowing you to choose relevant topics to design your own learning program.

SmartBin Cloud is an innovative and customizable logistics solution for your production. Lean processes, fast throughput times and optimal usage of production areas are competitive advantages. With our SmartBin Cloud solution, we help you to make the most of these advantages. See for yourself how it works!

We continue to set the standard for integrating fasteners into CAD drawings by providing a variety of formats for exporting the drawings. Why create your own drawings when you can download 2D and 3D CAD models of our products from our online portal with just a few clicks?

After all, doesn't every production employee dream of their product partner offering a trouble-free package in which the machine, fastener, support and maintenance all come from a single source? We offer this service in cooperation with our long-term brand partner, PennEngineering*. Trade in your old equipment for a newer model with the Haeger* BuyBack Program. Replace your current machine for setting PEM* self-clinching fasteners with a much faster and more modern model.

Realtime Manufacturing Service, or RMS for short, inspires the team at Dortmund-based tuning specialist 9FF. If you are also concerned about speed in the procurement of turned and milled parts for prototypes or series parts, get in touch with us.

Visit us at the Holz trade fair in Basel from October 11 to 15, 2022. Our timber construction experts will be demonstrating the latest products and trends in connection technology for wood. As a partner of the leading manufacturer of SPAX* self-tapping wood screws, you can look forward to seeing what innovative products we will be showing in Basel

Finally, I wish you golden autumn days, all the best and every success, and may the world become a more peaceful place again!

Thank you for your valued trust!

PETER KAMMÜLLER

General Manager, Bossard Schweiz

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We are wherever you are.



Online

BOSSARD IN PARIS

The composite materials community met at JEC World after a two-year hiatus



The world's leading international exhibition for composite materials was held in Paris as an in-person event for the first time in two years from May 3 to 5. Together with its affiliates bigHead® and MultiMaterial-Welding® (MM-W), Bossard showcased a product portfolio as diverse as the world of lightweight and composite materials itself.

JEC goes digital

The JEC World Connect platform was used to hold an exclusively online edition of the show in 2021 due to the coronavirus crisis. This year's edition of the exhibition was a hybrid event, with the digital experience running in parallel to the actual show in Paris. The online platform gave remote attendees the opportunity to visit exhibitors' digital booths, communicate with one another and take part in the entire event program over the live stream.

Special fastening technology requirements

New, lighter materials mean standards are becoming increasingly stringent, making the challenges that fastening technology has to overcome even more complex. Visitors were particularly interested in MultiMaterial-Welding's demonstration of how ultrasonic energy can be used to melt thermoplastic fasteners into porous materials in fractions of a second, thus creating permanent force- and form-locked connections in lightweight and sandwich materials.



bigHead® fasteners are the ideal solution for creating secure connections in a wide range of light-weight materials where various processes like predrilling aren't an option due to the materials' properties. But the bigHead® innovation and engineering services are the biggest advantage of all, since they can be used to offer customized fastening solutions for applications.

Bossard's affiliates weren't the only ones show-casing their solutions, though. Bossard itself also presented special rivets like the ecosyn® BCT, selected thread inserts and screws with special threads for composite materials at the exhibition. All of the processes and products mentioned permit processing in a matter of seconds, making these solutions ideal for automated production environments for lightweight and composite materials.

JEC World is the leading trade show for the composite materials industry. It covers the entire value chain – from raw materials manufacturing and composites production, to the end product and downstream services.

For Bossard, the exhibition was a must-attend event on this year's calendar, so it could keep itself in the loop, meet industry representatives and acquire new customers. JEC World illustrates how the increasing use of lightweight and composite materials is opening up new design-related horizons in many segments of industry.

JEC World 2022 – facts and figures

- 1,201 exhibitors
- 26 pavilions
- 32,000+ trade visitors
- 2,733 business meetings
- 10 winners of the JEC Innovation Awards
- 4 winners of the JEC Composites Startup Booster





EXPERT FDUCATION

Learn where and when it suits you with the Bossard E-Learning Portal!

With its E-Learning Portal, Bossard is allowing you to take a personal approach to a whole host of fastening technology issues as part of its Expert Education Service. And, if that weren't enough, you also have the freedom and convenience to learn at your own pace.

It won't take you long to find your way around our well-structured e-learning library. Take a look at the overview to get an idea of all the available topics to begin with. Then access the lessons that are relevant to you — as often as you like, from absolutely anywhere and at any time. In order to make the transfer of knowledge even more attractive, the written explanations are supported with meaningful visual material. You'll be able to access all the chapters once you've logged in. You're even free to choose which topic you'd like to start with.

Topic-selection

Self-study

Self-control

Quizzes designed to test you on what you've learned and give you an idea of how you're getting on are provided at the end of each chapter. The E-Learning Portal is only available in English and German at present.

How you benefit at a glance

Learn when and where it suits you. There are no time-related or geographical constraints when it comes to accessing Bossard's E-Learning Portal. You can access the expert knowledge you need to know whenever you need it in your everyday life – 24 hours a day, 365 days a year. And the end-of-chapter quizzes let you know right away whether the content has actually sunk in.

Objectives with the E-Learning Portal

- Learn how to **distinguish between different fasteners** based on their characteristics.
- Understand the influencing factors and functional principles of bolted joints.
- Gain basic knowledge of the materials you use and how they influence mechanical properties and corrosion protection.

Course content

The content is split into two sections. The first one is dedicated to the **introduction to mechanical fasteners** and covers the following topics: screws, nuts, thread inserts, washers, retaining rings for shafts and bores, pins and rivets. In the second part, you will learn **basic knowledge** about raw materials, material grades, mechanical properties and corrosion.

The E-Learning Portal's target groups

- Supply chain, purchasing and order processing specialists
- Development, design, planning and quality assurance experts
- Professionals working in Repair, Maintenance and Assembly departments

Learn how Bossard's E-Learning Portal can save you both time and money: www.bossard.com



SMARTBIN CLOUD

Bespoke solutions for your production operations





Starting situation

Lean processes and speed are absolutely critical at the heart of the factory, at the assembly workstations or directly on the

assembly line. Optimum use of space is vital where conditions are cramped. The container sizes for the materials required at the point of use are correspondingly small, and the items used have a high stock turnover rate whenever possible. The ability to respond flexibly to changes is critical. Both the needs of and support provision for assembly staff play a key role in this respect.





Our SmartBin Cloud XS is a product that meets exactly these specific requirements. The slim variant of the SmartBin Cloud range makes efficient use of the space available on a shelf and has a

stock capacity of 6 kg. So it can be used to manage a large number of items in the smallest of spaces — and fully automatically to boot. The electronic display (SmartLabel Cloud) provides essential information for assembly, detailing the order status and delivery dates. So SmartBin Cloud XS guarantees complete certainty and allows assembly staff to concentrate completely on their core tasks.



Starting situation

In high-bay warehouses, goods are stored on half-pallets or full pallets and are managed by (semi-)automatic warehouse management systems. Frequently used

products or large goods are standard here. High bays characteristically provide space for cumbersome and bulky materials too. So practical solutions for large volumes need to be found.



Solution

We offer pallet solutions, in the form of our SmartBin Cloud XL and XXL variants, that are designed to meet precisely these large volume requirements. Our

half-pallet and pallet trolleys make storing large quantities an absolute breeze and enable efficient warehouse management operations without any delays.



Starting situation

In supermarkets and local warehousing facilities, C-parts must be easy for logistics and assembly staff to access.

Typically, they are stored close to the place of use in boxes and clear crates. Efficient use of the available surface area is essential due to space constraints, and error-free refilling is a must too. At the same time, stock levels must be optimum so that the value of the goods isn't too high.



Solution

Our SmartBin Cloud S and M solutions provide real-time information and total transparency, which translates into maximum reliability and

dependable availability. The scales can also be combined as desired, meaning the SmartBin Cloud L can be used for an entire shelf's worth of material weighing up to 80 kg.

Available product variants

Slim 6 kg	\rightarrow	XS	SmartBin Cloud
6 kg	\rightarrow	S	SmartBin Cloud
20 kg	\rightarrow	M	SmartBin Cloud
80 kg	\rightarrow	L	SmartBin Cloud
Half-pallet	\rightarrow	XL	SmartBin Cloud
Pallet	\rightarrow	XXL	SmartBin Cloud

Learn more about SmartBin Cloud at: www.bossard.com





EUROBLECH HANOVER

Visit us from October 25 to 28, 2022 at the PennEngineering booth (12-H145)



BOSSARD PARTS COMMUNITY - THE CAD ONLINE PORTAL

2D and 3D CAD models of Bossard products

Bossard is by engineers' and designers' sides right from the beginning of a new product's development process. You can find most of our standard range on our online portal, which makes integrating fasteners in CAD drawings extremely easy. On our portal, you can search for, select, specify and download the required parts in the desired format as a 2D or 3D model free of charge.

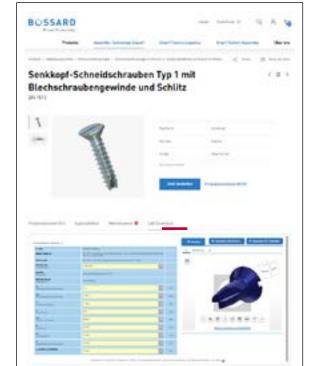
One major advantage of the platform is the variety of formats the drawings can be exported in. So you can download files in the 150 most popular native CAD formats and import them into your CAD system directly. The popular formats include Inventor and Revit from Autodesk, Solid Edge and NX from Siemens PLM Software and SOLIDWORKS from Dassault Systèmes. Before you start the download process, all you need to do is specify (once) which CAD format and with which 2D and 3D layers you'd like the product data to be made available in.

their energies to continuously creating and maintaining the drawings on the portal. Without them, this extensive digital service wouldn't even be possible in the first place. At present, there are 2,880 Bossard items in over 52,000 product variants available for you to choose from. The fastest way to find the CAD portal is to select the product on our website first of all. Then click on the "CAD Download" tab under the product description.

Several members of the Bossard team devote all

You can also access the Bossard CAD Portal directly at www.bossard.partcommunity.com. The portal itself is provided by our partner Cadenas, which is why you need to register separately to use the download function.

You can also get professional support on the Cadenas website if something isn't working the way you think it should.











HAFGER® AND PEMSERTER®

Feeding and setting equipment for PEM® press-in fasteners

Professional fastening technology requires professional processing technology. Bossard is the company to contact – not just if you need fasteners, but also the matching processing equipment, including the associated consulting and customer service, as part of our System Sell approach. At this point, we really ought to highlight the feeding and setting equipment provided by our partner PennEngineering®, which has recently been improved with numerous innovations and further developments.

Processing equipment and fasteners have to be perfectly coordinated, both to one another and to the user's needs, if the full potential of press-in technology is to be exploited. Our decade-long partnership with PennEngineering®, the press-in innovator, and its brands PEM®, Haeger® and Pemserter®, enables us to offer you unique solutions: machines, fasteners, consulting and maintenance — and all from a single source. Continue reading to find out about two superbly successful installations: the Haeger® 824 WindowTouch 4e and the PEMSERTER® In-Die.



Haeger® 824 WindowTouch 4e – press-in system – BN 26702

With the Haeger® 824 WindowTouch 4e, first the fasteners are poured into the vibrator tray on the side. Vibration conveying reliably feeds the fasteners, which can be up to 30 mm long, for machining. The Haeger® 824 WindowTouch 4e is characterized by tool changeover and retrofitting in seconds, excellent accessibility and user ergonomics, simple and accelerated programming, and its extremely energy-saving operation.



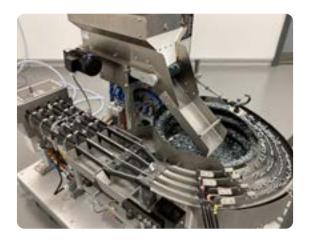
Robot ready

The new Haeger® 5 control system enables easy integration and complete control of specific machine functions across the entire automation line.

Robots or automated functions can be integrated using PROFINET®, PROFIBUS®, DeviceNet®, Modbus and several direct I/O options. The Linux-based operating system offers stability and unparalleled security.

PEMSERTER® NextGen Universal In-Die feed cart – BN 26670 (bolts), BN 26675 (nuts)

The NextGen Universal feed cart allows users to efficiently and accurately feed PEM® press-in nuts, press-in bolts or spacers to a punch press, for single or simultaneous processing. Secondary steps normally associated with fastener insertion are eliminated, cutting overall labor costs. At the same time, the parts' quality can be improved and your product's throughput can be significantly increased. The modular design enables quick and repeated changeover and offers unique flexibility. The system can be configured to feed many different types of PEM® fasteners, eliminating the need to purchase multiple feeding systems.



Haeger® Buy-Back Program

Are you already using a Haeger® or PEM-SERTER® machine, and would you like to benefit from the latest options? Until the end of 2022, you will receive up to €8,000 for your old unit when you purchase new Haeger® equipment under the Haeger Buy-Back Program!

You will find more information about the Haeger Buy-Back Program in the local section on page 21

Contact us!

You can find out more about our extensive range of tools in the e-shop and on the brand page.

www.bossard.com







INTAKE MANIFOLD FOR A PORSCHE IN RECORD TIME

Tuning specialist used the Realtime Manufacturing Service (RMS)





It could hardly get any easier and faster, or more reliable and accurate. With its Realtime Manufacturing Service (RMS), to name but one example, Bossard offers its customers the option of calculating and ordering small batches of turned and milled parts online.

9ff German Engineering just experienced first-hand that Bossard wasn't just making empty promises, and that, to the contrary, it could in fact deliver in record time. 9ff, a renowned name in the high-class tuning industry, had a very specific requirement: it needed a modified intake manifold for the Porsche GT3 that would improve fresh air flow from the carburetor to the combustion chamber compared to standard products with a larger inlet and outlet and a smooth, flow-optimized channel.

Jacek Dziuba, an engineer at 9ff, explained that the company finally came across Bossard Germany's RMS online portal when searching for a supplier that could create fewer than 100 units measuring 70 millimeters tall and 79 by 91 millimeters wide at the base, not to mention contending with the highly complex geometry and requirements that go hand in hand with a more than 1,000 hp sports car: "We registered, uploaded the 3D data for the intake manifold, and specified the input. And indeed, we received a quote in real time."

If the turned and milled parts were simpler, the workflow would have been automated until delivery. But we took matters into our own hands due to the specific and design-related requirements — what with the intake manifold being for a Porsche GT3, after all. We did this because the intake manifold could only be manufactured using 5-axis CNC machining, which called for high-end manufacturing expertise, maximum precision and equipment availability, not to mention highly qualified staff who were proficient in CNC programming.

Additionally, the final products were to be anodized in red to meet style and corrosion protection requirements.

As for the superb speed: Porsche is certainly known for cars that tear up the tarmac, but we and our production partners really put the pedal to the metal too. A mere 15 working days after the order was placed, the intake manifolds were delivered to the 9ff headquarters in Dortmund on the promised delivery date and in the desired quality.



The Realtime Manufacturing Service

RMS, which already has a short albeit superbly successful history with the parent company Bossard in Switzerland, is backed by more than just state-of-the-art technology and immense experience. It also incorporates a great deal of work for the German market. We had to store countless calculations in the system. This was the only way we could issue reliable quotes for a wide variety of CNC turned and milled parts in a multitude of materials and variants within a very short space of time.



"We'll definitely use RMS and Bossard Germany again in similar situations."

Jacek Dziuba and the 9FF Team

Here's how the Realtime Manufacturing Service works:

- Once you've registered, you upload the 3D data of the desired turned or milled part to the online portal and specify the product.
- A quote, including a delivery date, is provided in real time.
- When you place the order, the project data is immediately processed, analyzed and passed on to Production.
- The finished CNC prototypes and small series are delivered in the promised time.
- And, for those customers who need more than just prototypes and short runs, we are delighted to prepare an individual quote in an extremely short time for large series.

Christopher Winkler (Business Development Manager) was responsible for implementing the project in record time. Not only did he look after the customer; he also very quickly found the right manufacturing partner and organized the punctual delivery.

Mr Winkler wasn't on his own, though. Robert Omachlik and Melanie Jung from the Swiss parent company, not to mention Jürgen Steiner (Head of Bossard's Competence Center for Drawing Parts in Velbert), played a key role in launching and running RMS in Germany.



Christopher Winkler

Business Development Manager

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"RMS offers our customers the advantage of being able to reliably plan their further processes. This is a definite plus, especially in more complex productions, and also improves the all-important bottom line."



HOLZ BASEL | OCTOBER 11 - 15, 2022

Visit us at the Holz exhibition in Basel. You can look forward to innovations and opportunities to network



BASEL 11.–15. Oktober 2022

OLD FOR NEW

Trade in your old HAEGER®/PEMSERTER® machine

The industry is changing rapidly. The same is also true of product assemblies and production lines. New types of products and innovative technologies are being released at breathtaking speed in response to the changing world.

Haeger® Buy-Back Program

As a partner of PennEngineering®, we offer all our customers who decide to return their old Haeger® or PEMSERTER® machine a discount on their next purchase of one of the latest Haeger® models.

Thanks to 18% faster insertion speeds, the latest Haeger® models allow you to benefit from more efficient production processes. We also guarantee the supply of spare parts. This is how we're supporting you on your journey to Industry 4.0.



Would you like to try before you buy? No problem!

You can do exactly that in the new Haeger® show-room. You can take yourself through the equipment, setup and press-in stages on the most successful Haeger® 824 Windows Touch 4e press-in machine with automatic feeder. You're also welcome to bring along and fasten your own work-pieces.

If that weren't enough, you'll also get an overview of the variety of press-in technology that PennEngineering® has to offer and of Bossard's fascinating world of products.

Be inspired by the functions and possibilities that a Haeger® machine has to offer. To visit, scan the QR code:



www.bossard.com

