

DIRAK®

MAGAZINE

NEW PPF

INSIGHT

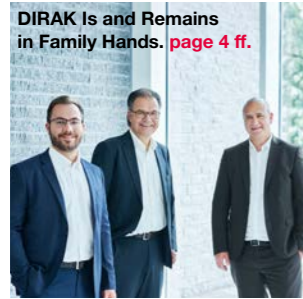
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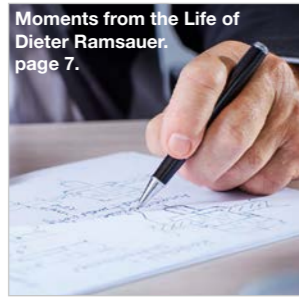
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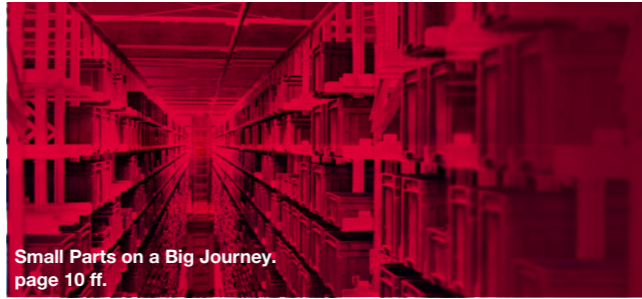
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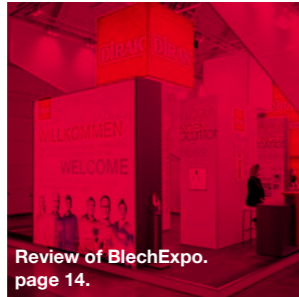
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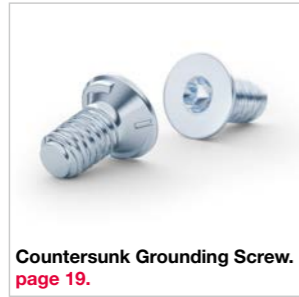
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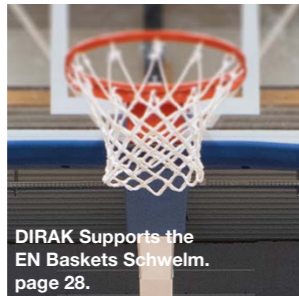
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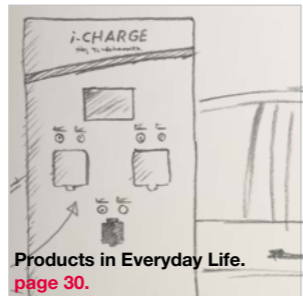
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Dear readers,

We are pleased with the positive feedback on the first issue of DIRAK Magazine. Once again, there is a lot to report from the DIRAK world in this issue.

As you have surely already experienced, DIRAK – even after the passing away of our founder Dieter Ramsauer last year – remains in the hands of the Ramsauer family. In this issue, we introduce you to partners Michael and Lukas Ramsauer, who continue to support the management.

In addition, we will once again give you a glimpse behind the scenes and take you on a journey through our site in Haßlinghausen – and much more.

Before I reveal any more, I hope you enjoy reading and immersing yourself in the DIRAK world.

Kind regards

Florian Birkenmayer, Managing Director

DIRAK Is and Remains in Family Hands

The passing of our founder Dieter Ramsauer last April marked the end of an era for our company. At the same time, a new one has begun.

The company is still in family hands with partners Lukas and Michael Ramsauer: Both partners continue to work for the company and support the Managing Director Florian Birkenmayer. The common goal is to align all of DIRAK's activities with the challenges and needs of our customers.



Michael Ramsauer stands behind the company as a partner with advice and support: "I see my role as partner to be maintaining the company as a family business so that it can be passed on to the next generation."

Lukas Ramsauer, grandson of the company's founder Dieter Ramsauer, also has DIRAK's future at heart: "As a partner of DIRAK, it is my goal to preserve the values of our family business and to accompany Mr. Birkenmayer in continuing to align our company in an independent and competitive manner."

The management and leadership of the company is the responsibility of the Managing Director Florian Birkenmayer: "I am pleased with the active support of partners Michael and Lukas Ramsauer. Together, we will continue to move the company into the future and create groundbreaking solutions for our customers."

Moments from the Life of Dieter Ramsauer

To mark the birthday of our founder Dieter Ramsauer, who passed away last year, the foyer at our Ennepetal site is currently being redesigned. To kick off the event, a collage was unveiled on May 2 showing important and formative moments from Dieter Ramsauer's life. In addition to his passion for constructing mechanical things, which led to his vocation, music and important people who accompanied him also find their place here.



„I am a one-hundred-percent optimist. I am incapable of thinking negatively.“
Dieter Ramsauer

DIRAK Global:

Our Subsidiary in China Celebrates Its 20th Anniversary



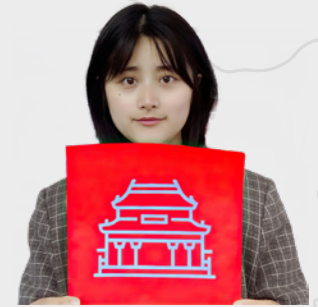
Our global network ensures that DIRAK is close to the customer and close to our employees. In this issue we focus on our subsidiary in Suzhou, China, which has now been in existence since 2001 and celebrated its 20th anniversary at the end of last year.

To participate at least digitally in this celebration, Karl-Heinz Overhamm and Florian Birkenmayer sent a video message in which they thanked DIRAK China for the good cooperation over the past 20 years and wished continued good luck for the future. The representatives of DIRAK Suzhou also expressed gratitude for the international cooperation in their thank-you

remarks. A celebration was held for their employees, which was rounded off by a varied program with dance and song performances, small shows and plays. And as if they had a dress code, all employees wore a DIRAK T-shirt.

” TAO YIMING, MANAGEMENT ASSISTANT IN THE OPERATION IN CHINA

Due to the time difference, we usually need the answers from our global colleagues on very short notice. They respond quickly to our requests, even if it is not very convenient for them. We can't say more than thank you to express our appreciation for their quick and helpful handling of our problems.



The subsidiary was impressed and grateful for the fast and uncomplicated communication in our network. In addition, our typical characteristics of being punctual and always following rules have stood out positively for the subsidiary.



Managing Directors Florian Birkenmayer and Karl-Heinz Overhamm congratulated the DIRAK subsidiary in Suzhou via video message.

Over the past twenty years, successful cooperation has been established between DIRAK China and DIRAK Germany in which joint exchange plays an important role. This supports our activities, so we will continue to work hand in hand in the future and continue to rely on good communication within the network. ■



Intelligent Conveyor Technology Makes it Possible: **Small Parts on a Great Journey**

Without our plant in Sprockhövel-Haßlinghausen and its employees, virtually nothing would work. The "Automatic Small Parts Warehouse," which has been in operation there since 2011, guides the product components to the individual work stations thanks to intelligent conveyor technology – on a two-part journey from incoming goods to shipping. In this episode, we make a stop in the picking department.



→ **Where is the journey going? – To delivery**

For the assembly of our high-quality products we need numerous components, which are continuously delivered to us. We use our warehouse management system to determine whether to transport the articles to the automatic small parts warehouse or to our conventional warehouses at the Haßlinghausen or Ennepetal plants. Suppliers from the surrounding area usually send us the components directly in special DIRAK small load carriers, which can be placed on the conveyor system with lifting aids. Goods that reach us in cartons are repacked accordingly onto small load carriers.

📍 **Check-in – Testing and storage**

In the incoming goods department, our employees check the delivered quantities and enter them into the system. This is followed by a precise quality inspection of the articles. If the inspection shows that everything is in order, the entire delivery is released and placed in storage.

📍 **Fast and safe – The three-aisle system**

To ensure that we can always deliver in the event of a malfunction, the system evenly distributes small load carriers with identical articles via the conveyor system to our three automatic small parts aisles. They reach a speed of almost 22 km/h and can simultaneously transport two containers with a maximum weight of 50 kg each. The lanes are divided into zones according to access frequency to optimize access speed. In total, the automated small parts warehouse has around 19,000 storage spaces.



Automatic small parts storage is much more than just a warehouse for small parts: 27 employees from 8 departments are connected here by about 450m of conveyor systems. The floor space of the automated warehouses is about 700m².

📍 **Almost like boarding – Order picking**

At currently four workstations, our employees assemble the components for the production orders, which are then assembled according to the customer's order. Up to three orders can be processed simultaneously. The required components for the respective production order are displayed on the workstation monitors and transported to the picking stations. There our employees count, weigh and scan the various items, post them to the order and put them together in appropriate containers. Once the order components are completely collected or reach the 50 kg maximum weight, the container is moved to the assembly hall via the conveyor system.

This is a first glimpse of the groundbreaking technology and the numerous precise steps required to manufacture and deliver our high-quality products according to our customers' requirements. And it shows one thing in particular: At DIRAK, we are a team and every employee plays an important role - no matter which area of the company she or he works in! The next issue of the magazine will continue with the steps from assembly to shipping. ■

In the next issue, we start in assembly and accompany the products until they are shipped.



All Good Things are Worth Waiting for



Our new trade fair stand concept with a hygienically safe tour enables visitors to experience the DIRAK product world.

Finally, the time has come again – at the end of last year, we were again able to participate in one of our main trade fairs. Blechexpo in Stuttgart takes place every two years and deals with complementary technologies of mechanical sheet metal working, joining and fastening technology.

We have been exhibiting in Stuttgart for many years now and always present ourselves anew with a creative and appealing trade fair concept. With a closed or open stand, with wood or slate floor – it will never be boring. Due to the current corona situation, we have for the first time created a trade fair concept in cooperation with our long-standing stand builder which also complies with the general hygiene and corona rules and enables a safe

experience of the DIRAK world in the form of a tour.

At our information point, customers and interested parties were able to obtain further information about the company and make personal appointments with our product consultants. Our groundbreaking products and innovative new products were directly explained by our employees at our booth and customers were able to try them out.

In addition to our mechanical product range and DIRAK-SNAP-Technology (DST), we also presented our mechatronic product range "E-LINE by DIRAK." Several monitors supported the presentation of the individual products with corresponding information videos. A separate consultation area invited more specific queries with our product consultants – in compliance with current hygiene regulations, of course.

In addition to our new products, our customers were impressed by this new trade fair stand concept.

We are already looking forward to the next big trade fair this year: EuroBLECH in Hanover.

Trade Fairs

InnoTrans, Berlin
20 – 23 September 2022

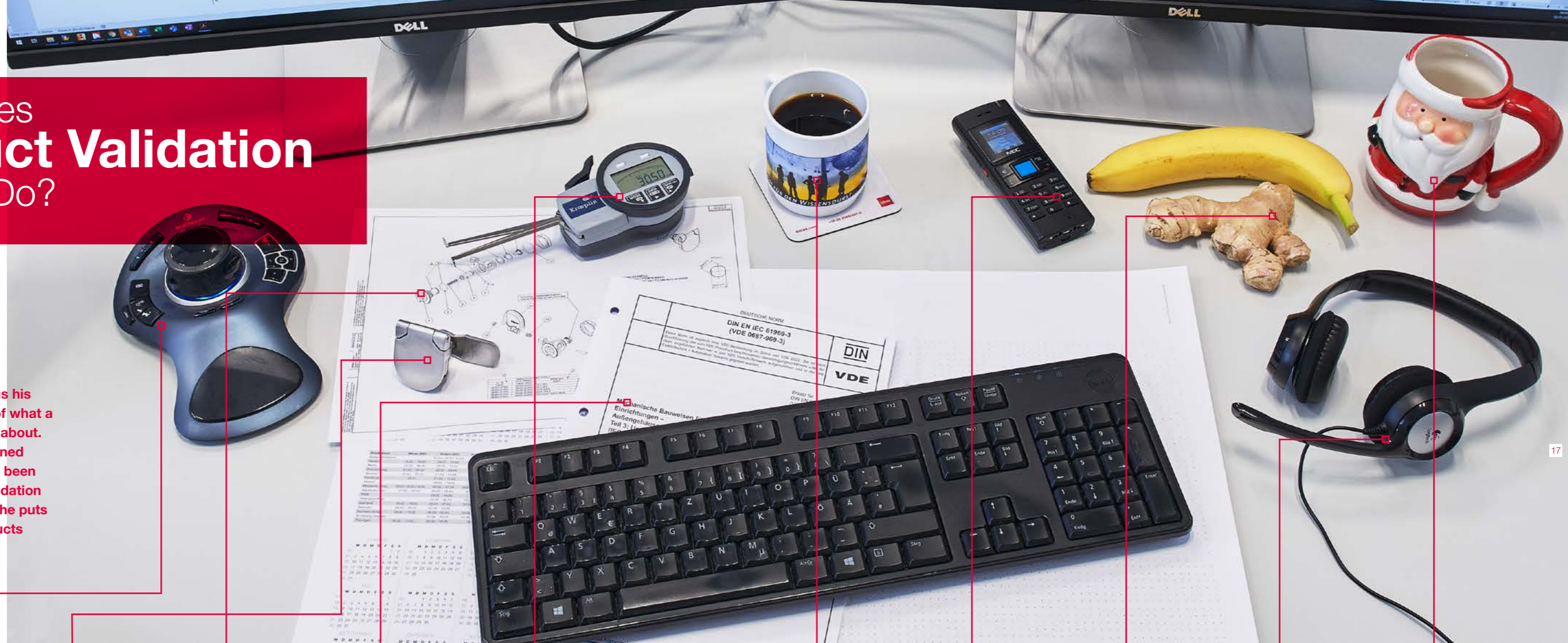
Security, Essen
20 – 23 September 2022

EuroBlech, Hannover
25 – 28 October 2022

What Does Product Validation Actually Do?



Daniel Krause shows us his desk, giving us a hint of what a product validator is all about. He is a team leader, joined DIRAK in 2014 and has been working in product validation since 2019. Every day, he puts newly developed products through their paces.



3D mouse

This special mouse shows: Product validation is not that far removed from design and its CAD system. Devices are designed here and an assembly is checked, etc.

Test piece

Whether prototype or production sample – the three most important rules are: 1. check, 2. check, 3. check. This is the only way for the product validator to find out if the articles meet the specifications, whether internal or external.

Technical drawing/ specification

This spells out in black and white how the product should be. Daniel Krause uses the drawing as a basis for ensuring the properties of the test piece during the test.

DIN standards

Product qualifications are the second mainstay in DIRAK product validation. Here, products are inspected and tested to ensure that they meet the required specifications and standards.

Internal measuring gauges

Measuring tools like this one are part of the team leader's everyday special tools. They are indispensable for all initial sample inspection reports.

Cup

"... for the thirst for knowledge" is written on the cup. After all, curiosity is part of every product validator's job description. And for good reason, because this is the only way to discover new things.

Telephone

Communication with interfaces in design, purchasing, sales and product management as well as complaints management takes place on a daily basis.

Banana/ginger

"A healthy mind in a healthy body." And that's how ginger tea has established itself for Daniel Krause. Preferably with freshly grated ginger. Then let it steep for a loooong time.

Headset

Put down briefly for the photo: Of course, digital meetings with teams are now part of everyday life.

Christmas cup

For a non-alcoholic drink at Christmas time or breakfast together: The team and the common goals are in the foreground for successful cooperation.

The Right Solution

Over center toggle latches are used in many different applications. For example, if a transport crate or machine housing needs to be closed, functionality is normally the number one priority. But simply closing is not enough nowadays. Design and the cost factor are increasingly coming into play. We have developed the right product for precisely this purpose:



 6-240



The new DIRAK Polyamide Over Center Toggle Latch 6-240 reliably and securely latches flaps and covers. Due to the properties of the materials, the latch is suitable for both indoor and outdoor use. In addition to its elegant design, the polyamide over center toggle latch is an attractive solution in terms of price.

As the tensioning mechanism closes, a dead point is passed, which causes the over center toggle latch to lock securely in the closed state. The effect of the lever ensures that a lot of holding force can be achieved with just a little manual force. ■

Conductive Connection Thanks to Countersunk Grounding Screw

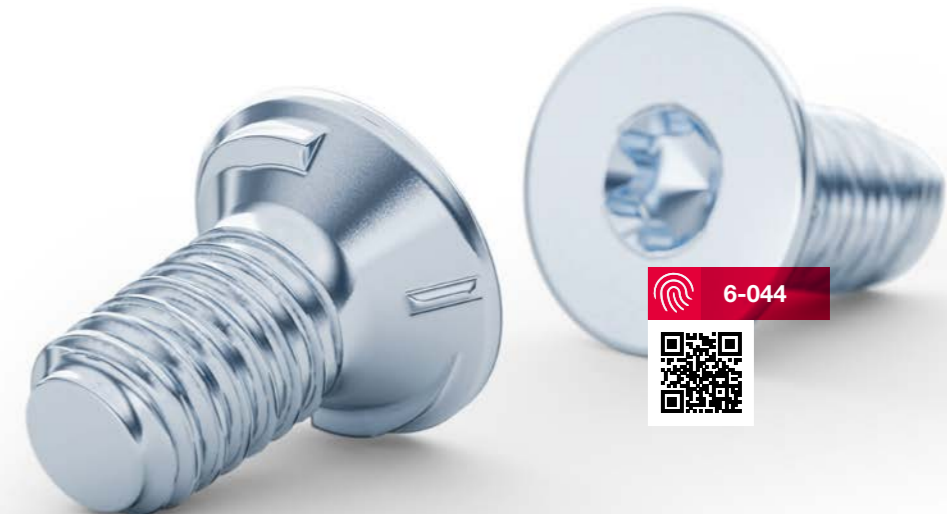
Potential equalization is generally used to protect persons and equipment against electric shocks due to overvoltage. However, painted or powder-coated metallic base materials cannot be used without pretreatment of the points that connect into the potential equalization. If conventional fastening elements are used, the upper layer of the contact surface must first be removed or kept free of paint. With the new DIRAK Countersunk Grounding Screws 6-044, this time and cost-intensive step is eliminated.

For counterbores and cylindrical boreholes

These VDE-certified countersunk grounding screws have a segment cutting edge and a scraping tooth under the screw head. Product trainer Georg Hübner explains: This advancement allows for electrical and mechanical contact with metallic base materials without extensively pretreating them." The countersunk grounding screws establish potential equalization either in a counterbore or in a cylindrical borehole.

Also available as metric self-tapping thread variant

The M6x12 countersunk grounding screws are available with a standardized metric thread and in a second variant with a metric self-tapping thread. This screw cuts its own thread in a borehole. It is designed with a slightly conical structure to make it easier to find the borehole and center the screw in it. Due to the out-of-round cross-section, the screwing torques are in a low range and this effect is reinforced by a sliding coating. ■



 6-044



Product Presentation

Georg Hübner, product trainer at DIRAK, presents the advantages of the new grounding screw.



DST Fasteners in Use at HAROMAC



Simple assembly and easy disassembly allow for modular design and thus make subsequent expansion easy.



20

21



Can a complete workbench be assembled quickly and without tools? Can it then withstand high loads? A case study with the HAROMAC tool factory shows that precisely this can be done using the fasteners of DIRAK-SNAP-Technology (DST).

The HAROMAC tool factory, which produces stainless steel and sheet steel trowels, looks back on a company history spanning 120 years. The company is also celebrating its 25-year anniversary at the Hückeswagen location in the Bergisch Land area. The manufacturer's specialty with masonry and tile-laying tools is in manufacturing products that allow customers to implement their own individual design.

Screwless fastening technology is the solution

This option also extends to the workbench product segment. But more is required of a workbench than just an individual design. Oliver Lück, Managing Director of the HAROMAC tool

factory, explains: "The workbenches presented a new challenge for us. They had to provide good load-bearing capacity and be easy to assemble without any screws and with just a few tools."

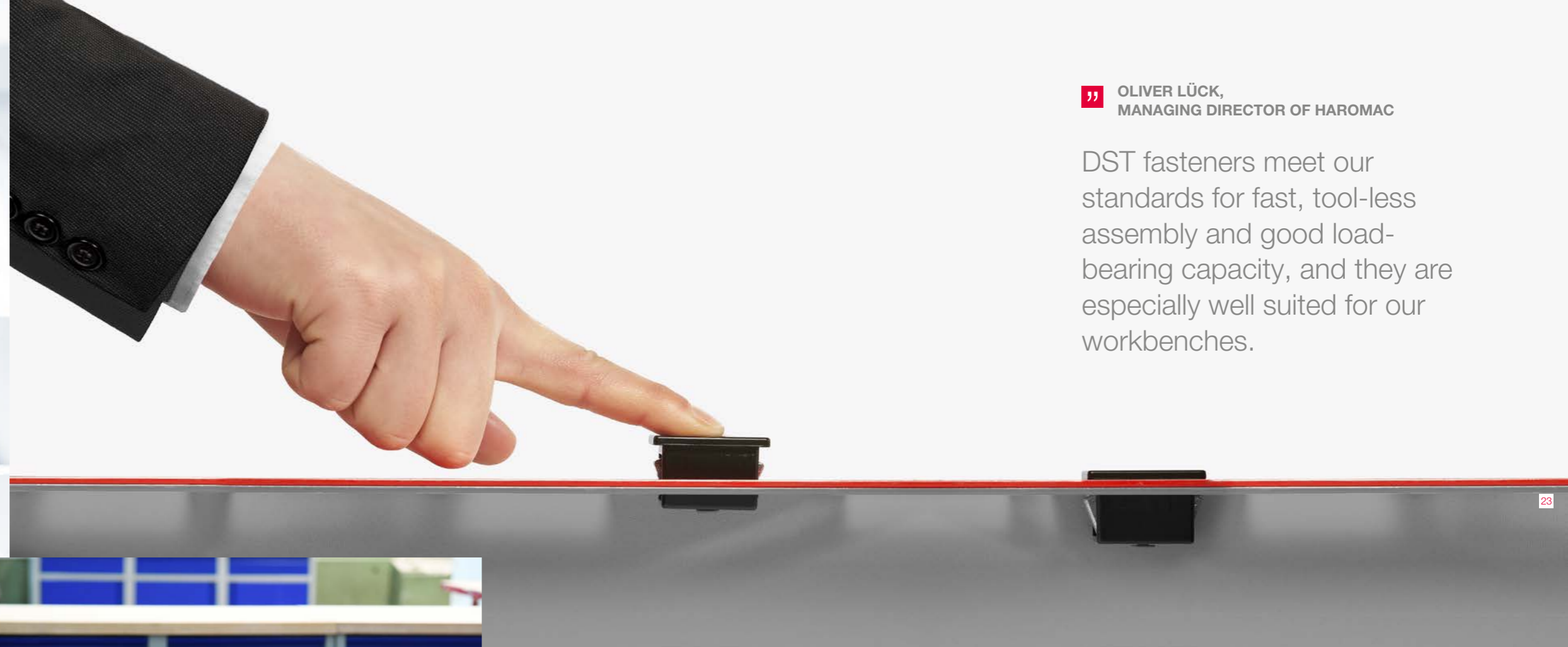
We at DIRAK gladly accepted this challenge and were able to solve the problem of the HAROMAC tool factory quite easily thanks to DIRAK-SNAP-Technology. With DST fasteners, workbenches are now assembled quickly using no tools – the fasteners are simply pressed into the cutouts in the sheet-metal walls: "SNAP". Secure.



■ ■ ■ **The technology allows for high-strength connections**

The idea behind DIRAK-SNAP-Technology is incredibly simple: It uses the operating principle of a slam-latch, which is commonly found in doors for houses or rooms. It is based on SNAP elements with an angled insert or angled clamps and a spring positioned inside the SNAP elements. These SNAP elements are inserted into a guide channel of an object and held in place by fixing plugs. If this fastener is then pressed through a cutout, the angled insert pushes the SNAP element back like a latch bolt in the guide channel and the spring is tensioned. As soon as the height of the angled insert is surpassed during the insertion process, the tensioned spring presses the SNAP elements back out of the guide channel. A distinctive "SNAP" sound can be heard as this happens. The result: The fastener is now wedged in the cutout and holds the connected elements together with great strength.

Matthias Velten, Area Manager at DIRAK GmbH, explains: "We have used these fasteners on HAROMAC workbenches, among other things. Because of this special technology, the workbenches can withstand heavy loads."



” **OLIVER LÜCK,**
MANAGING DIRECTOR OF HAROMAC

DST fasteners meet our standards for fast, tool-less assembly and good load-bearing capacity, and they are especially well suited for our workbenches.



The easy disassembly makes a modular structure of the workbenches possible. Another advantage is the packaging of the workbenches. Since the workbenches can be assembled quickly, they are broken down and sold unassembled as a flat pack. That makes them easy to handle and only a little space is needed for transport. ■

Future-Proof Data Security

Mechatronic latching solutions from E-LINE by DIRAK provide security in data-centers. Controlled access and real-time documentation in data centers protect against data theft.

Home office working has become firmly established due to the pandemic, so it may become a permanent fixture in some companies. One challenge here is data security. While software-based data protection has been under continuous development for years, the physical protection of data and network cabinets must not be neglected. Especially where many people have access, identification, organization and control are "must-haves." Our E-LINE brand offers various solutions for these purposes.

Security through access control and real-time documentation

Special care must be taken for the security of customer data by data centers in shared facilities with a high level of data traffic, for example colocation centers. In this situation it is advisable to organize access to the different racks by time and person and to document each access event or attempt to obtain access.

For controlled access and organized security, developers offer different infrastructures with centralized and distributed solutions. A distinction is generally made here between on-

line and standalone systems. In an online system, the closing system is integrated into the E-LINE by DIRAK software and is managed. All handles are connected with the system in real time so that all events within the closing system related to time are sent directly to a central office. This overview in real time, supported by suitable software, provides online information about closing states as well as access events of authorized persons.

The system can trace who gained access to the respective server cabinet and when. This makes it possible to prevent internal misuse of data," explains Winfried Ellers, Sales Manager of DIRAK Mechatronics. The access authorizations can be issued individually via RFID card or pin codes, so that for examples maintenance teams are given only reduced access to specific racks.

So your data will be safe. ■



MLR5000KP



Fulfilling Heartfelt Wishes Together:

DIRAK Promotions Support the Kinderhospizdienst Ruhrgebiet e.V. (Ruhr Children's Hospice Service).

The Kinderhospizdienst Ruhrgebiet e.V. was founded in 2001 and since then has made it its business to support affected families together with trained volunteers and make their everyday life easier. This includes various tasks: Support of the families in their challenging everyday life, exchange among the families, individual offers for siblings and children with life-shortening illnesses and also support with health insurance inquiries and obtaining assistance.

In addition, qualified chaplains and child and youth bereavement counselors provide counseling and pastoral care. A special concern is to fulfill the heart's desires of the children, such as meeting a soccer idol or riding on a police motorcycle.

Unlike adult hospice work, children's hospice work begins at the time of

diagnosis. Above all, it is a life companion in a challenging time when the small and large steps of saying goodbye are just as much a part of the process. "It is important to offer sick children, adolescents and their siblings a space where they can express, shape and live their emotions and thoughts in an age-appropriate way," says Birgit Schyboll, chairwoman of Kinderhospizdienst Ruhrgebiet e.V.

To support this work, DIRAK makes an annual donation to the association and funds the annual family retreat on the island of Norderney. During this week-long time-out, the sick children can fly kites together with their relatives, feast on chocolate ice cream and take a sightseeing flight over the Wadden Sea, taking a deep breath to recharge their batteries for everyday life.



” BIRGIT SCHYBOLL, CHAIRWOMAN OF KINDERHOSPIZDIENST RUHRGEBIET E.V.

We are grateful that the DIRAK's team with its annual commitment makes all this possible. The time off gives the families and us the strength to continue to tackle further challenges with confidence in the future.

Volunteer work that brings smiles

The Kinderhospizdienst Ruhrgebiet e.V. accompanies and supports affected families in Witten, Bochum, Hattingen and the neighboring towns.

Would you like to support the work of the Kinderhospizdienst Ruhrgebiet e.V. and/or volunteer?

Please contact us:
Am Herbeder Sportplatz 17,
58456 Witten, Tel.: 02302 – 277719

For the affected families, the support and aid is free of charge. The work of the Kinderhospizdienst Ruhrgebiet e.V. is made possible mainly by donations.

We thank you very much for your support.

**Volksbank Sprockhövel eG:
DE83 4526 1547 0019 1919 19**



EN Baskets Schwelm and DIRAK Score Points Together – Immediately

"Locally anchored and globally active" – those are the traits, the commonalities that describe us and the EN Baskets Schwelm. As a globally active company, DIRAK has a worldwide network with seven locations on three continents. Yet we are also strongly connected with our region and believe it is important to strengthen this connection. The same is true of the EN Baskets Schwelm, who support local children and young people with various offers while they compete as a professional international team in the second division national league. The partnership was formalized just in time for the beginning of the new season in October 2021.

Our Managing Director Florian Birkenmayer is delighted about the partnership: "Finally, we are able to present DIRAK in a sports setting as well, not only as a brand, but also as an employer so we can make new local contacts." Omar Rahim, General Manager of the EN Baskets Schwelm, agrees: "The cooperation opens up possibilities for both sides. We are looking forward to the new season with exciting activities."

DIRAK has been supporting the EN Baskets Schwelm since the beginning of this season. A glimpse into the partnership provides information on the reasons for the partnership and shows the similarities between the Ennepetal family business and the professional international team in the second division national basketball league.

At their last home game, the EN Baskets collected funds for the fundraising campaign "Together against the war in Ukraine." The total amount of contributions was €1941.39. As a partner of the team in the second division national league, we are very pleased with this commitment and have doubled the contribution total with €2000.

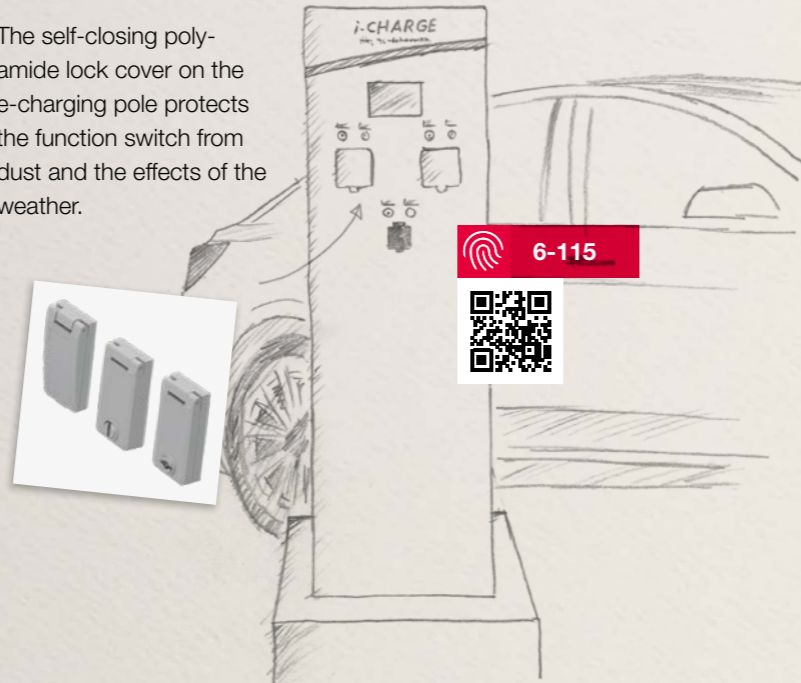


Products in Everyday Life

The swinghandle with liftable operating lever protects the rear wall of an e-charging pole from unauthorized access.



The self-closing polyamide lock cover on the e-charging pole protects the function switch from dust and the effects of the weather.



The swinghandle with profile-cylinder – perfectly suited for distribution cabinets for horizontal and vertical use.



... and now?

And if you can't wait until the next edition, please feel free to subscribe to our digital channels including LinkedIn and the newsletter, and to visit our website. You can also find your direct contact person here. Our website also has useful features including the hinge recommendation and an option for downloading CAD data.

We look forward to seeing you!

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