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NOVA

MAGAZINE



"Customers know where to find us: dozens of machines will leave our production hall in the years ahead."

VISITING DOMINO

TREND WATCHING WITH DENNIS OTTENS

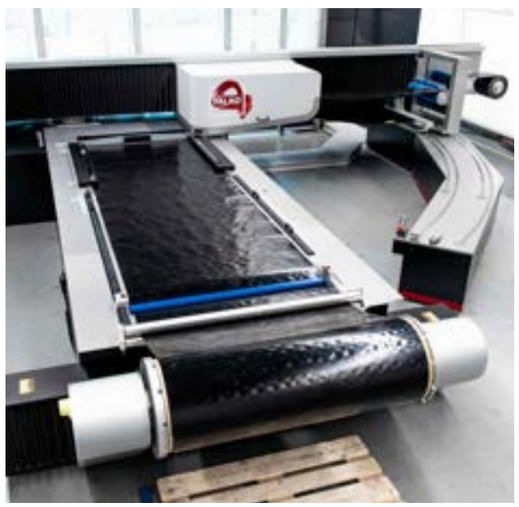
BOI KON

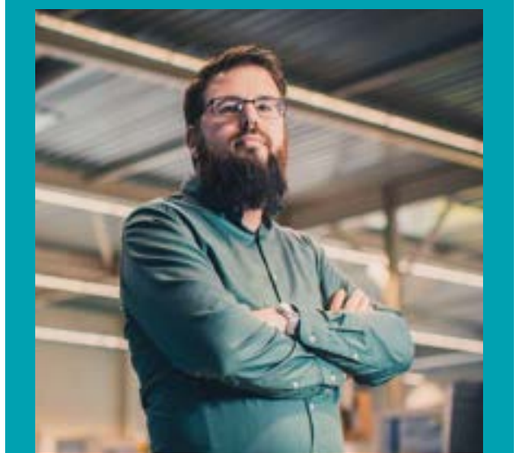
SHAPING TECHNOLOGICAL INNOVATIONS

CONTENTS

08 - 09

FALKO S REVOLUTIONARY THERMOPLASTIC UD-TAPE PROCESS





10 - 11

YEARS O**F** E**X**PERIENCE ERIK WIERINGA

PAGE

VISITING DOMINO ..... 04 - 07

FALKO S REVOLUTIONARY THERMOPLASTIC UD-TAPE PROCESS ..... 08 - 09

YEARS O**F** E**X**PERIENCE ERIK WIERINGA ..... 10 - 11

INNOVATIVE AUTOMATION SOLUTIONS **F**ROM **F**OSKE ..... 12 - 13

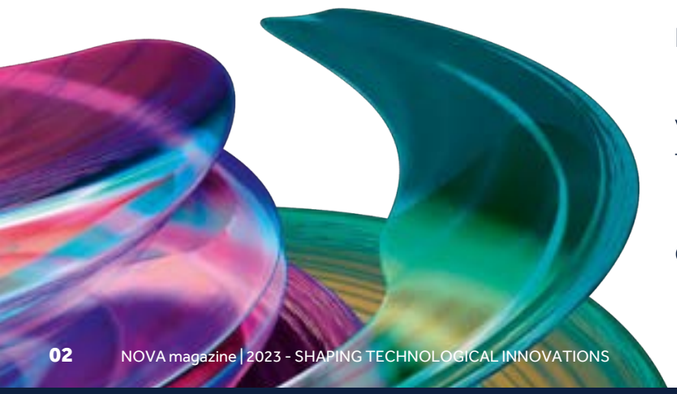
BOIKON SHORT SWEET ..... 14 - 15

MODULAR SYSTEMS **F**ROM DUCO ..... 16 - 17

TREND WATCHING WITH DENNIS OTTENS ..... 18 - 19

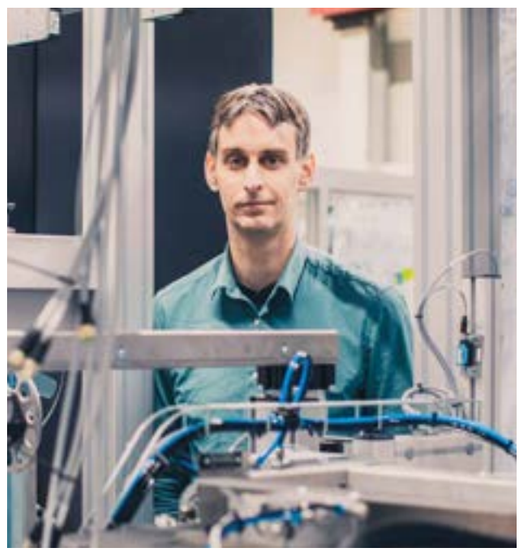
VISITING TSST ..... 20 - 21

ON THE ROAD WITH ALE**X** ..... 22 - 23



18 - 19

TREND WATCHING WITH DENNIS OTTENS





20 - 21

VISITING TSST

FOREWORD

Dear reader,
The biggest storms in our industry have passed. We have become quite adept at navigating the supply problems and shortages affecting our sector, but demand for our technologies remains as strong as ever - and we certainly feel it on the shop floor. You will not hear us complaining about the growing interest in our work, but it does mean stepping up a gear.

That makes me all the prouder of our employees. Despite the pressure, they pull together and deliver outstanding work every day. They give their all to deliver our technology on time. We have also made tremendous progress in after-sales support through our service department over the past few months.

In this edition of NOVA Magazine, you can read about the challenges we have faced together recently. New European legislation comes into force in May 2024, greatly expanding the range of products that require detailed track & trace data. The perfect job for our DJURA machines, of course. They can handle every imaginable type and size of packaging, from cans and pouches to boxes and entire pallets. All in compliance with the legal requirements. That achievement is down to our own employees, as well as partners such as Domino Benelux and Omron, who help us reach new heights.

With the summer holidays approaching, DJURA equipment is also flying out of our production hall to destinations at home and abroad. Track & trace at the highest level. That, too, is BOIKON.

I hope you enjoy this issue.

Erik Oosterhof
Managing Director

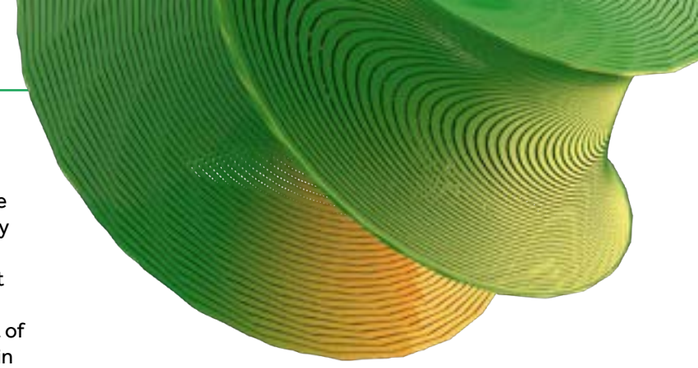




PRINT PERFECTION

THE HOUTEN ROOTS OF THE DJURA CONCEPT

“Impressive, isn’t it?” Account manager Luit Bakker grins as he looks at the result of the button he has just pressed on the touchscreen. In a fraction of a second, a complete traceability code has appeared on the test sheet beneath the laser. It is etched into the surface, so no consumables such as ink or labels are needed. Sustainability matters, Luit stresses, but speed is just as important, as a small wisp of smoke rises from the paper. “Some breweries run 80,000 bottles an hour through their production lines. Do the maths: that is 20 a second. And every single one needs its own code.”



We are in Houten, just outside Utrecht. Here, in the heart of the Netherlands, we step inside a company whose fingerprint can be found on almost every product in the supermarket, yet whose name most consumers have probably never heard: Domino Benelux. Originally a British company and now part of printing giant Brother, it has been a market leader in industrial coding for years. Date codes, barcodes, track & trace codes, batch codes and promotional codes for major brands such as Coca-Cola and Grolsch: whatever you can think of, Domino’s machines can print it.

Best before: see top

We have all checked whether the cream in our hands belongs on an apple pie or in the bin. But behind those scannable codes and numbers lies a much wider world of information. Luit: “The more regulations there are, the more codes you need. Think of the tobacco industry or healthcare, where it is vital to have a genuine, verified product whose entire production journey you can trace.

Speaking of journeys, the Groningen-born account manager travels all over the country, because Domino is much more than a supplier of sophisticated stamps. “We really aim to offer end-to-end solutions and keep innovating. Take our Domino Cloud, for example, which quickly detects production errors and keeps you informed remotely. Or our camera technology, which immediately checks whether a code has been applied correctly and is legible. In the past, that check only happened afterwards, often leaving you with a product you had to throw away.”

Sustainability and safety also play an important role. “How do you develop ink with as few CMS substances as possible, so that it is safe to use on food packaging? Or eliminate ink altogether? That is where laser printers are ideal. We also need to stay on top of new European legislation. Our London headquarters has an entire department devoted to this, so we can inform our customers in good time.” Do all those extra rules requiring additional coding solutions ever cause frustration? Luit shrugs. “Not really. Of course they require extra investment, but you can also use the codes to give consumers better information. Someone who has just bought an expensive bottle of whisky wants to know it is the real thing. So every piece of code adds a little value.”



“Ten years on, DJURA machines with Domino lasers are installed all over Europe.”



A match made in heaven

Interesting stories, but they still leave one question unanswered: how did a company from the centre of the Netherlands end up in Leek? Luit chuckles. BOIKON and Domino needed a matchmaker. “Around 2013, a major customer in the north asked how best to apply codes to flexible packaging. That can be tricky with lasers, but you certainly do not want to discard a product at the last moment just because its code has not printed properly. That company put us in touch with BOIKON... and ultimately the entire DJURA concept grew from there. Initially, I was going to develop it myself. But at one point I was sitting there with Erik Oosterhof, ed. , watching the list of requested features grow longer and longer. Then Erik said: I’ll work something out, leave it with me. They did a fantastic job.”

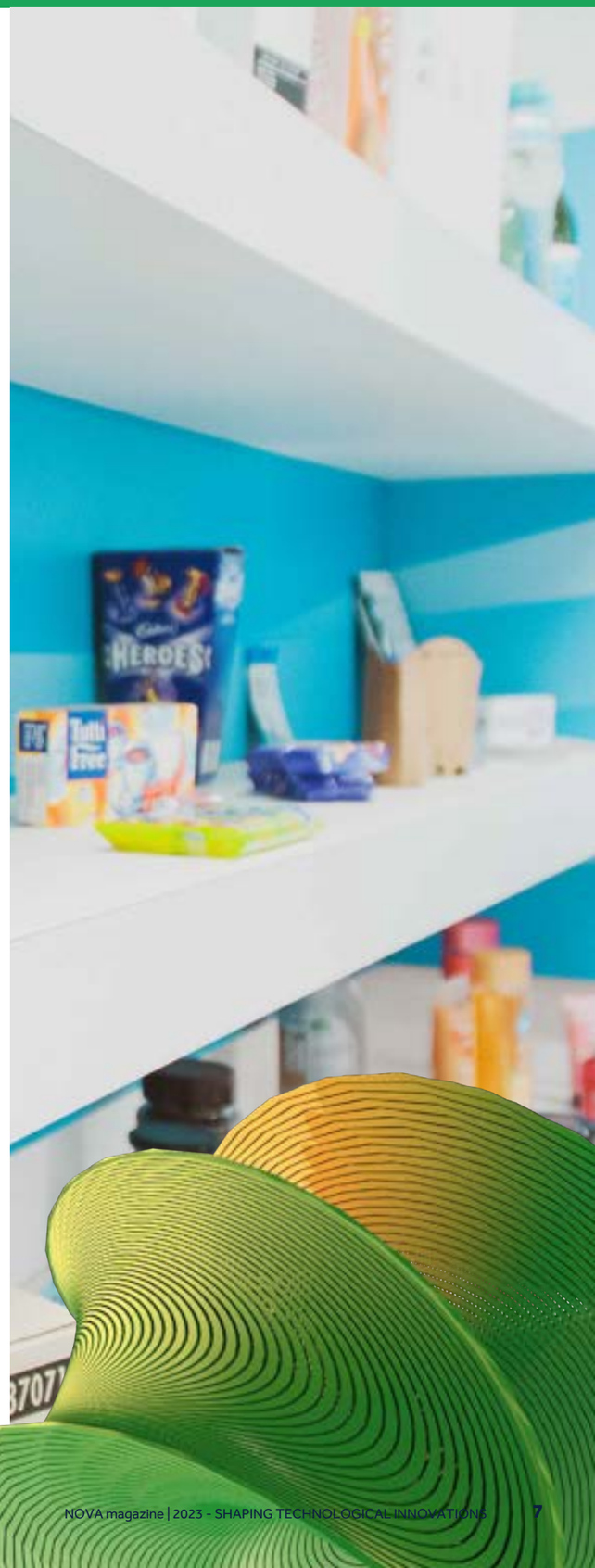


And the rest, as they say, is history. Ten years on, DJURA machines with Domino lasers are installed all over Europe. “I cannot give you the exact figures, but there are quite a few. Production comes in waves, with much depending on new legislation. Right now, we are mainly riding the ‘cigar wave’. DJURA also uses our printers for aggregation labels. Think of it this way: each product has its own code, but it then goes into a box whose label tells the software exactly which products are inside. That box goes onto a pallet with its own unique label, and so you build up the whole hierarchy. This is essential for preventing fraud. You do not want a box on which tax has been paid in Romania suddenly turning up in England.”

At home and abroad

Although Domino usually installs its lasers itself, Luit now has enough confidence in BOIKON’s engineers simply to send them the box. “Their technicians are trained to work with our equipment, so they can also provide first-line support. They have those skills in-house.” Another of BOIKON’s strengths, Luit says, is listening to customers. “They also think along with them and often deliver more than was originally requested. If you need to integrate a track & trace system into your production line anyway, they look at other automation opportunities at the same time. Domino is an international company, and if one of our colleagues abroad runs into a packaging problem, I have no hesitation in referring them to BOIKON. These days, they often do not even need me. I get an email saying: Luit, we had an issue, but we are already talking to BOIKON.”

“If one of our colleagues abroad runs into a packaging problem, I have no hesitation in referring them to BOIKON.”



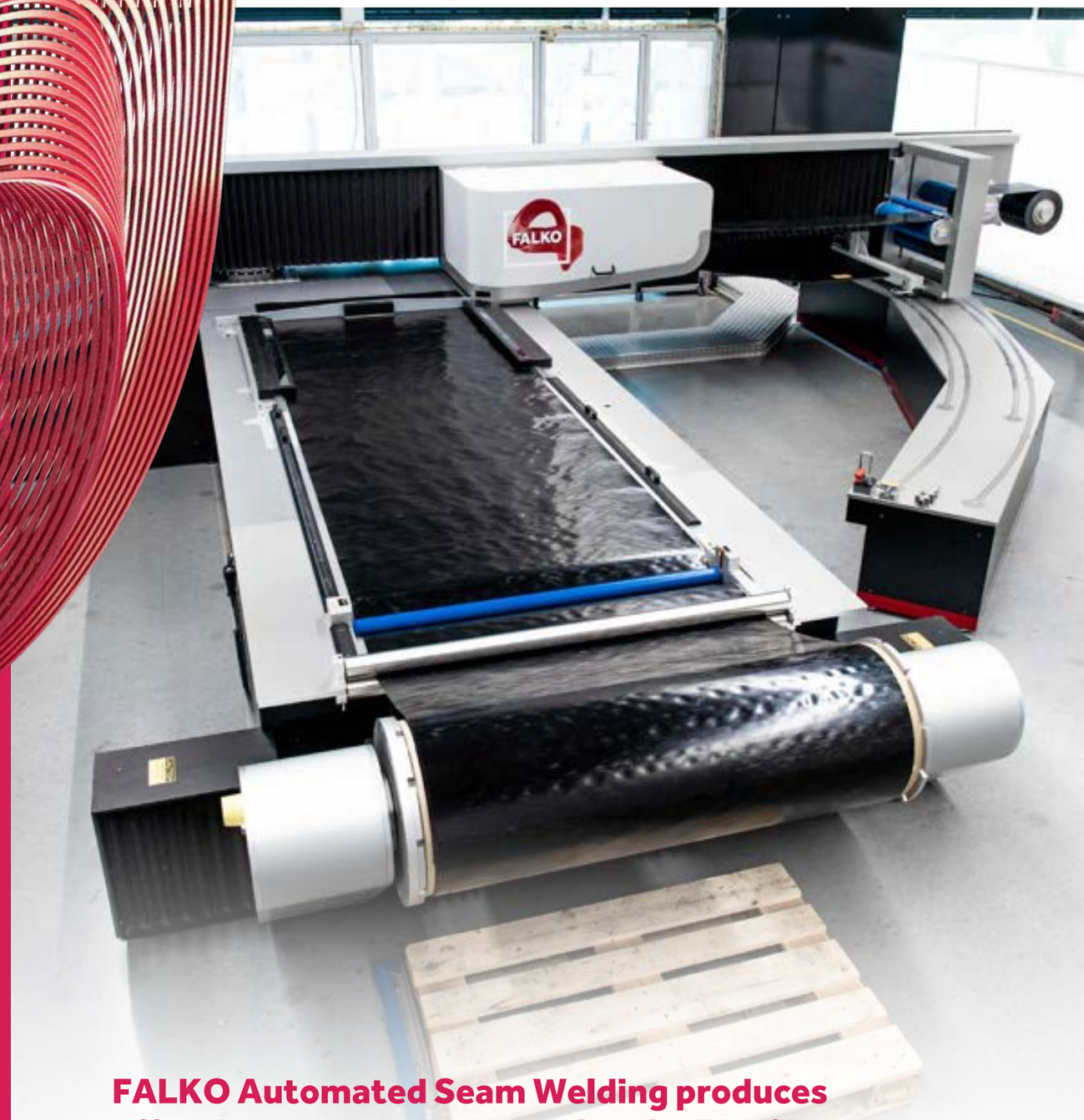


FALKO

A REVOLUTIONARY PROCESS FOR THERMOPLASTIC UD-TAPE

For years, there was no automated preparation process for continuous compression moulding or double belt press consolidation. FALKO Automated Seam Welding (ASW) changes that.

Using unique continuous ultrasonic welding technology combined with real-time weld verification, our FALKO ASW produces UD-tape rolls with unconventional fibre orientations. At unprecedented speed and scale. These single-ply UD-tape rolls, with fibres at 90, 45 or -45 degrees, can then be easily processed using qualified consolidation methods.

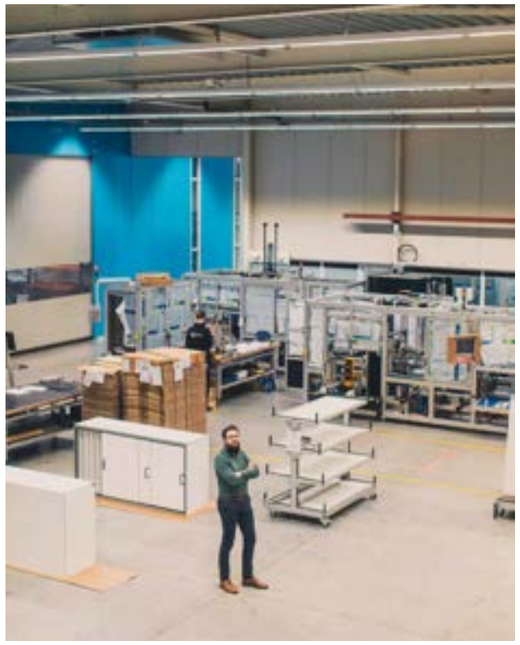


FALKO Automated Seam Welding produces off-axis tape on an industrial scale. The fibres run at 90, 45 or -45 degrees rather than along the tape. Ideal for double belt press or CCM consolidation!

BOIKON'S BOLDNESS THROUGH ERIK WIERINGA'S EYES: "DELIVERING SOMETHING OTHER THAN WHAT WAS ASKED FOR TAKES COURAGE"

"The first DJURA machines in 2014, the FOSKE project at UMC Utrecht, SYBOLT... pretty much everything except thermoplastic composites." Erik Wieringa effortlessly reels off his assignments over the years. One thing is clear: today's work is worlds apart from the jobs he took on as a student intern 15 years ago. "Those were small projects based purely on customer requests. Now I work on complex automation projects that bring together several disciplines. As a project engineer, I probably have the broadest role within BOIKON at the moment."

At 35, Erik is just a little too young to be called one of the original team, but he has seen the company change and grow. "I started here around 2009 or 2010. Our current premises on Vossenkamp had just been completed and were still half empty. People said: 'This will always be big enough for us.' Well, two extensions later, it is already getting too small again."



From A to Z

"I have always wanted to know how things work and why they are put together that way. If a toy broke, I had to take it completely apart. I must have driven my parents mad." Electrical engineering seemed too abstract, so he chose mechanical engineering, only to discover that it was the electronics side that fascinated him. Finding a suitable job was quite a challenge. "At most companies, mechanical engineers end up in the drawing office and join a project halfway through. You send off some drawings and never hear whether it works. There is no challenge in that for me. At BOIKON, they said: you will start small, but you will get a project from A to Z and can work it all out for yourself. What is possible, and what are the limitations?"

He is the first to admit that the A-to-Z approach applies less today. "Things have become enormously more complex. That is a big difference. You need more parties involved to see the whole picture. We genuinely come up with things that did not exist before, things people thought could not exist. Take flexible pouches: with DJURA, we can apply a valid code despite the folds and uneven surfaces. Early on, some laser manufacturers said: 'What you are doing with that machine is impossible.' Well, it is possible. We have certainly proved that by now."

Can't do it, won't do it

Proving itself to sceptics has almost become BOIKON's trademark, Erik agrees. "Take the FOSKE platform. Sterile services departments have traditionally been rather conservative; people prefer to wait and see." In industry, you might want to make something today and have the machine ready yesterday. In healthcare, investments may happen only once every 30 years, with decisions passing through many layers of approval. "What happened there was very special, because we essentially delivered something that was not in the tender. It takes courage to say: we are not offering what you asked for; we are looking for a solution to your real problem. As a company, you have to dare to do that - and at BOIKON, we do."

"We are not offering what you asked for we are looking for a solution to your real problem."



FOSKE

INNOVATIVE AUTOMATION SOLUTIONS FOR YOUR CSSD

FOSKE automates product and information flows and optimises and safeguards workflows and workstations in hospital central sterile services departments (CSSDs). We combine innovative robotics, vision and track & trace technologies to achieve the highest possible quality, efficiency and flexibility. Just as importantly, FOSKE's CSSD automation improves workplace ergonomics and employee job satisfaction.

Future-ready healthcare

Automating a CSSD with FOSKE fully supports the drive towards future-ready healthcare. Our solution delivers efficiency gains of up to 40% across the entire department. It also makes the purchasing and inventory costs of medical instruments easier to manage, while improving quality. The automation - and the calmer working environment - that FOSKE brings is unique in the world.



FOSKE's automation and technology help you ensure the highest standards in the cleaning and sterilisation of medical instruments.

BOIKON SHORT & SWEET

Supporting talent

You are never too young to get into technology! That is why we sponsor Pretty Smart Robotics, a youth club from the Westerkwartier region that takes part in the FIRST Robotics Competition (FRC) and inspires young people to become creative innovators. Now that is a great partnership!



An Easter feast

Even these brilliant engineers and technicians sometimes need a hearty breakfast and a good cup of coffee to wake up. Just like at our generous Easter breakfast together in the production hall!



What a van!

Doesn't it look smart? Since February, our new Mercedes Sprinter has been ready to deliver our machines and innovations to even the furthest corners of Europe.

Time to celebrate!

You only turn 50 once. For our Managing Director Erik Oosterhof, we thought that was a good reason to put out the flags, both in the office and outside the entrance. Happy birthday to the big BOIKON boss!



A winning hand

At BOIKON, we like to put our cards on the table... except during our klaverjas card tournament. Our new Polish colleague took the title straight away, even though he had only just learnt the game. Congratulations, Błażej!



Tomorrow's technology

In September, BOIKON attended the Techniek Tastbaar hands-on technology event at RSG De Borgen in Leek, showing just how far a technical education can take you.



BOI KON
SHAPING TECHNOLOGICAL INNOVATIONS

Did you mean...

Many of the interviews for this magazine were written up using transcription software. Brand recognition is not an end in itself for us - we prefer to let our work do the talking - but clearly there is still some room for improvement. Here are a few of the Dutch words the software thought it heard when we said BOIKON:

BROEK OM
BEUKMAN
Bonbon
Balkan
BOL.COM
BOKKEN
Balkon
Boycot
BODYCON
Buikwand

DUCO

MODULAR SYSTEMS FOR FLEXIBLE PRODUCTION AND WORKING ENVIRONMENTS

DUCO is a modular platform for efficiently creating safe, ergonomic production and working environments. It offers a wide range of standardised technical solutions and products, including a modular aluminium profile system. This system gives you complete flexibility, from machine frames to complex multi-palletising solutions, so you can build exactly what you need. Naturally, our experts are always ready to help. DUCO systems are used across a wide range of sectors, from manufacturers and machine builders to laboratories and educational institutions.

Tried and trusted

The modular mechanical and electrical building blocks of the DUCO platform have been tested and refined over many years. We have standardised them in 3D CAD programs and ERP software. Physical components are held in our automated warehouse, allowing us to guarantee exceptionally reliable delivery. By configuring these modular building blocks intelligently, we achieve the ideal balance between standardisation and customisation. That balance delivers the ultimate combination of reliability and flexibility.



We do everything we can to make your job easier. We configure systems on request and tailor them to your product and requirements where needed. A 3D concept drawing immediately gives you a realistic picture of what to expect.

TREND WATCHING WITH

DENNIS OTTENS

For some, it is the ideal tool for validation and combating counterfeits. For others, it is a necessary evil or a government obligation. Whatever your view, track & trace is here to stay in a growing number of industries. As BOIKON's leading DJURA specialist, Dennis Ottens has seen tighter regulations take shape first-hand and is now helping companies take the next step.

The next step

"Tobacco legislation was introduced in two stages. First came OTP and 'make your own' products: pouches and tubs, in other words. These have had to meet all traceability requirements since May 2019. From May 2024, the requirements will also apply to other tobacco products, such as cigars, pipe tobacco and snus a Swedish tobacco product placed under the upper lip, ed. . Products that do not comply may no longer be manufactured after that date."

Buying codes

"More and more companies are finding their way to BOIKON and DJURA. It often starts with the suppliers of the software packages that generate the codes. If I am a manufacturer supplying Poland, I have to buy codes in Poland, bring them into my business and apply them, then report back: I used these codes for these products in these locations. It is often through those software companies that manufacturers come to us to discuss implementation."

1,500 packaging formats

"Our biggest surprise was the sheer variety in cigar manufacturers' product ranges, with so many sizes and packaging formats. Initially, we thought we were entering a highly competitive market: cigars all come in rigid boxes, and plenty of companies can handle those. But it is more nuanced than that. It is quite a niche market, so manufacturers try to stand out. Some have as many as 1,500 different packaging formats! With DJURA, we have a platform that handles those effortlessly, without the operator having to make lots of adjustments. Customers know where to find us: dozens of machines will leave our production hall in the years ahead."

A growing market

"Cigars are a luxury product, so they need to look the part. That is one reason for all the different sizes; marketing plays a role too. Essentially, there are two markets: cigarillos, which are fairly similar in size to cigarettes, and long-fillers, the familiar large Cuban cigars. These days, though, they more often come from Nicaragua or South America. People can pay 20 for a single cigar, and it remains a growing market."

From Cuban cigars to baby care

"More industries are recognising the value of track & trace, particularly for brand protection. Counterfeits are common in luxury goods, and specific codes can guarantee that customers are buying the real thing. We have spoken to watch manufacturers and perfume brands, but producers of nappies and milk powder are also adopting it. Demand for reassurance is especially high in countries such as China."

Finding the right fit

"Our challenge is to find markets that suit us. We genuinely provide a tailored solution for each production line. I do not see DJURA moving into industries looking for an off-the-shelf product they can simply pay for and drive away with. We always begin with an in-depth conversation to identify the bottlenecks and work out how to resolve them as efficiently as possible."

Laser-marked bananas

"Printed labels are still widely used, but laser technology is going to grow too. It etches codes or brand names directly into the product, removing the need for unnecessary paper or polluting plastic. It works for luxury goods, but mark my words: before long, the fruit grower's brand will be lasered straight onto your banana skin."





TALENT FROM TWENTE

WITH DEMCON TSST, BOIKON'S ALUMINIUM PROFILES TRAVEL AROUND THE WORLD

"When you arrive, I'm in the new building across the road. Grey ground floor, white above? Er... I think so, but let me check." Even on the phone, it is clear that Demcon is on the rise: its office is so new that purchasing manager Rudi Munster (56) has barely had a chance to look around. "I'm not here that often," he explains later at the coffee machine. "Most of my work is across the street, where Demcon TSST is based."

"Since then, we have bought more or less a complete package from BOIKON. It certainly takes work off our hands."

We are in Enschede, on a business park between the University of Twente campus and the Grolsch Veste football stadium. At Twente Solid State Technologie (TSST), acquired by the larger Demcon group in 2018, high performance takes a very different form: the company builds atomic layer deposition equipment for university research centres. Rudi explains that, like many businesses on this park, it began as the brainchild of a university lecturer. "Someone has an idea, and if it catches on, they are given the opportunity to establish a spin-off company here. In this case, it was a system that creates an ultra-high vacuum, producing an exceptionally clean, uncontaminated chamber. Ideal for nanotechnology research and depositing thin films. Do tell me if this gets too technical!"

From lecture hall to business

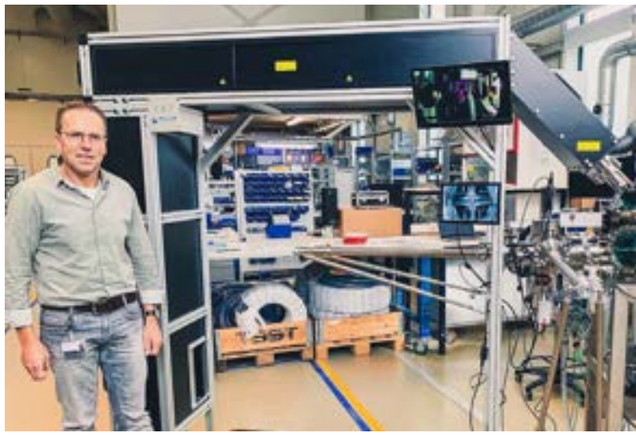
Technical it certainly is, but impressive too. Although TSST still has close ties to the University of Twente, it now supplies research centres worldwide, from the Benelux countries to the far reaches of Asia. Rudi: "In the early days, around the turn of the millennium, the professor did everything himself. But he still had to teach, so that became increasingly difficult. Then a small sales team was added, made up of people with physics backgrounds. They ask customers all sorts of questions: what do you want to research, and what do you need? That leads to a recommendation, and we get to work. We build a test setup here on the shop floor to make sure everything works exactly as it should, then install it in the same way at the customer's site."

BOIKON has grown alongside them as a supplier, explains the Twente native. "Back when we worked on a much smaller scale - almost as a hobby - we were looking for extruded profiles. BOIKON stood out because they could supply exactly the right corner connectors, leaving very little drilling for us to do. For the first few years, we only bought individual components, but eventually it became quite labour-intensive. So I called Leek and asked: can you build assemblies for us too? Their answer was: 'Of course, we do that every day!' Could they also buy materials from other suppliers on our behalf? That was no problem either. Since then, we have bought more or less a complete package from BOIKON. It certainly takes work off our hands."

Precision-made to measure

BOIKON's engineers now work quite independently, Rudi explains. "They order standard components - off-the-shelf items, as we call them - from abroad, then work from the TSST drawings. They make everything to measure and fit it into our system. Recently, a university in Denmark wanted an unusual size. Most frames are about 1.70 metres high, but in this case people had to be able to walk underneath. They simply make it happen." Safety remains important too, especially when lasers are involved. "BOIKON fits enclosed viewing windows to almost all our systems, so that nobody can accidentally come into contact with a laser beam."

Above all, Rudi stresses, BOIKON is excellent at thinking along with TSST. "Sometimes we have no more than a rough outline, and they help us choose the best materials. We could keep trying to reinvent the wheel, but there is little point when they already have the knowledge. Siebo Beukema has also visited us for a tour. I always appreciate suppliers making an effort to understand their customers." He pauses. "To be honest, I have never visited BOIKON myself. Too little time, too little capacity. Perhaps I should make a trip to Leek for a look behind the scenes, and see where else they could add value."



ON THE ROAD WITH ALL-ROUND ASSEMBLY SPECIALIST ALEX VEENSTRA

"SITTING BEHIND A SCREEN DRIVES ME MAD"

Alex Veenstra's career almost took a very different path. After a short internship at BOIKON, the 41-year-old went his own way: there was not enough work to employ him full-time. Close to finishing his mechanical engineering studies, Alex joined a ventilation duct company, but soon realised it was not a great match. Then the long-awaited call from Leek finally came.

"I remember it exactly: it was a Saturday afternoon and we were playing away against the Knickerbockers. One of those matches where the post-match drinks were the main event. Just before we entered the clubhouse, Jeroen, then co-director, called and asked whether I could drop by on Monday." He chuckles. "If he had called an hour later, he would probably have wondered what kind of idiot he had on the line!"

Hands-on work

That was 2003. Now it is 2023, and Alex is entering his twentieth year at BOIKON. "All-round assembly specialist, yes. Oh well, it is just a title. Just call me the guy who works with his hands. Put me behind a computer and I go mad after an hour." And work with his hands he certainly has. "Especially in the early years, when we mainly worked with aluminium profiles and enclosures, I did absolutely everything myself. That sometimes caused bottlenecks. I would be working on a big project, then around lunchtime a stack of orders would arrive, all needing to be cut to size and packed. And then people wondered why my own project was not finished! Still, it was a great learning experience. You get to know the company from top to bottom."

These days, Alex mainly works on site. "For the past three years, we have focused on getting the SYBOLT project up and running. Especially recently, that has meant a 5 a.m. alarm, arriving at work at 6 and leaving for Heerenveen at 6.30. The advantage is that we built most of the machines we install there ourselves in Leek, so I know them inside out. I can lay all the cables, install control cabinets, fix minor faults and so on. And when you install a machine, there are always things you need to resolve with the engineer and project manager." He gives a broad, knowing grin, as he often does throughout our conversation. "I spend so much time on the road that sometimes I barely recognise half my colleagues in the office."

Hard work in Gran Canaria

With the first SYBOLT handover approaching, he can look ahead to his next project away from home. "DJURA machines are also in high demand with the new legislation on the horizon. After the summer, I will spend three weeks installing machines in Gran Canaria. Yes, a tough life - my friends and family always make that joke too. What they tend to forget is that my day starts at 6.30. I grab breakfast at the hotel and am at the factory by 7.15. I do not leave until the evening, and then I still need to shower and eat. There is time for one beer at most, then I am out like a light."

Not that work is always such a burden. "For a while, we spent a lot of time in Germany and Poland installing production lines. Four technicians on site for two weeks. On Sundays, we would find a go-kart track to let off steam." Laughing: "I can tell you, colleagues regularly came home from those trips with bruises." Then, more seriously: "Of course, it is important to get along on long projects like that. For yourself, for the team and for the customer. I like to think I am easy-going, and I think the other technicians would agree. But I also really enjoy being the person who brings everyone together."

Just as enjoyable, but more demanding, is the complexity of his projects. "Where some suppliers say, 'That is too complex; we cannot do it,' BOIKON says, 'It is complex, but we think we can.' You can repeat the same job 20 or 30 times and keep checking the schedule: we lost time here last time, so how do we make it up now? At BOIKON, we often jump in at the deep end and, to be honest, we do not always know what to expect. But we do it. Where others stop, we keep going."

"I spend so much time on the road that sometimes I barely recognise half my colleagues in the office."



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