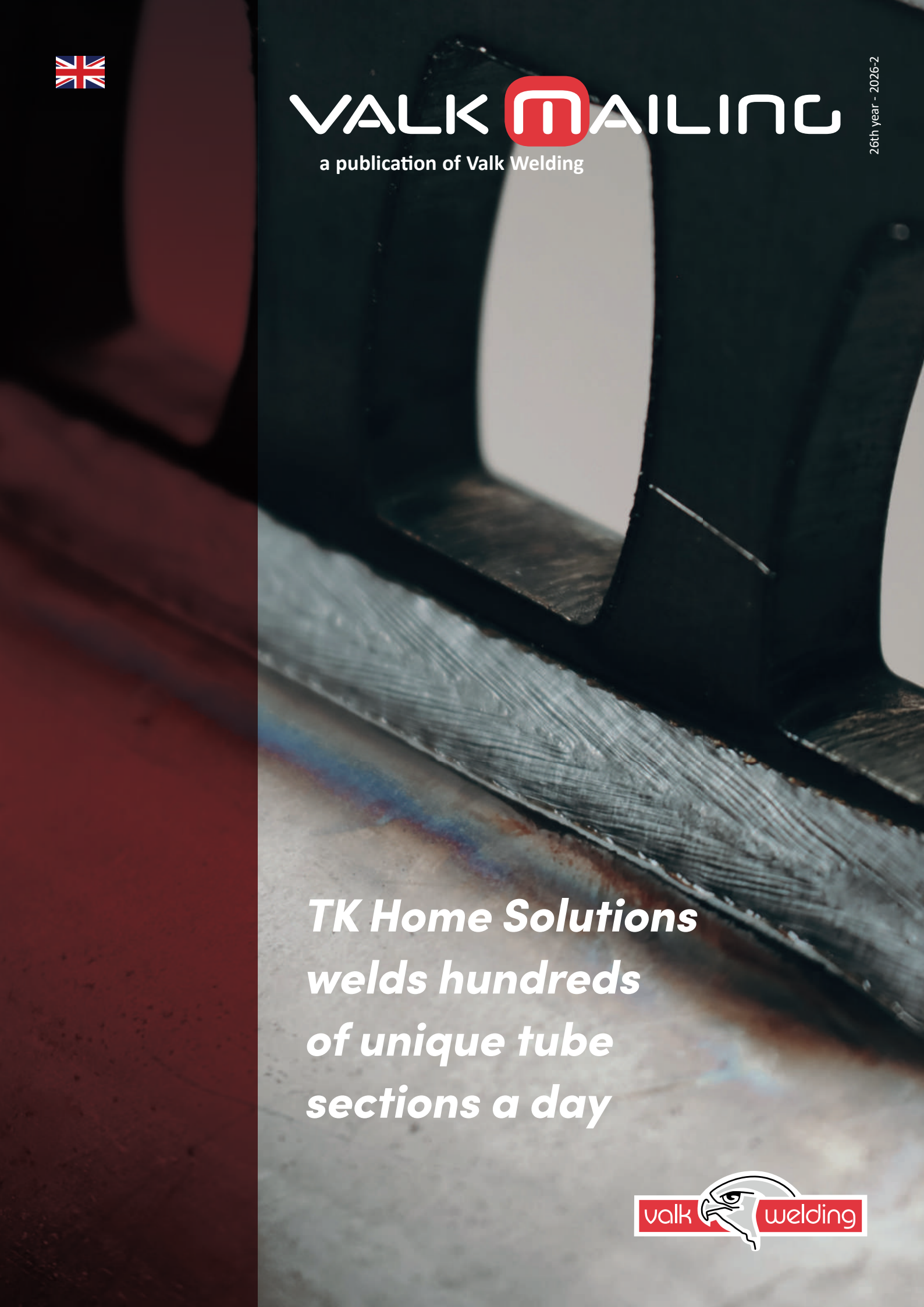


VALK MAILING

a publication of Valk Welding

26th year - 2026-2

TK Home Solutions welds hundreds of unique tube sections a day

valk welding

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Colofon

The Valk Mailing has been put together with care by Valk Welding. From concept to creation, our team has worked hard to realise this magazine and provide you with relevant information, inspiration and insights into the world of welding technology and automation. For any questions, comments or suggestions, please feel free to contact us at info@valkwelding.com. Thanks to all employees and partners who contributed to the success of this magazine.

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Dear reader,

Before you lies the second Valk Mailing of 2026, already the twenty-sixth edition. All these years we have shared our customers' stories through this magazine, and once again they come from all over Europe. As I read them, one common thread stood out to me: software is increasingly making the difference.

Kent Stainless programs a new frame with ARP in minutes instead of hours. Thirteen years after purchase, Onillon et Fils is suddenly getting 30% more hours out of the same welding robot, purely through a software step. And with our Management Information System software, we make visible how an installation actually performs, right down to the level of the individual weld.

That development does not stop at the welding robot. At Meijer Metal, welding robots, AGVs and storage towers form a single production flow, and Dekk Pipes combines cutting, welding, and handling in one integrated installation. Software and hardware are growing towards each other, and AI technology is giving that movement an extra boost. We invest in this deliberately because this is where your return lies for the coming years.

Yet it is not the technology that determines success, but the people. Every automated step makes the entire process more powerful and a little more complex. The operator who understands the process, the programmer who sees through the logic of the product, the planner who reads the figures: they make the difference. That is why we invest heavily in training and in awareness on the shop floor, both at our customers and within our own organisation.

That awareness also includes caring for data. Anyone who manages production data, robot programs and customer drawings digitally must also protect them. I am proud that Valk Welding is now ISO 27001 certified for information security. It means the trust you place in us is protected in the digital world too.

What appeals to me most in these stories is that our customers do not choose a machine, but a partner. TK Home Solutions put it aptly: at Valk Welding, it does not matter which department you speak to, everyone is approachable. That culture is our most important asset.

Software, hardware, and people moving forward together: this is how we strengthen the European manufacturing industry and help our customers compete on the global level on which they operate every day. I wish you an enjoyable read.

Sven Akkerman (CFO Valk Welding)

TK Home Solutions welds hundreds of unique tube sections a day

Netherlands

TK Home Solutions, part of TKE, manufactures stairlifts in Krimpen aan den IJssel for every staircase and every home, and these are used worldwide. This bespoke approach means people can keep living comfortably and safely in the home they know, even once climbing the stairs unaided is no longer easy. Because no staircase is the same, no tube section is the same either. For TK Home Solutions, that means hundreds of tube sections a day, every one of them 100% customer-specific.

The software made the difference
In 2010, TK Home Solutions switched from manual to robotic welding of these tube sections. The welding robot brought speed and consistent quality, but no two tubes are ever exactly alike. Each one would therefore need its own welding program, and with hundreds of tubes a day, that was simply not feasible. Valk Welding therefore developed software that reads in the drawing of every customer-specific staircase, recognises the deviations and automatically adjusts the welding robot program accordingly. As a result, the right program is ready for almost every tube in an instant. “This specific software development and its integration were decisive for the success of the production process,” says Fred Melkert, project manager at TK Home Solutions.
That was possible because both parties took the time to understand each other’s field. TK Home Solutions opened up the logic behind its product, and Valk Welding translated that into the capabilities of the robot and the software. That mutual openness has remained the foundation ever since.

Machines that can handle tomorrow’s growth
TK Home Solutions looks far ahead. Growth plans are backed up by analyses and forecasts, and production resources are aligned accordingly. TK Home’s ambitions involve a substantial expansion of capacity to support international market growth.



To safeguard continuity and secure the growth ambitions for the years ahead, the two parties sat down together again. Thanks to a partnership in which knowledge of the product, the software and the process exists on both sides, the conversation could go straight into depth.

Two parties that move each other forward
What followed were brainstorming sessions that Fred Melkert describes as extremely valuable. These conversations about the future of production also immediately created room to bring in questions from everyday practice. These were considered alongside the technological developments of recent years, and that opened up new possibilities. As the sessions went on, the outcome proved greater than what the conversation started with: improvements emerged in several areas that were not part of the original question. One idea led to the next, and some benefits only became visible because both parties thought things through and tested them together. That is what an open brainstorm can deliver: answers to questions that had not even been asked at the outset.

Technology to the latest standard
The welding process grew along with it. The new installations are equipped with the Super Active Wire welding process, which produces neater welds and largely eliminates the need for pre- and post-treatment for weld spatter. TK Home Solutions also works with the latest generation of ARC-EYE laser sensor, which handles the curves of the tubes effortlessly, even in the most difficult positions.

A partnership across every department
The collaboration runs through every level of both organisations. Software colleagues from Valk Welding, together with TK Home Solutions’ IT department, brought the entire file handling up to the current standard, and on the shop floor, in consultation with the operators, the idea arose to show on screens how much longer the robot still has to run. That provides oversight and peace of mind now that they operate four stations. Fred Melkert finds it remarkable that contact is equally natural at every level, from the software developer to the technical director. That paid off during the changeover, which stayed on schedule without production being at a standstill for long, and it has paid off since too. Agreements are kept, and that builds trust. “Valk Welding doesn’t walk away once the signature is on the paper.”

the signature is on the paper.”
Fred Melkert therefore describes the new installations as a co-creation: two companies that know what they are capable of, trust each other’s expertise, and have together built a production set-up that lets TK Home Solutions look ahead to the future with confidence.

www.tke-homesolutions.nl



ARP

Not just the weld, but the whole process

How two robot systems enforced discipline throughout the entire factory at Kent Stainless

Ireland

Kent Stainless in Ardcavan, Ireland, has been designing and manufacturing custom constructions in stainless steel and carbon steel since 1982. Alongside its own range of Kent products, the company focuses mainly on the Mission Critical sector, with a strong focus on the semiconductor and pharmaceutical industries, alongside a rapidly growing presence in the data centre sector.

“Welding is the core of everything we do. Stainless steel forgives nothing. The quality of the weld is the quality of the product. Welding capacity therefore determines how much work we take on and how well we do it”, says Declan Heffernan, Director of Engineering and Operations.

Craftsmanship under pressure
Experienced stainless-steel welders are scarce, and the growth of Kent Stainless was running up against the available welding hours.

For the semiconductor industry the company produces modular frames in high volumes, with tight tolerances and virtually every frame individually configured. Heffernan: “We were looking for three things. Capacity that grows with us without depending on the labour market, consistent weld quality, and a production process we can plan.”

Two systems, one principle
In 2023 Kent Stainless put a FRAME-H system into operation. In 2025 a TRACK-FRAME-E followed, in which the robot travels along a track and serves two workstations.

Both systems work on the same principle. The robot welds at one station while the operator loads the other. Loading therefore costs no production time and the robot welds almost continuously. The TRACK-FRAME-E has a VWPR torch with integrated fume extraction. This captures welding fume directly at the source, so the operator does not come into contact with harmful particles. “The robot should never have to wait for a frame. And the operator should never stand watching the robot weld”, says Heffernan.

Programming without downtime
Kent Stainless programs the robots with ARP (Automatic Robot Programming). This software automatically generates a complete robot program based on a 3D CAD model. The programmer checks it, after which it goes to the robot. That speeds up offline programming by up to ten times. The record at Kent Stainless now stands at 22 new frames per day.

This also makes robot welding attractive for one-offs, and batch size one is the norm at Kent Stainless. “The programming costs per frame are minutes, not hours, without a test piece and without downtime. We weld a one-off frame just as economically as a repeat order. Programming has shifted from a production bottleneck to part of engineering.”

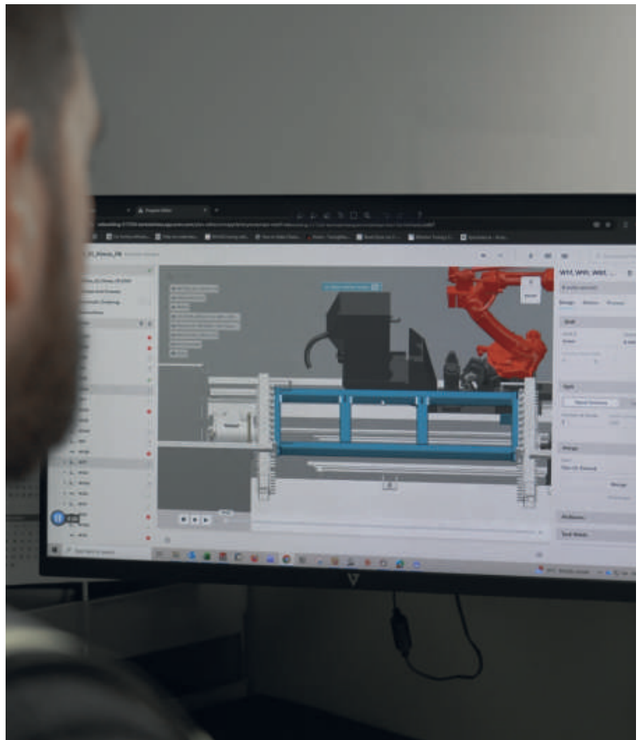
Discipline throughout the factory
The biggest effect was upstream. “To feed a robot cell properly you have to batch: cutting, preparing and tack welding in batches. The robot has enforced that discipline on the entire preparation process and our preparation hours per frame went down immediately.”

The cell also delivers a figure Kent Stainless can rely on. “We know what a shift produces and we commit to delivery times.” Because every weld is identical, that predictability is also visible in the quality.
Internally, roles changed. Experienced welders now do the work their craftsmanship calls for and operators run the cells. Within the company’s own engineering department, a robotic engineering team has emerged for programming, calibration and process development.

Moving forward together
“Valk Welding has been a partner from the start rather than a supplier. The ARP training made our people self-sufficient quickly, and for support we get engineers who understand welding technology, not just robots. The proof is that we came back for the second system.”

Kent Stainless still sees room in the cells and is bringing more product families to the robots. Automation is a pillar of the strategy through to 2030. Heffernan gives companies that are starting to automate one piece of advice: “Automate the flow, not just the weld. Buy a robot for the weld alone and you will be disappointed. Buy it for what it does to your factory, and you will never look back.”

www.kentstainless.com









"What began as a single workstation to launch robotisation has thus, within two years, evolved into a growing robotic welding shop."

Watch the video:

A growing robotic welding shop

Latvia and Czech Republic

DTPS

RK Metals, part of UPB Group, is one of a number of Latvian manufacturers that combine in-house production with the role of a general subcontractor in steel processing. When the company was looking for a partner to launch its robotic welding operation in 2021, it was tackling three issues at once: a growing shortage of welders, pressure to improve the welding shop's efficiency, and the need to shorten lead times. "Our collaboration with Valk Welding has always been professional, and every promise made has been kept," says Ritvars Viss, deputy technical director of RK Metals, summarising four years of working together.

Steel structures and machinery from Grobiņa

RK Metals is based in Grobiņa in the Dienvidkurzeme region of western Latvia, not far from the port of Liepāja, and is part of the UPB Group. The company was founded back in 1993 and, over more than thirty years, has grown into one of the leading Baltic manufacturers of steel structures and machine parts. Among other things, its steel structures support the Citygate building in Sweden – the tallest office block in Scandinavia; in addition, the company supplies infrastructure projects and bespoke machine parts to customers in Scandinavia and further afield. Over 200 people here manage the entire cycle from design through production to assembly.

Looking for a partner, not just a machine

RK Metals chose its supplier carefully. After assessing the situation on both the Latvian and European markets, the choice fell on Valk Welding – the deciding factors were their practical approach and willingness to carry out all the required live demonstrations and tests. Test welds and demonstrations took place at the Valk Welding CZ technical centre in Paskov, where the customer was able to verify, using their own parts, that the proposed solution would work. "After several months of searching for the optimal solution, the TRACK-FRAME-E robotic system was selected and ordered, as it perfectly suited our plan to automate the welding of small and medium-sized components – which is where we wanted to start," says Ritvars Viss.

Strict acceptance tests and building trust

As this was RK Metals' first step into robotisation, the customer set strict acceptance criteria. Trust was built gradually, step by step. The 2023 delivery also included a check to ensure cycle time compliance on a smaller but relatively complex welded assembly, in other words, a guarantee that the robot could handle a real-world part within the required time and to the required quality. Large and complex steel welded assemblies are welded at the workstation; the operator positions the part and starts the program, whilst the robot consistently delivers the same weld quality, regardless of how many welders the company has available at any given time.

Complete offline programming

Offline programming using the DTPS software played a crucial role. The system was supplied with full offline programming capabilities, meaning production program's could be created without disrupting the welding workstation. The delivery included training for both operators and programmers, as well as a full on-site handover. For the following two years or so, the installation was supported by full assistance from Valk Welding.

"Over the course of those few years, I was in regular contact with several programmers from the Czech and Polish teams at Valk Welding, and of course I attended training at the technical centre in Paskov; however, no training can ever cover every situation that might arise. In particular, the remote support, I can now say this from the colleagues at Valk Welding, definitely sped up our journey towards the robotisation of the welding of our parts," explains Uldis Kausis, a welding robot programmer. The emphasis on technology in robotisation and a strong focus on welding, with all its specific requirements, enabled RK Metals to integrate robotic welding into its processes quickly and smoothly.

A second, larger robot after two years

The experience with the first system led to a sustained interest in process improvement at RK Metals – and this culminated, two years later, in the decision to order another, larger robot for larger welded assemblies. The TRACK-Y-RL-FH robotic system was ordered at the end of 2025 and installed in August 2026, again following a thorough commissioning process. What began as a single workstation to launch robotisation has thus, within two years, evolved into a growing robotic welding shop.

"Whenever problems arose during the last four years of our collaboration, we were never left to cope on our own and always received professional support," adds Ritvars Viss.

www.rkmetals.lv



Welding and logistics as one production flow

In the hall at Meijer Metal, the welding robots keep running, even after the last operator has gone home. No forklift bringing in welding jigs or pallets, no waiting time for supply and removal. AGVs drive material to the welding robot installations, collect welded products and bring semi-finished parts to the automated storage towers. The welding process sets the rhythm, the logistics follow.

Automation does not stop at the welding robot
Around every welding robot, logistical movements take place continuously. Materials arrive, products leave again and semi-finished parts are temporarily stored. If one of those links stalls, production eventually grinds to a halt as well. Material shortages, waiting times and unnecessary forklift movements reduce the robot's output, however well the welding process itself has been set up.

That is precisely where KUMATECH's strength lies. The company automates the internal logistics around production cells with AGVs, pallet dispensers and automated storage towers. Materials are always available at the right moment, so the welding robot can keep producing.

At Meijer Metal, the robots keep producing unmanned
When purchasing a new welding robot, Meijer Metal did not look at the welding robot alone, but immediately at a total solution. Valk Welding and KUMATECH jointly designed a fully automated production process. The logistics around the welding robots have been automated with AGVs and automated storage towers. The AGVs handle transport between the multiple welding robot systems, milling cells, storage towers and a bending robot. As a result, the uptime of the production cells has increased, and Meijer Metal can now produce 24/7 without needing employees present at night.

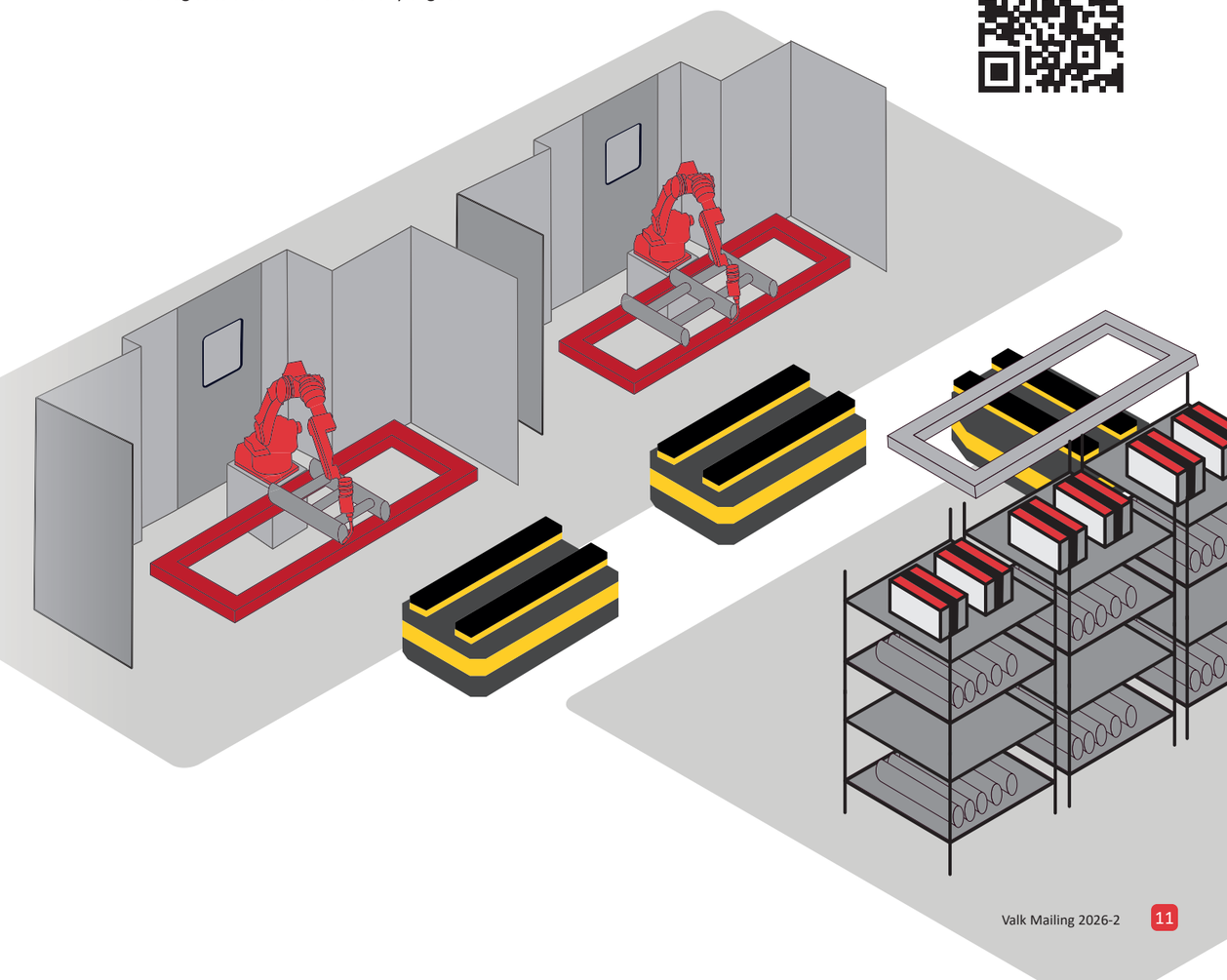
The strength of this solution therefore does not lie in one machine, but in the collaboration between robotisation and internal logistics. Only when both fit together seamlessly does the production process perform optimally.

Automating step by step
Automating does not automatically mean a large and complex project. Both Valk Welding's welding solutions and KUMATECH's logistics systems can start small and be implemented step by step in the production process. The systems connect to existing machines, robots and ERP systems. At Meijer Metal, the set-up therefore grows along with production.

One integrated process
Valk Welding and KUMATECH work towards the same goal. A production environment in which processes run predictably, safely and efficiently. Valk Welding provides the heart of production, KUMATECH keeps that heart beating. This means there is no collection of separate automation solutions, but one process in which the technology is fully in service of production. A welding robot only delivers maximum returns once the logistics around it are also fully aligned.

"The strength of this solution therefore does not lie in one machine, but in the collaboration between robotisation and internal logistics."

Watch the video:



C-Metal automates large-scale welding for the Oosterweel project

Welding robots reduce C-Metal's production time from 90 to 8 hours

Belgium

For the production of thousands of steel components for the Antwerp Oosterweel tunnel, C-Metal in Temse invested in a fully automated welding robot installation. The 36-metre-long installation with two welding robots marks a crucial step in the further modernisation of steel production. Thanks to this investment, the company can produce larger volumes faster, more consistently and with higher quality. The first assignment is impressive from the outset: the production of thousands of stiffeners used in the deep tunnel of the Oosterweel project.

For C-Metal, this investment is more than a technological upgrade. The company was looking for a way to combine the growing demand from complex steel construction projects with an increasingly tight labour market. Finding experienced welders and fitters is becoming ever more challenging, while clients are setting higher requirements in terms of capacity, quality, and delivery reliability.

More capacity with the same people

Automation is often seen as a replacement for manual work, but at C-Metal the approach was exactly the opposite. The robot installation was purchased to increase production capacity and carry out larger projects in-house. This creates room for further growth and additional employment.

By automating repetitive welding work, employees can focus more on work preparation, quality control, programming, and process optimisation.

“Thanks to this investment, the company can produce larger volumes faster, more consistently and with higher quality.”

A project that demands constant quality
The first application of the installation concerns the production of ROCO purlins for the Oosterweel connection. These steel girders form part of the support structure of the tunnel excavation and must meet strict quality requirements throughout the project.

It is precisely in this type of large-scale infrastructure project that robotic welding offers significant advantages. Where manual welding always remains dependent on human variation, a robot performs every weld according to the same parameters. This results in consistent weld quality, higher reproducibility, and a lower risk of deviations.

In addition, the welding technology used ensures deeper penetration of the joint. This means the same strength can be achieved with less weld length and fewer weld passes, which directly contributes to a more efficient production process.

Production time drops from 90 to 8 hours
The scale of the project makes the impact of automation immediately visible. Around 17,000 stiffeners are welded for the Oosterweel connection. With a traditional production method, this would amount to around 827 kilometres of welding work. Thanks to the deeper penetration and the efficient welding strategy of the robots, the required weld length is reduced to roughly half.

The biggest gain, however, lies in production time. Where the manual production of a single purlin takes around 90 working hours, the two robots achieve the same output in around eight hours. This means not only a significant increase in capacity, but also a more predictable production process and greater delivery reliability towards the customer.

Flexible deployment for future projects
Although the installation is currently used for the Oosterweel project, C-Metal sees the possibilities as much broader. The robot installation was developed to efficiently produce a wide range of steel structures and forms an important building block within the further automation of the factory.

Thanks to the combination of capacity, flexibility and consistent quality, the company expects to deploy the installation for future projects as well, including underground structures, car parks, and other complex infrastructure applications.

Certainty through strong support
From the start, we chose Valk Welding because we knew we could count on their support. This certainty was decisive in allowing the project to succeed with confidence. Valk Welding supported C-Metal intensively during the start-up phase and continued to do so afterwards.

The combination of Valk Welding’s installation expertise and C-Metal’s strong welding knowledge and engineering ensures smooth knowledge transfer and guaranteed productivity.

Collaboration between people and technology
The project at C-Metal shows that robotisation is not about replacing skilled workers, but about strengthening their capabilities. Automating repetitive tasks creates room for further growth, higher product quality and better control over planning and capacity. For companies facing labour shortages, stricter quality requirements and increasing production volumes, automation can be a crucial step towards a future-proof production environment.

With this investment, C-Metal confirms its ambition to carry out complex steel construction projects more efficiently, with higher quality and greater reliability. The combination of craftsmanship and advanced automation should also enable the company to successfully realise large infrastructure projects in the future.

www.c-metal.eu



ARP

ALVARIN METALLI OY

In five years, no welding job shop will still run without a robot

Finland

Alvarin Metalli and Konepaja Tremec serve international OEM customers with medium-heavy welded and machined products. Some 160–170 people work across the two sites, with part sizes ranging from fist-sized components to 15-metre structures. The Valk Welding robot cell brought into operation in Karvia in spring 2026 is the group's fourth welding robot and serves production for both companies. Operations Director and Konepaja Tremec CEO Arttu Alvari explains why robotisation is no longer a choice.

One new welding robot a year
"We mainly make welded and machined parts, frames and assemblies built from them," Arttu Alvari describes.
Robotisation has been pursued in a determined way even before the Valk Welding cell, with the aim of investing in one new welding robot every year.

"Robotisation set out to tackle the challenges of production throughput, efficiency and consistent quality," says Alvari. "Then come the financial considerations: reducing the hours spent per part and being able to produce more with the same floor space and the same number of people."

The company already had experience with two other robot suppliers. "Once we had strategically decided to expand welding robotics and welding automation significantly, we wanted to broaden our knowledge of what Valk Welding offers too, and gain practical experience with it," Alvari says.

The robot brand isn't the point
"I feel that the robot brand isn't the biggest point in welding automation — it's everything else around the robot. At the end of the day, every robot just moves a torch. What matters is what happens around it and how that's managed — for example, the programming, so the work becomes efficient." The goal is ambitious: even small batches are meant to be welded by robot. At the Karvia cell, programming is handled with Valk Welding's ARP offline programming, so programs are generated from the products' 3D models away from the cell. "Everything else plays a really important role for us: how the programming works and how making the first part goes," Alvari says. "For us, the software plays a huge role — the most important thing of all at the start. Once the products start repeating themselves, that role naturally becomes smaller."
The effect is already visible day to day.
"Thanks to the programming, the threshold for sending simple parts to the robot has definitely come down."

Toughest parts tackled first
"We haven't sent any practice parts to the cell. The very first jobs sent there were genuinely complex and challenging parts," Alvari says. "It coped with them surprisingly well, all the same. If we'd sent simple items there, it wouldn't have proven anything at all."
The cell runs two shifts.

A setback resolved within the hour
Commissioning went as planned until a fault occurred whose cause wasn't immediately clear. A service technician was on site within an hour of the call.

"I've bought so many machines and pieces of equipment that I know they don't always run smoothly. What really matters is what's done when things don't go smoothly," Alvari says. "It was taken seriously, and work started on it straight away, even though no one really knew yet what was going on. Overall, it left a really good impression that, even though there was a setback, it was handled really well."

Schedule pressure was high, since the cell's capacity had already been sold to customers before installation.

"As far as Valk is concerned, I have nothing to say that did not work out. Everything went as promised, problems were solved, they were noticed straight away, and the customer wasn't left alone with the problem." "What really matters is how the customer is looked after, both during the sales process and especially afterwards — so you're not just left watching the tail lights disappear. A problem always comes up sooner or later, and rarely when there's no rush. That's when you shouldn't be left wondering on your own." Valk Welding sees the same thing as a deepening of the partnership.

"They have a vision of investing in one new welding robot every year, and the requirements placed on welding automation suppliers grow year by year. At the same time, the collaboration deepens and both sides focus on the best possible outcome. That's rewarding for us too," says Samuel Karjalainen, Sales & Customer Relations, Valk Welding.

Customers are already asking for robot welding
"Among our customers, there's been a growing wish in recent years for their products to be welded by robot," Alvari says. "Series products have of course been robot-welded for a long time, but interest is now intense for small batches and more one-off products too."

Alongside the robot cell, the company has also switched to Valk Welding's solid wire, both on robots and in manual welding. "Good experiences, especially with the robot. In manual welding the difference was not as big, but with the robot we clearly noticed that certain problems reduced after the wire change."

Not welding with a robot isn't an option
"My view is that within five, or at most ten years, there won't be a welding job shop left that doesn't weld with a robot. At that point, you'll have to stop welding. Not welding with a robot for at least some of the work isn't an option," Alvari says. He doesn't, however, believe manual welding will disappear.

"That certainly doesn't remove the need for manual welding. On very few parts does a robot reach a hundred per cent. There always has to be some manual welding, some finishing and judgement calls to make."

www.alvarinmetalli.fi





"I feel that the robot brand isn't the point in welding automation — it's everything else around the robot."

— Arttu Alvari

The future of software

Figures that steer your production

The previous edition covered Automatic Robot Programming (ARP): software that automates the programming of your installation. This time the focus is on the Management Information System (MIS). Where ARP determines how quickly you get from drawing to welding program, MIS shows what your installations actually achieve afterwards. Valk Welding develops MIS entirely in-house, keeping everything from development to service in one hand.



Watch the video:

“At Power Packer, technical specialist Peter Meijering can find the time of production, the material deviation, and the welding parameters of a specific product within a few mouse clicks.”

Most companies know exactly what has been produced. How the installation performed in the process often remains invisible: waiting time for supply, a changeover that takes longer than planned, a fault that recurs more often than you thought. MIS records this and gives you the evidence base for targeted optimisation and investments that match what your market demands.

One source, usable by everyone

MIS brings together all robot data on a single dashboard, accessible from PC, mobile, or tablet. Your operator sees the installation they are currently working on, your planner the historical data on which they base their planning, your management the performance of the past year. At JOOP, an OEM supplier of steel components, this gives the same real-time insight into welding production as their own software system for work preparation, according to technical sales advisor Elbert van Zanten. Together, the two dashboards give JOOP control over the entire process, from STEP file to delivered product, the foundation on which the company builds its growth as an Industry 4.0 supplier.

Proof at every weld

Through product traceability, MIS automatically records a chronological data log for every welded product, right down to the set and actual welding parameters for each weld. For customers supplying sectors with high-quality requirements, that is decisive. At Power Packer, technical specialist Peter Meijering can find the time of production, the material deviation, and the welding parameters of a specific product within a few mouse clicks. That considerably speeds up assessing the impact and risk of a quality query. It works the same way with faults: what went wrong, what the error message is, how much time it cost and how often the fault recurs, helping to find the solution faster.

Control over the long term

Dulasta uses the MIS data every week in its management team meetings. Director Roelof Dunnink sees a clear improvement in robot availability and fewer faults, instead of loose notes that used to go missing. At Faymonville, according to Lukas Krüger, MIS provides live insight into the status of all robots, with the weekly and shift analysis helping to optimise production in the long term and the structured fault overview speeding up problem-solving.

What MIS makes visible is the starting point for the rest of your automation. Software around the welding robot is developing fast, with reliable production data remaining the foundation.

Would you like to discover what MIS can mean for your production? Our specialists would be happy to show you in a demonstration.

Welding technology as the foundation for quality from Triptis

Germany

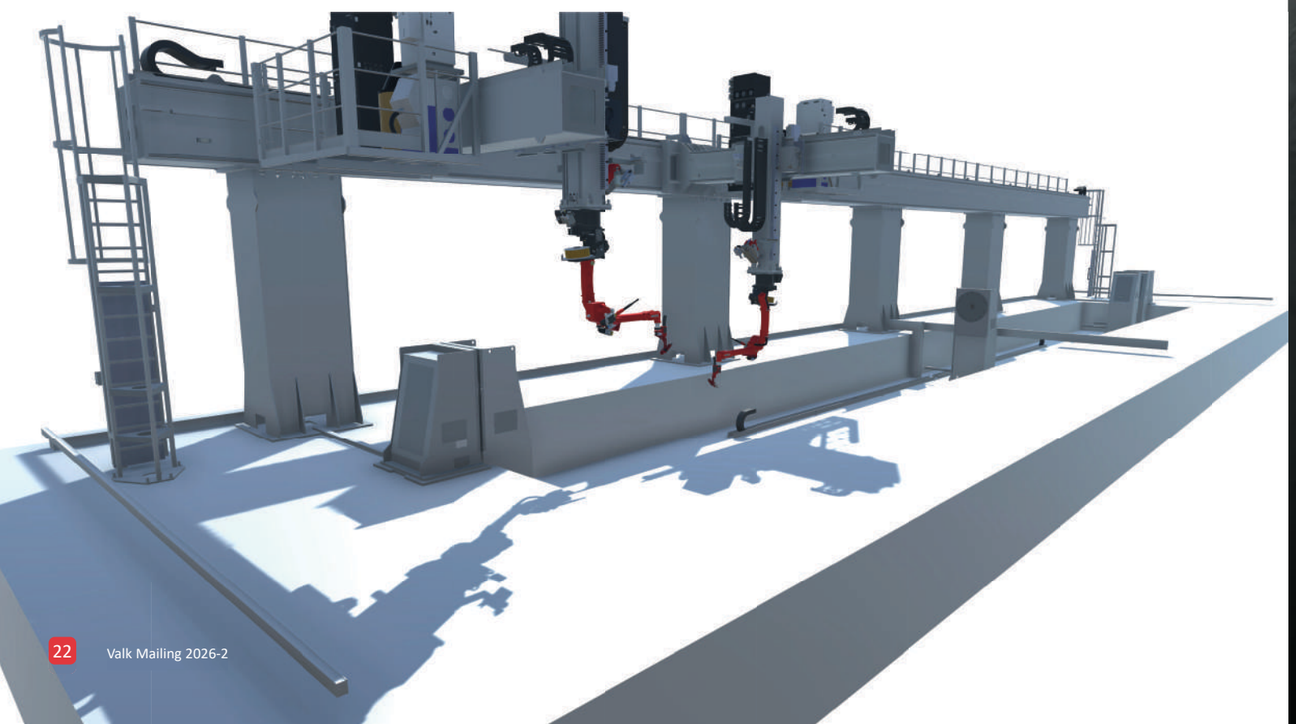
A rundown former East German (GDR) repair works grew into one of Europe's leading trailer manufacturers: Fliegl Fahrzeugbau in Triptis, Thuringia, has been building trailers and semi-trailers for the transport and construction industries for more than 30 years. Welding technology sits at the heart of production – from manual welding in the early years to today's modern welding robots.

From greenhorn to top-5 manufacturer

In 1975, Josef Fliegl laid the foundation for today's group of companies in Kastl, Bavaria – initially with agricultural trailers. In 1991, his son Helmut, together with his wife Margit, took over a former agricultural repair works in Triptis from the Treuhand and founded Fliegl Fahrzeugbau on 15 July 1991.

The first trailer, a white tandem low-loader, left the yard that same year. As early as 1992, the first straight low-loader followed as Triptis's first in-house innovation.

The rise continued rapidly from there: in 2005, the state-of-the-art Plant II for large-scale production opened directly on the A9 motorway. In 2014, Fliegl laid the foundation for the robotisation of production with the newly founded Fliegl Metallfertigung and invested in the most modern welding technology. Today, Fliegl employs around 250 people at its Triptis headquarters, and around 500 across Europe including the partner plants in Austria and Bosnia-Herzegovina. More than 5,000 vehicles leave the Fliegl plants each year – on average around 25 per day from Triptis alone.





"The quality of every single weld seam can now be traced."

- Maximilian Fliegl, Plant Manager

Welding technology at the heart of production

Anyone walking through the halls in Triptis quickly understands why Fliegl stands for "Made in Germany" quality: the welding shop, assembly and final assembly form the core of both plants. As part of the "Fit 2030" investment programme, Fliegl is currently rebuilding its main site.

The company is also investing heavily in production technology: since February 2026, two new welding robots from Valk Welding have been taking over the welding of aluminium and steel tipper bodies for the semi-trailer tippers in Plant II. Maximilian Fliegl emphasises that this makes the quality of every single weld seam – such as heat input and seam thickness – fully traceable. Thanks to the robots, components that were previously bought in can in future be manufactured in-house in Triptis to the highest quality.

Construction with holes – and without rust

At Fliegl, engineering and construction go hand in hand. Among the best-known in-house developments are the patented Curved Chassis with its round, flat frame neck, and the conical tipper body, which saves weight without compromising stability. More than 50 European patents now stand for the innovative strength coming out of Triptis. Surface treatment is also part of the company's welding expertise: before painting, the steel tipper bodies are blasted with a mixture of round and angular grit – a process with which Fliegl effectively protects its vehicles against rust.

Broad product portfolio for transport and construction

From Triptis, Fliegl today supplies an almost complete range: flatbed and curtainsider semi-trailers, semi-trailer tippers, low-loaders, container chassis, tandem trailers, swap chassis, waste-disposal vehicles and vehicles for timber transport. Alongside large-scale series production, the company develops targeted innovations for the market – most recently, for example, a chassis developed specifically for electric tractor units, and a chemical chassis for tank container transport. In doing so, Fliegl remains true to its philosophy: innovation, manufacturing depth and welding quality "Made in Triptis".

www.fliegl-trailer.de

After thirteen years, more return from the same welding robot

Onillon et Fils gets new return from an existing welding robot after thirteen years

France

Onillon et Fils has been active in French metalworking since 1976. The family business, founded by Onillon senior and now run by his two children, began as a locksmith's workshop and grew into a specialist in welded fittings for timber construction. The focus is on fittings for laminated timber manufacturers: companies that glue strips of timber together to form structures with spans of 8 to 20 metres, and in some cases up to 40 metres. That segment now accounts for 90% of turnover and provides work for around 35 employees.

Variety is typical of the production. Onillon et Fils makes both single pieces and larger series, from conveyor parts to walkways, pontoons and railings. Almost everything is custom-made, produced on a just-in-time basis. That diversity calls for a flexible production process.

The first step: robot welding in 2013

For that reason, Onillon et Fils opted for welding automation as early as 2013, with a TRACK-FRAME-E from Valk Welding. The aim was to weld the small and medium series, mainly products with long weld seams that took a lot of time by hand. The robot proved its worth but did not run five days a week. The reason lay in the custom work: each series required a new program, and programming at the robot took relatively long. In a production process with short lead times, this meant that work the robot could in principle handle was left undone.

The second step: automatic programming

That threshold became the starting point for the next step. Onillon et Fils set out to find whether Automatic Robot Programming (ARP) could speed up the programming. With ARP, operators no longer create a welding program at the robot itself, but in the software. Before the robot starts, they only need to check the program and start it.

The effect was felt quickly. The operator needed only half a day of training. "It was a beneficial change for the operator," the company says. "All he has to do now is check the program before running it. As a result, the robot's operating time has risen by around 30%." Since starting in February 2026, Onillon et Fils has already created 91 welding program's with ARP.

That speed also allowed work that used to be left undone. Because a program is now ready in a short time, Onillon et Fils can robotise more small and medium series. And because programming is no longer a bottleneck, the company can even schedule a product on the robot at the last moment. "Thanks to the speed of programming, we can put pieces on the robot at the last minute and handle an urgent order," the company director adds.

New return from an existing cell

In this way, Onillon et Fils shows that automation is not a one-off investment but a continuous process. The same ambition that led the company to its first welding robot thirteen years ago now makes that same installation produce more than ever. Anyone already working with a robot cell does not, therefore, need to wait for a next cell to take a step forward. Sometimes the gain lies in the software evolution only.

www.metallerie-onillon.fr





"Onillon et Fils has already created 91 welding program's with ARP."

Fully automated prefabrication of sprinkler pipework

Over 500 welded stub pipes a day

Poland

Dekk Pipes Prefabrication is a fast-growing Polish company based in Trzcianne, in the Podlaskie province, specialising in the prefabrication of pipe components for sprinkler installations and other fire protection systems, among other applications. The prefabricated components are used both in projects carried out within the DEKK Group and supplied to customers on international markets.

The road to automation

Within the DEKK Group, Dekk Pipes Prefabrication is responsible for producing finished pipe components for sprinkler installations, which are subsequently used by Dekk Fire Solutions during the installation of systems on site. Handling prefabrication in-house allows the DEKK Group to retain control over workmanship quality, delivery times, and the organisation of supplies.
As the number of orders grew, Dekk Pipes Prefabrication began to encounter the limits of manual production. The aim was to increase productivity while keeping the existing workforce and to improve the repeatability of the components produced.

The decision was made to install a single universal machine combining the processes of cutting, welding, transport, handling, and storage. After a thorough analysis of the market, the choice fell on Valk Welding, whose solutions are well known on the European market. Over the past twenty years, Valk Welding has supplied around fifteen robotic welding installations for the production of products similar to those made by Dekk Pipes Prefabrication, confirming the company's experience with this type of solution.

Two robots combining several processes

The installation supplied by Valk Welding to Dekk Pipes consists of two industrial robots and a system for handling and transporting pipes and stub pipes.

The first robot is responsible for picking up, handling and precisely positioning the stub pipes, while the second carries out the cutting and welding process. While the robot responsible for cutting cuts a hole in the main pipe, the handling robot picks up the appropriate stub pipe from storage and precisely positions it over the cut hole. The positioned stub pipe is then welded to the main pipe by the welding robot.

The entire system operates fully automatically, from taking pipes from the input storage, through preparing and welding the components, to placing the finished pipes with stub pipes in the output storage. The finished components then go through further stages of preparation and quality control before being passed on for further logistics and assembly. The operator selects the correct combination of pipes and stub pipes, after which the machine automatically carries out the specified process.

Start-up and process refinement

Waldemar Pietryk, Plant Director at Dekk Pipes Prefabrication, recalls the implementation process and the results of the investment: Although we knew from the start that Valk Welding was the right partner for our investment in robotic welding, the start-up itself required solving many detailed issues and adapting the process to the realities of our plant. At every stage of the project, the Valk Welding team actively looked for solutions that would achieve the expected result. Now, more than a year after the machine was installed, we are able to produce over 500 stub pipes a day without any problems, which fully meets our production needs.

Ready for further growth

More than a year of operating the automated station confirms that the investment in automation meets the expectations of DEKK Pipes Prefabrication. The installation makes it possible to increase production output, improve the repeatability of the components produced, and increase control over the process, while ensuring a production capacity matched to the plant's current needs.

Thanks to the use of advanced automation, DEKK Pipes Prefabrication is among the pioneers of highly automated prefabrication of components for sprinkler installations in Central and Eastern Europe.

www.pipesprefabrication.pl





The strong connection

Let’s connect at shows

15.03 - 18.03
Global Industrie (FR)

24.03 - 26.03
Machineering (BE)

06.04 - 09.04
Industrial spring (PL)

20.04 - 23.04
Urban Steel (DE)

13.05 - 14.05
DIRA Robotbrag (DK)

05.10 - 07.10
HiTech & Industry (DK)

12.10 - 14.10
Sepem Angers (FR)

26.10 - 29.10
BlechExpo (DE)

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